

## Green Is Good: How Green Bonds Cultivated into Wall Street's Environmental Paradox

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### Recommended Citation

Trompeter, Luke (2017) "Green Is Good: How Green Bonds Cultivated into Wall Street's Environmental Paradox," *Sustainable Development Law & Policy*: Vol. 17 : Iss. 2 , Article 3.

Available at: <http://digitalcommons.wcl.american.edu/sdlp/vol17/iss2/3>

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# GREEN GREED IS GOOD: HOW GREEN BONDS CULTIVATED INTO WALL STREET'S ENVIRONMENTAL PARADOX

Luke Trompeter\*

## ABSTRACT

When the European Investment Bank issued the first green bond in 2007, few imagined this debt instrument would attract mainstream investors. Designed to finance projects ranging from climate change prevention to clean transportation development, green bonds were geared for socially responsible investors concerned with our planet's sustainability. However, by 2015, green bonds were issued by major corporations like Apple and municipalities like New York City at a record \$40 billion. Major players on Wall Street have taken notice and look to cash in on the rapidly growing green bond market. With this new influx of investment and the bonds' tax-exempt status, clear standards for what constitutes a "green" project are required to ensure investors' money is actually being used to increase environmental protection and sustainable development.

This Comment discusses how green bonds were first created, their original purposes, and how they grew into a mainstream investment tool. Since the demand for these bonds exploded, there remains very few regulations ensuring these investments will be used for "green" projects. The Securities and Exchange Commission ("SEC"), Environmental Protection Agency ("EPA"), and the Municipal Securities Rulemaking Board ("MSRB") are best suited to provide clear definitions and disclosure laws for green bond projects, giving issuers clarity, and ensuring investors that their funds are being properly used for environmental and sustainable development.

## I. INTRODUCTION

Al Gore famously stated on the threat of climate change, "[t]he good news is, we have everything we need now to respond to the challenge of global warming . . . But we should not wait, we cannot wait, we must not wait."<sup>1</sup> In the early 2000s, the international community was uncertain on how best to address climate change and ensure the world's increasing development was sustainable.<sup>2</sup> In 2008, the World Bank launched the "Strategic Framework for Development and Climate Change" to jump-start public and private sector action against climate change.<sup>3</sup> Included in these proposals was the issuance of "Green Bonds," an innovative method of encouraging investment in environmental and sustainable development projects across the globe.<sup>4</sup> Green bonds have since grown from a socially responsible investment niche to a major Wall Street debt instrument, reaching \$40 billion in issuance in 2015.<sup>5</sup>

Green Bonds are currently being used to finance projects in climate change prevention, biodiversity conservation, pollution reduction, renewable energy advancement, clean transportation development, and clean water projects.<sup>6</sup> Green Bonds are given tax-exempt status to incentivize issuers who then supply investors with AAA credit ratings.<sup>7</sup> Governments at the national, state, and local levels allow these bonds to be issued tax-free because of the positive environmental returns they produce in fighting climate change.<sup>8</sup> Given these tax exemptions, many have concerns that the lack of a clear definition of a "green project" and minimal disclosure laws will allow new players to issue bonds without ensuring their projects have beneficial environmental or sustainable impacts.<sup>9</sup>

This article will begin by focusing on how the European Investment Bank and the World Bank first created green bonds in 2007. It will address how after the International Finance Corporation ("IFC") sold the first \$1 billion green bond,<sup>10</sup> the rest of the market took notice, and the industry has grown to \$40 billion with new issuers entering the market including municipalities and corporations.<sup>11</sup> Since the demand and supply of these green bonds exploded, there remain very few rules preventing "greenwashing" from saturating the industry and ensuring issuers use the investments for substantive green purposes.<sup>12</sup> In response, the private sector crafted voluntary regulations for issuers known as the Green Bond Principles.<sup>13</sup>

Part III of this article will analyze the liabilities of voluntary prescription in the industry. Due to the lack of a definitive verification process, American municipal bonds are particularly vulnerable to investment in unhelpful green projects.<sup>14</sup> New laws and regulations may turn off some investors hoping to cash in on the tax-exempt investment grade bonds.<sup>15</sup> Both issuers and recipients of the bonds will need to decide whether they care more about making green or being green. Part III of this article will also outline how investors in green bonds can use class action lawsuits to sue issuers who mislead them or greenwash their projects for non-sustainable purposes.

Part IV of this article will recommend definitive solutions for the green bond industry. First, the Securities and Exchange Commission ("SEC") and the Environmental Protection Agency ("EPA"), through cooperative action, should issue a conclusive

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definition of what a “green project” is. Second, the Municipal Securities Rulemaking Board (“MSRB”) should increase its disclosure laws for municipal issuers of green bonds. Third, allowing class action lawsuits by investors whose money is used for greenwashing will establish legal precedent for the misuse of green bonds and ensure that violators are held accountable.

## II. THE EVOLUTION OF GREEN BONDS FROM TREE HUGGER TO WALL STREET MISTRESS

### A. WHAT MAKES A BOND GREEN?

A bond is a debt instrument issued to a holder.<sup>16</sup> In other words, a legal IOU or loan, where the holder lends the issuer money with interest.<sup>17</sup> The issuer uses these funds to finance continuing investments that will return profits for both the issuer and the holder.<sup>18</sup> Currently, corporations lead bond issuance with over \$7.5 trillion, while municipal bonds account for another \$2.9 trillion.<sup>19</sup> Green Bonds, similar to social impact bonds,<sup>20</sup> are “theme bonds,” meaning they have a designated goal for the investment.<sup>21</sup> In this case, mitigating climate change or investing in sustainable development.<sup>22</sup>

Currently, there are four major types of green bonds—although others may emerge as the market grows and diversifies.<sup>23</sup> The first, Green Use of Proceeds Bonds, are much like conventional bonds, in which issuers raise capital and repay their investors with interest over time with proceeds from the investment project.<sup>24</sup> The credit ratings for Green Use of Proceeds Bonds are the same for the issuer and the actual bond.<sup>25</sup> The second type of green bonds, Green Use of Proceeds Revenue Bonds, pays its investors back through guaranteed revenue streams such as fees, tolls, or taxes.<sup>26</sup> The third type, Green Project Bonds, finance projects in which the investor has direct exposure to the risk of project and may not have recourse to the issuer.<sup>27</sup> Lastly, Green Securitized Bonds finance projects and use underlying assets as collateral.<sup>28</sup> These assets typically generate the first repayments to bondholders.<sup>29</sup>

Green bonds are being used to finance projects in pollution prevention, clean transportation technologies, renewable energy (solar, wind etc.), clean water, biodiversity conservation, carbon reduction, and sustainable construction that adhere to LEED<sup>30</sup> certification standards.<sup>31</sup> For example, the World Bank has funded solar and hydro power projects in China, geothermal projects in Indonesia, efficient lighting projects in Mexico, sustainable rail transit in Brazil, eco-buses in the Philippines, water purity plants in the Dominican Republic, solid waste development in Morocco, eco-farming in Armenia, agricultural innovation studies in Peru, and climate resilient infrastructure plans<sup>32</sup> across multiple nations.<sup>33</sup>

Green Bonds are particularly attractive to potential investors because they are tax exempt<sup>34</sup> providing fiscal incentives to aid in the fight against climate change or develop renewable energy.<sup>35</sup> Additionally, these bonds have an investment grade which entice not only socially-responsible investors (“SRIs”), but also mainstream investors looking for safe places to put their money.<sup>36</sup> SRIs typically do not invest in regular bonds, preferring instead to select investments they feel will have long-term

socially-beneficial impacts.<sup>37</sup> SRIs who invest in green bonds value their environmental benefits, and issuers can diversify their investor pool with SRI funds normally not available to them.<sup>38</sup> The World Bank guaranteed the first green bonds with AAA rating, the highest any investment can receive.<sup>39</sup> This meant potential investors were almost guaranteed their investment would not default.<sup>40</sup> With the entrance of new corporate and municipal issuers, the ratings on some bonds have declined, but none have been issued lower than Standard and Poor’s investment grade BBB rating.<sup>41</sup> Currently, the green bond market is oversubscribed, meaning investor demand exceeded that of the shares available.<sup>42</sup>

### B. GREEN BONDS: AN ORIGIN STORY

The European Investment Bank (“EIB”) issued the first green bond in 2007 to fund renewable energy projects across Europe.<sup>43</sup> The World Bank has subsequently taken the lead as the global issuer of Green Bonds by financing climate-related projects across the globe.<sup>44</sup> In 2008, the World Bank published an outline “Strategic Framework for Development and Climate Change”<sup>45</sup> to stimulate public and private sector action in the fight against climate change and to promote the use of renewable energy.<sup>46</sup> Green Bonds emerged as a significant tool for the World Bank to accomplish its goals.<sup>47</sup> By raising funds from investors, the World Bank can lend money for projects that educate and help developing nations combat the consequences of climate change.<sup>48</sup> Since 2008, the World Bank has issued over \$9 billion in green bonds in over 120 dealings.<sup>49</sup>

In March 2013, the IFC,<sup>50</sup> issued the first \$1 billion green bond, which completely sold out to investors within an hour of issuance.<sup>51</sup> The rest of the bond market, including major players like corporations, central banks, investment banks, and municipalities, noticed this new financial product and the seemingly unlimited demand for it.<sup>52</sup> Months later, the Environmental Defense Fund (“EDF”), Bank of America, and Vasakronan (a Swedish real estate company) issued the first corporate green bond.<sup>53</sup> After the entrance of corporate issuers into the market, both the popularity and availability of green bonds increased.<sup>54</sup> Corporate issuers have exponentially more capital available to them than development banks, and sell their products on major exchanges across the world.<sup>55</sup>

The Commonwealth of Massachusetts issued the first green municipal bond in June 2013.<sup>56</sup> The bond was issued at \$100 million, and the state received over \$130 million in offers from 183 investors.<sup>57</sup> Recognizing the success of Massachusetts’ green bonds, the New York City Comptroller proposed a plan to issue \$30 billion in green bonds by 2018, making it the first city in the country to offer bonds that specifically finance environmental projects.<sup>58</sup> The New York City Comptroller’s office, in conjunction with the Office of Management and Budget, was charged with establishing the criteria for what constitutes a green project using previous issuers like the World Bank and IFC as models.<sup>59</sup> The Comptroller’s Office sought feedback from investors on how best to establish a high quality green bond program in an effort to be transparent and to highlight New York City’s dedication to sustainability.<sup>60</sup>

Once corporate issuers like Vasakronan, and municipal issuers like New York City, entered the green bond market, billions flowed in, and the number of issuers dramatically increased.<sup>61</sup>

### C. A PRIVATE SECTOR RESPONSE: THE GREEN BOND PRINCIPLES

In the early stages of the green bond market, issuers like the IFC and the World Bank were trusted to only finance projects that were in accordance with the World Bank's rigorous environmental and social safeguard policies.<sup>62</sup> However, as more corporate and municipal issuers enter the market, legal regulations will play an important role in ensuring the bonds are actually used to address environmental challenges.<sup>63</sup>

There are two main concerns those in the green bond industry have going forward which include the lack of consensus regarding what constitutes a green-bond-eligible project and weak transparency and reporting requirements.<sup>64</sup> The industry is currently at a crossroads; it must establish definitions for what a "green project" is, and require issuers to disclose and verify the use of their tax-exempt bonds, or allow projects to be diluted by greenwashing.<sup>65</sup>

When companies<sup>66</sup> or government organizations promote environmental initiatives, but actually operate in a non-environmentally responsible way, it is labeled greenwashing.<sup>67</sup> For example, energy companies greenwash when they tout green energy technology even though compared to fossil fuels, it represents only a small proportion of their overall business revenue.<sup>68</sup> In the green bond context, issuers may advertise their projects as green to entice investors and reap tax benefits, but actually use the funds for environmentally detrimental projects.<sup>69</sup> For example, clean coal projects, which have become the poster child for greenwashing, advertise themselves as 70% cleaner than traditional coal, but scientists have maintained this has no reduction on climate-change-causing carbon emissions.<sup>70</sup> Additionally, under current disclosure requirements, bond investors may not be aware that the project they helped finance has been greenwashed until after its completion.<sup>71</sup> For instance, a hydroelectric dam may produce more greenhouse gases than it reduces and may yield other conservation concerns.<sup>72</sup>

The International Capital Market Association ("ICMA") established the Green Bond Principles ("GBP") in 2014 as a private sector solution to green bond disclosure and verification.<sup>73</sup> The GBP have four core components: Use of Proceeds; Process for Project Evaluation and Selection; Management of Proceeds; and Reporting.<sup>74</sup> The GBP recognizes nine broad categories that are eligible for green bond issuance:<sup>75</sup> 1) renewable energy including production, transmission, and products; 2) energy efficiency and energy storage in new and refurbished buildings and smart grids; 3) pollution prevention greenhouse gas control and soil remediation; 4) sustainable management of living natural resources including sustainable agriculture and fisheries; 5) terrestrial biodiversity conservation including the protection of coastal and watershed environments; 6) clean transportation such as electric or hybrid public rail; 7) sustainable water management including clean drinking water and sustainable urban drainage systems; 8) climate change adaptation

including climate observation and early warning systems; and 9) eco-efficient processes such as eco-labeling and resource efficient packaging and distribution.<sup>76</sup>

Currently, many issuers in the industry subscribe to the voluntary GBP.<sup>77</sup> While the GBP are beneficial for recommending the use of proceeds, providing environmental assessments, and reporting stipulations for projects, further requirements are needed before they can be considered comprehensive guidelines for green bonds.<sup>78</sup>

## III. BEING GREEN WHILE MAKING GREEN: ANALYZING THE REGULATORY CLIMATE OF GREEN BONDS

### A. EXAMINING VOLUNTARY PRESCRIPTION OF GREEN BOND GUIDELINES

The green bond market has grown exponentially in the last few years, but the deficiency of regulation in the industry could hinder the bonds' ability to generate substantial environmental progress.<sup>79</sup> While many issuers currently subscribe to the voluntary GBP established by the ICMA,<sup>80</sup> there are problems with enforcing these voluntary principles. Some of the problems include the lack of accountability and enforcement mechanisms coupled with minimal disclosure requirements and the absence of penalties for violators.<sup>81</sup>

The ICMA believes the use of proceeds, project evaluation, management of proceeds, and reporting requirements established by the GBP promote transparency and disclosure for investors and banks.<sup>82</sup> While these principles can be helpful, they remain voluntary.<sup>83</sup> Further, the ICMA is a trade association and represents issuers and asset managers that subscribe to a self-regulating market system.<sup>84</sup> With the exponential increase in green bond issuance and the entrance of municipal and corporate entities into the market, the voluntary system is not enough.<sup>85</sup> Unified government regulations are needed for clear definitions of "green" and to prevent a flood of greenwashing projects.<sup>86</sup>

The GBP purposely do not take a stand on which green projects or technologies will produce the greatest environmental or sustainable benefits.<sup>87</sup> This is problematic as issuers can receive the same tax benefits without guaranteeing substantial results.<sup>88</sup> While difficult, it is possible to calculate the anticipated results or environmental externalities of potential green bond projects.<sup>89</sup>

The GBP also recommend the use of an external reviewer to verify the sustainable features of a potential project.<sup>90</sup> Again, this verification is voluntary, and the GBP note that external party reporting adds costs that do not occur with regular bonds and could potentially limit investor funds.<sup>91</sup> Additionally, issuers who do choose to use an external review may do so from "second-party opinions," which can sometimes be from the same organization that issued the bond while still claiming it as an independent opinion.<sup>92</sup> Even true, third-party reviewers like Moody's<sup>93</sup> may have a conflict of interest with issuers if they are paid based on the quality of the assessment they provide.<sup>94</sup> Moody's and other major credit rating agencies were accosted for their role in the 2008 financial crisis.<sup>95</sup> This included the use of an "issuer pay" model, where the issuer pays the agency for

each rating, which may influence the agency to give out higher ratings or risk losing business to competitors.<sup>96</sup> The same problems could persist with verification of green bonds if issuers voluntarily choose their external reviewer.<sup>97</sup>

The Climate Bond Initiative (“CBI”) recognized the problems of the “broad integrity principles” set forth in the GBP.<sup>98</sup> In developing the Climate Bonds Standard & Certification Scheme, the CBI established mandatory requirements for tracking and reporting as well as an assurance framework with independent verifiers.<sup>99</sup> Complying with the Climate Bond Standard enables a bond to be certified, allowing investors to be more certain their funds will be used to produce environmental or sustainable benefits.<sup>100</sup>

While the Climate Bond Standard is an improvement for the green bonds market, it still has several shortcomings. The requirements within the Climate Bond Standard are mandatory, but subscribing to the Climate Bond Standard remains voluntary.<sup>101</sup> Given the additional costs of verifying, many issuers will avoid this process and still enjoy the tax benefits.<sup>102</sup>

Like the GBP, the Climate Bond Standard does not provide a clear definition of what is considered a “green” project or technology.<sup>103</sup> The Climate Bond Standard provides broad categories of commonly invested ventures, but in aligning itself with the requirements of GBP, the Climate Bond Standard purposely does not take a position on which eligible green projects would produce the optimal environmental results.<sup>104</sup> Common examples of this dilemma include nuclear power, which is considered green as a renewable resource but a hazard in a conservation effort.<sup>105</sup> Another concern is the funding of “clean coal” projects, which remains banned under the Climate Bond Standard but may be allowed under less restrictive guidelines.<sup>106</sup> Financing water projects has also become a source of disagreement in the green bond industry.<sup>107</sup> While there is undoubtedly a need for funding of water infrastructure projects, expensive water treatment and desalination processes may force cities to use massive amounts of carbon-based energy.<sup>108</sup> Therefore, many in the industry argue that water infrastructure projects should not be eligible for green bonds.<sup>109</sup> The CBI released the Water Climate Bonds Standard in 2015 to address this dilemma and help investors evaluate water-related projects and their anticipated environmental impact.<sup>110</sup> Issuers have since adapted the Water Climate Bonds Standards, but due to its novelty, the effectiveness of the standards at curbing environmental and sustainability concerns has yet to be seen.<sup>111</sup>

Providing tax incentives for projects that are greenwashed and fail to produce the projected environmental results is the strongest argument for establishing a government mandated “green” definition as issuers are reaping the benefits without contributing to the public good.<sup>112</sup> Relying on voluntary market principles might help issuers increase the number of bonds through lower issuance costs, but this will ultimately be detrimental for the intended environmental cause.<sup>113</sup> Once the market loses credibility through greenwashing, it may never recover.<sup>114</sup>

A conclusive definition of “green” by the government would allow issuers to better demonstrate that their project is focused on credible environmental change while assuring investors

that their funds are being used properly.<sup>115</sup> The U.S. Food and Drug Administration (“FDA”), in conjunction with the U.S. Department of Agriculture (“USDA”), underwent a similar process when deciding upon a definition for “organic” food labeling.<sup>116</sup> To draft this definition, the USDA used studies of organic production and requested comments from industry participants including farmers and producers to evaluate criteria.<sup>117</sup> This enabled the USDA to create a definition that could be regulated, complied with, and would not unreasonably increase costs of organic production.<sup>118</sup> To be considered “organic” the food must meet several requirements including production without genetic engineering or ionizing radiation, production per the National List of Allowed and Prohibited Substances, and certification by the authorized USDA National Organic Program.<sup>119</sup> While you can label particular ingredients as organic on the side information panel without this certification, it is illegal to label organic on the primary display section or use the USDA organic seal anywhere on the package without it.<sup>120</sup>

Similarly, the government could provide a clear definition of “green projects,” specify requirements to satisfy this definition, and develop a certification process that would signal to the public the bond’s green authenticity.<sup>121</sup> As the primary securities regulator in the country, the SEC<sup>122</sup> is best positioned to work in conjunction with the EPA, who already has precedent for creating definitions of green infrastructure.<sup>123</sup> The SEC and EPA could request comments from respectable green bond issuers including the World Bank to ensure their definition would be effective, cost efficient, and reasonable to comply with. However, a major concern for the industry is ensuring regulatory costs do not dry up the market.<sup>124</sup>

## B. GREEN METROPOLIS: MUNI BONDS AS TOOLS FOR SUSTAINABLE CHANGE

Municipal bonds are often seen as trusted financial investments and the best solution to America’s growing infrastructure problem.<sup>125</sup> Green municipal bonds attempt to combine the reliability of the municipal market with the extrinsic benefits of environmental and sustainable development.<sup>126</sup> However, municipal bonds are particularly ripe for greenwashing and confusion over the designation of green projects.<sup>127</sup>

While two-thirds of global green bonds received third-party verification, only two US issued municipal bonds received any external review, making many doubt their green credibility.<sup>128</sup> This has led to concerns that the bonds designated green are failing to accomplish their desired results while still retaining the tax benefits.<sup>129</sup> In 2015, Julien Bras, a SRI portfolio manager at Allianz stated:

Without some form of market or regulatory intervention, the risk is that the market is going to end up being a mixed bag, and then it will never recover its credibility . . . it’s the easiest way to greenwash—all you have to do is come up with a couple of environmental projects, green-stamp them, and pocket the funds allocated for those projects. It doesn’t cost much more [than a conventional bond]. . . . The need for [standardization]

on this market is self-evident and urgent—we need a definition of what is green.<sup>130</sup>

The private sector has continued to develop solutions to this issue, but the government has yet to intervene. In August 2016, Moody's issued its first Green Bond Assessment ("GBA") for an American municipal bond.<sup>131</sup> GBA scores range from GB1 (excellent) to GB5 (poor) based on the organizational structure put in place to manage the bond, the use of proceeds, the expected disclosure on the use of proceeds, the expected management of proceeds, and the ongoing reporting and disclosure.<sup>132</sup> A GBA is not a credit rating but rather an opinion on the relative effectiveness of the issuer's environmental or sustainable project.<sup>133</sup> In offering these assessments, Moody's is adding to the competitiveness of the green bond market by enlightening investors about which bonds will have the greatest environmental impact.<sup>134</sup>

While the GBA is a positive step towards validating green bonds, the same issues arise as the GBP.<sup>135</sup> First, the assessment is currently only available to those that request it, meaning issuers can still avoid the verification process.<sup>136</sup> Additionally, the first municipal bond assessed by Moody's was for a water project.<sup>137</sup> Sustainable water investments can be considered green under the GBP, but others in the industry, including many SRIs, feel they should not be eligible for green bonds.<sup>138</sup> Recent municipal green bonds issued to finance water projects follow health and safety standards of the Clean Water Act and Safe Drinking Water Act.<sup>139</sup> However, without a clear green definition, they may fail to consider all the necessary environmental aspects, such as energy consumption needed to deliver and treat the clean water.<sup>140</sup> The debate over water projects highlights the lack of consistency across the market as to what should qualify as a green project and why government action is still necessary in the green bond market.<sup>141</sup>

The Municipal Securities Rulemaking Board ("MSRB") has a history writing investor protection rules regarding municipal bonds and ensuring the funds are used in a fair manner.<sup>142</sup> The MSRB is a self-regulatory organization, financed by member dues, and its rules are enforced by the Financial Industry Regulatory Authority ("FINRA")<sup>143</sup> and the SEC.<sup>144</sup> The Dodd-Frank Act of 2010 broadened the MSRB's oversight ability, and mandates how municipal issuers disclose information to its transparency system.<sup>145</sup> The MSRB currently requires issuers to disclose an official statement including the underwriting spread, the amount of any fee received by the dealer, and the initial offering price for each maturity in the offering whenever there is a new primary offering of a municipal bond.<sup>146</sup> Additionally, issuers must continually disclose information about the municipal bonds throughout its maturity.<sup>147</sup> Mandatory disclosure rules for municipal green bond issuers would ensure they are complying with green project definitions, and continue to monitor and adhere to the green requirements throughout the project's completion.

### C. THE INVESTOR STRIKES BACK: CLASS ACTION LAWSUITS AGAINST GREEN BOND ISSUERS

As in other cases of bond issuer fraud, if a green bond issuer provides misleading information that investors consider detrimental to their investment, legal action should be an available resolution tactic for them to recover. However, without widely accepted definitions and standards for green bonds, "it is difficult to judge whether there has been an extreme departure from a reasonable standard of care."<sup>148</sup>

Although they are a fundamental starting point for a best practices standard,<sup>149</sup> neither the Climate Bond Standard nor the GBP offer solutions for investors who were wronged by their issuers.<sup>150</sup> Legal action against issuers can help wronged investors recover damages and act as a deterrence method against future issuers who greenwash their project or mislead investors. Class action lawsuits against bond issuers are an established and effective legal practice that can be dually applied to green bonds and the greenwashing problem.<sup>151</sup>

If courts find that issuers of bonds deceived their investors during the primary offering, or throughout the bond's maturity, they will allow individual investors to consolidate their complaints into one class action lawsuit.<sup>152</sup> For example, in *Zhu v. UCBH Holdings, Inc.*, investors alleged that the corporation issued materially false and misleading statements concerning UCBH's business condition and hid accumulating loan losses from them.<sup>153</sup> The investors alleged the issuers made these misleading statements to generate a scheme to defraud them.<sup>154</sup> One investor filed a complaint for a securities class action on behalf of "all purchasers of publicly traded UCBH securities."<sup>155</sup> The Court ruled that it would allow the complaints from different investors to be conjoined into a class action lawsuit against the issuer.<sup>156</sup>

Similarly, if investors of green bonds feel the issuer made false or misleading statements about the environmental impact of the investment, they should be allowed to consolidate their claims against the issuer into a class action suit.<sup>157</sup> Allowing investors to do so levels the playing field between individuals and multi-million dollar entities like corporations of municipalities.<sup>158</sup> Members of a class action suit can combine resources, legal services, and any evidence they may hold against the defendant.<sup>159</sup> Without class action suits, investors may not have the financial incentive to fight against large green bond issuers like Apple.<sup>160</sup> Additionally, issuers have incentive to continue their deceptive behavior if they are not confronted by bondholder litigation.<sup>161</sup> However, due to its complexities, class action litigation is a lengthy process.<sup>162</sup> Bondholders looking for a quick reimbursement of their funds may be better served resolving their cases individually.

Once a class action suit is formed, courts have ruled that issuers who fail to follow their publicly stated plans for an investment can be petitioned to pay damages to their investors.<sup>163</sup> For example, bondholders in *In re Oppenheimer Rochester Funds* sued an issuer for failure to adhere to the Fund's stated investment objective and over-concentration of the Fund's assets in non-investment grade (or "junk") bonds.<sup>164</sup> The investors alleged the fund managers promoted the investment as high yield with

tax-free interest income from municipal bond portfolios, which would be carefully assessed and monitored.<sup>165</sup> In reality, the fund was heavily concentrated with junk bonds, a much riskier and volatile investment.<sup>166</sup> Using evidence from testimonies, offering documents, and board meeting minutes, the plaintiffs established that they did not know, and through the use of reasonable care could not have known, that the defendant's statements were false or misleading.<sup>167</sup> Given the similar arguments and evidence of all the plaintiffs, the court ruled that no other avenue of resolution would be applicable and allowed the case to continue as a class action.<sup>168</sup> The case settled out of court but proved significant for bondholders who are misled by issuers.<sup>169</sup> Investors in green bonds can use this precedent against issuers who fail to adhere to their original green investment objectives or switch their project plans throughout a bond's maturity.<sup>170</sup>

Contrarily, there are cases of precedence for issuers winning or dismissing class action lawsuits by investors. Without a clear definition of "green projects," the bar for investors to prove issuers mislead and deviate from their original green objectives is high.<sup>171</sup> Bondholders in *Abell v. Potomac Ins. Co.* sued an issuer and underwriter for misleading statements about the project they invested in.<sup>172</sup> Although the bondholders won the suit and were able to prove the defendant's statements were materially false, the class action damages were reversed, and the bondholders were not compensated because they failed to prove that they had relied on these statements to make their investment decisions.<sup>173</sup> The Court ruled that the plaintiff's reliance on a securities fraud action is subjective and requires each individual investor to prove that she based her decision on the defendant's misstatements or omissions.<sup>174</sup> Determination of materiality, on the other hand, requires the plaintiffs to demonstrate how a reasonable investor would have used the defendant's statements—a much easier burden.<sup>175</sup> The decision in *Abell v. Potomac Ins. Co.* highlights the risk investors face when choosing to take action against an issuer.<sup>176</sup>

The burden for investors is high, but establishing legal precedent for green bondholders against issuers who mislead them or greenwash their projects will bring transparency and ensure integrity remains in the market. Settlements mandated by securities class actions are publicly posted to aid other investors who may bring future suits.<sup>177</sup> As precedent, when environmental class action lawsuits were publicized, corporations were forced to change their pollution habits and compensate affected class members.<sup>178</sup> If green bond investors can succeed in future landslide cases, issuers will change their practices for fear of financial repercussions and public shame.<sup>179</sup>

#### **IV. SOLUTIONS FOR GREEN SOLUTIONS: PROGRESSING REGULATION AND LEGAL ACTION IN THE GREEN BOND MARKET**

##### **A. FIFTY SHADES OF GREEN: DEVELOPING CONSISTENT GREEN DEFINITIONS**

While the guidelines of the GBP, the Climate Bond Standard, and Moody's GBA are helpful, there remains little consistency in the green bond verification process.<sup>180</sup> Different

standards allow for different definitions of green projects—leading to different "shades" or effectiveness of green projects.<sup>181</sup> This blurring of what constitutes "green" opens the door for issuers to greenwash projects while benefiting financially from their tax-exempt status.<sup>182</sup> Issuers looking to cash in will saturate the market with greenwashed projects, SRIs will stop investing in projects they feel are not impactful, and the market will dry up.<sup>183</sup> If the green bond market is to remain robust and effective in its environmental and sustainability efforts, a consistent definition of "green" is required.<sup>184</sup>

The SEC, which regulates the securities industry, including the bond market, is best equipped to enforce definitions of what constitutes a green project against issuers in the market.<sup>185</sup> In defining what is considered "organic," the FDA worked conjunctively with the USDA.<sup>186</sup> Together, the two government agencies were able to agree upon a definition, requirements to meet that definition, and how best to enforce it.<sup>187</sup> Similarly, the SEC should work with the EPA, who is more knowledgeable in environmental issues and sustainable development.

Balancing the "green" interests of renewable resources versus conservation efforts will be difficult, but it is an important step in ensuring green bonds achieve their original purpose. The EPA will likely decide what qualifies, as it has a regulatory history defining green infrastructure, as a similar "cost-effective, resilient approach to managing . . . impacts that provides many community benefits."<sup>188</sup> The EPA published handbooks for local governments to grow green infrastructure,<sup>189</sup> and therefore can publish similar literature for issuers and investors when defining green bonds.

The EPA and SEC should request comments from issuers who have a history defining and verifying green bonds to discuss effective methods.<sup>190</sup> This will ensure the definition would be both controlled and cost efficient.<sup>191</sup> Additionally, the SEC will enforce this definition using its authority in the securities market to not allow issuers to label their bonds "green" unless they satisfy the EPA definition.<sup>192</sup> Issuers that meet this definition will be eligible for the certification and can advertise their bonds as EPA/SEC approved "green" bonds.<sup>193</sup>

Requirements should be included in order to meet the definition and qualify for the certification. This definition can model the GBP,<sup>194</sup> but it should also weigh the environmental impacts of one project classification versus another. Eligible categories will be chosen based on main areas of environment and sustainability concerns that require financing.<sup>195</sup>

To date, typical green bond projects contain one eligible category. Future projects however could include a combination of these outlined categories to boost their sustainable impact. Eligible green projects under this joint definition should include renewable energy such as wind, solar, and hydro plants that meet federal water standards and additional environmental requirements described in the Water Climate Bonds Standard.<sup>196</sup> However, given the debatable impact of nuclear, coal, or "fuel efficient" technologies that still require the use of carbon-based fuels should not be eligible.<sup>197</sup> Pollution prevention projects including greenhouse gas control should be eligible. However,

water pollution projects should be restricted unless the project plan has specific outlines for determining if energy consumption will be less than energy savings.<sup>198</sup> Additionally, sustainable farming and fishing projects, including biological drop protection and drip irrigation systems, should be eligible under the joint definition if they can prove their sustainable management and conservation impacts.<sup>199</sup> Moreover, conservation efforts on land and sea should also be eligible including protection of marine or watershed environments.<sup>200</sup> Eligible green bonds should include electric and non-motorized public transportation as well as clean energy passenger vehicles.<sup>201</sup> All projects that include construction of residential or commercial buildings would also be required to follow to LEED<sup>202</sup> green building certification standards.<sup>203</sup> While this definition should not be deemed exhaustive as to include future emerging categories, it will give investors and issuers a definitive answer as to what qualifies as a “green project.”

Issuers and investors would also benefit from a certification process that allows green bonds that meet the definition to be advertised as such.<sup>204</sup> In addition to its “organic” definition, the USDA National Organic Program labels certified organic products and outlaws mislabeling them without the certification.<sup>205</sup> Likewise, the SEC can provide a certification process similar to Moody’s GBA<sup>206</sup> for eligible green bond projects that meet the definition and requirements. The certification process should consider the organizational structure managing the bond, the use of investor proceeds, the issuer’s level of disclosure on the use of proceeds, management of said proceeds, and the ongoing disclosure of information throughout the bond’s maturity.<sup>207</sup> This will allow investors to be sure their funds are being used properly and will differentiate issuers who want to advertise their environmental efforts versus those who just wish to reap financial benefits.

While the definition and certification process may take some time to develop, its implementation will alleviate confusion by investors, protect issuers with prosperous green plans from negative press of “being green in name only,” and ensure the continuation of a healthy green bond market.<sup>208</sup>

#### B. SHOWING YOUR HAND: INCREASING DISCLOSURE LAWS IN THE U.S. MUNICIPAL BOND MARKET

American municipal bonds are particularly vulnerable to greenwashed projects as currently very few use verification processes.<sup>209</sup> The MSRB currently drafts consumer protection and disclosure laws specifically for the municipal bond industry.<sup>210</sup> A definition for green projects is helpful for investors at the onset to decide which bond to invest in, but investors also need publicly-disclosed information throughout the bond’s maturity to ensure it ends with beneficial environmental or sustainable results.<sup>211</sup> The disclosure of information will also help prevent investors from misunderstanding what they have invested in and will lower the chance they bring a lawsuit against the issuer.<sup>212</sup>

The MSRB should require municipal issuers to disclose their green plans, including the use of proceeds, the process for evaluating and selecting the project, the sustainable impact, and the management of proceeds at the primary offering of the bond

and continually throughout the bond’s maturation period.<sup>213</sup> The disclosure of information can be of a similar framework to the GBP and the MSRB’s current disclosure filings.<sup>214</sup> Distinctively, municipal bonds may have several maturity dates, paying off investors at different times, and making up-to-date disclosure to the MSRB essential for investors to track the bond’s environmental progress.<sup>215</sup> However, these rules will have the same problems as the voluntary GBP unless they are written into law and enforced by the SEC.<sup>216</sup> The use of proceeds will follow the definition established by the SEC and EPA aiming to address climate change, renewable resources, or conservation.<sup>217</sup>

The process for project evaluation will include transparency determinations and a profile of the sustainability of the project.<sup>218</sup> Management of proceeds would be disclosed to the public through the MSRB’s Electronic Municipal Market Access system (“EMMA”)<sup>219</sup> so that investors can check on the progress and environmental proficiency of their investment. Additionally, the disclosure laws should require up-to-date reporting of the project’s progress and the use of proceeds until the bond has matured.<sup>220</sup>

As is the case with the GBP, verification and extensive reporting adds costs that do not occur with regular bonds.<sup>221</sup> There is concern that too much regulation will turn away new investors and issuers, and stifle the growth of the market.<sup>222</sup> However, combined with a consistent and appropriate definition, disclosure laws will ensure investors are making educated decisions and prevent issuers from greenwashing their projects.<sup>223</sup> Striking a manageable balance means aligning the objectives of investors, issuers, and regulators.<sup>224</sup> The market as a whole will need to decide if environmental integrity is worth more than the costs generated by the additional disclosure and verification regulations.<sup>225</sup>

#### C. POWER TO THE HOLDER: LEGAL ACCOUNTABILITY FOR GREEN BONDHOLDERS

In addition to a revamped definition of green bond eligible projects and increased disclosure requirements for issuers, bondholders still require a platform to recover their investments if they are misled about the project or are subjected to greenwashing. Allowing investors to conjoin their complaints into one class action lawsuit and litigate a claim against bond issuers together will lower cost of legal services for bondholders who are fighting deep-pocketed issuers.<sup>226</sup> Few investors would carry out individual claims as they have little financial incentive to do so against a corporate or municipal issuer.<sup>227</sup>

Class action lawsuits can also be used as a deterrence method, which would establish precedent against future violators.<sup>228</sup> Once multiple class actions are successful against green bond issuers, future issuers would have no choice but to change their practices or face public scrutiny and financial repercussions.<sup>229</sup> Additionally, class action lawsuits aid in preventing inconsistent rulings across jurisdictions resulting from multiple individual cases.<sup>230</sup> Combined with a green definition and disclosure laws, class action precedent would help in establishing consistent green bond regulation.

## V. CONCLUSION

Once investor complaints are combined, they must be able to argue and prove that they were misled or defrauded by the issuer. As in *In re Oppenheimer Rochester Funds*, where the bondholders sued the issuers for failure to adhere to the stated investment objective,<sup>231</sup> green bondholders should be able to bring suits against issuers who renege, mislead, or greenwash their initial green objectives.

Allowing these class action lawsuits may deter future issuers from greenwashing their projects misleading their investors.<sup>232</sup> Settlements not only reimburse the investors but also force businesses to change their practices though punitive damages and negative publicity.<sup>233</sup> Since green bonds are relatively novel, this precedent will be beneficial in enforcing future environmental and sustainability regulations against corporations or municipalities outside the bond context.<sup>234</sup> While the burden on bondholders remains high, as seen in *Abell v. Potomac Ins. Co.*,<sup>235</sup> it is important for investors to have legal actions against issuers. A consistent definition and disclosure requirements will help establish good practices for issuers, making it easier for investors to prove they actually relied on the issuers' false statement.<sup>236</sup> Class action lawsuits are a proven legal practice against bond issuers,<sup>237</sup> and green bond investor lawsuits should operate no differently.

When the European Investment Bank issued the first green bond in 2007 to spark private and public sector action in the fight against climate change,<sup>238</sup> few anticipated it would grow to the market size it is today. Green Bonds are an exponentially-growing financial market issued at over \$40 billion in 2015<sup>239</sup> with 2016 forecasts predicting \$100 billion worldwide.<sup>240</sup>

With the rise of this industry, regulations are needed to ensure its effectiveness in enhancing sustainable development.<sup>241</sup> The SEC, in conjunction with the EPA, should establish a definition and certification process determining what is eligible for green bond investment. The MSRB should also require the disclosure of data from municipal bond issuers to ensure they fulfill their sustainability promises. Finally, allowing green bondholders to file class action lawsuits against issuers who mislead or subject them to greenwashing will establish precedent and deter future issuers from acting similarly.

As former Treasury Secretary Hank Paulson Jr. puts it, “[w]e have the ideas, the models and the capital to make it [a sustainable economy] happen. What’s needed now is leadership from global policy makers to prioritize the development of a global green finance system.”<sup>242</sup>



## ENDNOTES

<sup>1</sup> Al Gore, Former Vice President, United States, Speech at *Sierra Club's National Environmental Convention and Expo in San Francisco* (Sept. 9, 2005) (transcript available at [http://www.alternet.org/story/25349/a\\_moral\\_moment](http://www.alternet.org/story/25349/a_moral_moment)).

<sup>2</sup> See *Development and Climate Change: a Strategic Framework for the World Bank Group*, WBG at 1 (June 28, 2012), <http://documents.worldbank.org/curated/en/732681468150874549/pdf/688160REVISION0se0Only090Box3700553B.pdf> [hereinafter *Strategic Framework*] (acknowledging the uncertainty about climate change policy in 2008).

<sup>3</sup> See *What are Green Bonds?*, THE WORLD BANK TREASURY, <http://treasury.worldbank.org/cmd/htm/WorldBankGreenBonds.html> (last visited Mar. 4, 2017) [hereinafter *What are Green Bonds*].

<sup>4</sup> See *id.*

<sup>5</sup> See Tom Zanki, *Green Bonds Soar Despite Uncertain Legal Environment*, LAW360 (Apr. 28, 2016, 6:38 PM), <https://www.law360.com/articles/789719/green-bonds-soar-despite-uncertain-legal-environment>.

<sup>6</sup> See *Green Projects from Around the World*, THE WORLD BANK TREASURY, <http://treasury.worldbank.org/cmd/htm/MoreGreenProjects.html> (last visited Mar. 5, 2017) [hereinafter *Green Projects*] (detailing the types of projects funded by green bonds).

<sup>7</sup> *What are Green Bonds*, *supra* note 3.

<sup>8</sup> See Tom Zanki, *NYC Comptroller Pitches Green Bond Program*, LAW360 (Sept. 24, 2014, 8:47 PM), <http://www.law360.com/articles/580568/nyc-comptroller-pitches-green-bond-program> (describing municipalities' eagerness to increase green bond issuance).

<sup>9</sup> See Namrita Kapur, *With Green Bonds, Legitimacy Comes to Those Who Verify*, ENVTL. DEF. FUND (Mar. 30, 2016, 1:51 PM), [http://business.edf.org/blog/2016/03/30/with-green-bonds-legitimacy-comes-to-those-who-verify/?\\_ga=1.60087789.1398288046.1470010915](http://business.edf.org/blog/2016/03/30/with-green-bonds-legitimacy-comes-to-those-who-verify/?_ga=1.60087789.1398288046.1470010915) (echoing concerns across the industry about lack of standards).

<sup>10</sup> See *How to Issue a Green City Bond*, CLIMATE BOND INITIATIVE 2 (2015), [https://www.climatebonds.net/files/files/GCB%204%20pager%20final%20edits%20vc-02\\_300Copies\\_170gsm\\_Bleed%20\(1\).pdf](https://www.climatebonds.net/files/files/GCB%204%20pager%20final%20edits%20vc-02_300Copies_170gsm_Bleed%20(1).pdf).

<sup>11</sup> See Zanki, *supra* note 5.

<sup>12</sup> See *id.*

<sup>13</sup> See INT'L CAP. MKTS. ASS'N, *GREEN BOND PRINCIPLES 1-6* (2016), <http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/green-bonds/>.

<sup>14</sup> See Kapur, *supra* note 9.

<sup>15</sup> See *id.*

<sup>16</sup> See Dave Kansas, *What Is a Bond?*, WALL ST. J. (2005), <http://guides.wsj.com/personal-finance/investing/what-is-a-bond/>.

<sup>17</sup> See *id.* (breaking down the definition of a bond into layman's terms).

<sup>18</sup> See *id.* (explaining how bondholders are repaid for their investments).

<sup>19</sup> See SIFMA, *The Role of Bonds in America*, INVESTING IN BONDS, <http://www.investinginbonds.com/learnmore.asp?catid=3&id=50> (last visited Mar. 5, 2017).

<sup>20</sup> See *What is a Social Impact Bond?*, GOLDMAN SACHS, <http://www.goldmansachs.com/our-thinking/pages/social-impact-bonds.html> (last visited Mar. 5, 2017) (defining social impact bonds as creative and novel financial tools that use private investment to support high-impact social programs such as, addressing incarceration rates or low academic performance).

<sup>21</sup> See *Understanding Climate Bonds*, CLIMATE BOND INITIATIVE, <https://www.climatebonds.net/resources/understanding> (last visited Mar. 5, 2017).

<sup>22</sup> See *Climate Bond Standard*, CLIMATE BOND INITIATIVE 3 (Dec. 6, 2016), [https://www.climatebonds.net/files/files/Climate%20Bonds%20Standard%20v2\\_1%20-%20January\\_2017.pdf](https://www.climatebonds.net/files/files/Climate%20Bonds%20Standard%20v2_1%20-%20January_2017.pdf) [hereinafter *Climate Bond Standard*] (spelling out the purpose for green bonds).

<sup>23</sup> See INT'L CAP. MKTS. ASS'N, *supra* note 13, at 7.

<sup>24</sup> See *Green Bonds*, UNDP, <http://www.undp.org/content/sdfinance/en/home/solutions/green-bonds.html> (last visited Mar. 3, 2017).

<sup>25</sup> See *id.*

<sup>26</sup> See *id.*; see also Press Release, Iowa Fin. Auth., Iowa Finance Authority to Issue Approximately \$323,460,000 in Iowa Finance Authority State Revolving Fund (SRF) Revenue Bonds (Green Bonds) (Jan. 28, 2015) [http://www.iowasrf.com/file.cfm/media/news/Bonds1\\_C7EA6E42C838F.pdf](http://www.iowasrf.com/file.cfm/media/news/Bonds1_C7EA6E42C838F.pdf) (announcing \$332.46 million in green revenue bonds to be paid back to the State through water related taxes and fees).

<sup>27</sup> See UNDP, *supra* note 24; see also *OPIC Issues First Green Guaranties Supporting Climate-Friendly Investments*, OPIC, <https://www.opic.gov/press-releases/2014/opic-issues-first-green-guaranties-supporting-climate-friendly-investments> (last visited Mar. 5, 2017).

<sup>28</sup> See UNDP, *supra* note 24.

<sup>29</sup> See *id.*; see also *Solar City Launches First Public Offering of Solar Bonds*, SOLAR CITY, <https://solarbonds.solarcity.com/> (last visited March 5, 2017) (issuing \$200 million in asset-linked retail bonds).

<sup>30</sup> See *This is Leed*, LEED, <http://leed.usgbc.org/leed.html> (last visited Mar. 5, 2017) (laying out the Leadership in Energy and Environmental Design (“LEED”) certification process for green commercial and residential buildings in the United States as established by the United States Green Building Council (“USGBC”).

<sup>31</sup> See INT’L CAP. MKTS. ASS’N, *supra* note 13, at 1.

<sup>32</sup> See *Green Projects*, *supra* note 6.

<sup>33</sup> See *id.* (outlining a climate resilient project in Belize that built-up roads to confront heightened flooding risk from rising sea levels and a project in China that reconstructed a river basin and improved drainage to prevent flooding and contamination caused by climate change).

<sup>34</sup> See *Tax Incentives for Issuers and Investors*, CLIMATE BOND INITIATIVE, <https://www.climatebonds.net/policy/policy-areas/tax-incentives> (last visited Mar. 5, 2017) (explaining that “bond investors do not have to pay income tax on interest from the green bonds they hold”).

<sup>35</sup> See *What are Green Bonds*, *supra* note 3 (explaining that “Green Bonds are an opportunity to invest in climate solutions through a high quality credit fixed income product”).

<sup>36</sup> See *Climate Bonds for Beginners*, CLIMATE BOND INITIATIVE, <https://www.climatebonds.net/resources/overview/climate-bonds-for-beginners> (last visited Mar. 5, 2017) (stating that 89% of green bonds are investment-grade); see also Christopher Swope, *Explainer: What Are ‘Green Bonds’ and Why Are Cities So Excited About Them?*, CITISCOPE (May 20, 2016), <http://citiscope.org/story/2016/explainer-what-are-green-bonds-and-why-are-cities-so-excited-about-them> (contending municipal bonds are viewed as safe and attract many investors).

<sup>37</sup> See Michael Chamberlain, *Socially Responsible Investing: What You Need to Know*, FORBES (Apr. 24, 2013), <http://www.forbes.com/sites/feonlyplanner/2013/04/24/socially-responsible-investing-what-you-need-to-know/#40115f885863> (breaking down how SRIs make investment decisions).

<sup>38</sup> See Env’tl. Fin. Staff, *Show Me the Green Money!*, ENVTL. FIN. (Aug. 22, 2016), <https://www.environmental-finance.com/content/analysis/show-me-the-green-money.html> (making clear how SRIs can be beneficial to issuers’ investor portfolios).

<sup>39</sup> See Bridget Boule, *The Dawn of an Age of Green Bonds?*, GREEN ECON. COAL. (Mar. 12, 2014), <http://www.greenecomonycoalition.org/know-how/dawn-age-green-bonds>.

<sup>40</sup> See *id.* (giving AAA status is the safest rating an investment can receive).

<sup>41</sup> See Zanki, *supra* note 5.

<sup>42</sup> Boule, *supra* note 39.

<sup>43</sup> See *History*, CLIMATE BOND INITIATIVE, <http://www.climatebonds.net/market/history> (last visited Mar. 5, 2017) [hereinafter *CBI History*]; see also *EIB Climate Awareness Bonds*, THE EUR. INV. BANK, <http://www.eib.org/attachments/fi/projects-supported-by-cabs.pdf> (last visited Mar. 5, 2017) (financing projects such as energy efficient, private and public housing in Austria).

<sup>44</sup> See *New World Bank Green Bond Is a Story of Market Growth and Innovation*, WBG, <http://www.worldbank.org/en/news/feature/2015/02/25/green-bond-story-market-growth-innovation> (last visited Mar. 5, 2017) [hereinafter *New World Bank*].

<sup>45</sup> See *Strategic Framework*, *supra* note 2.

<sup>46</sup> See *What are Green Bonds*, *supra* note 3.

<sup>47</sup> See *id.*

<sup>48</sup> See *New World Bank*, *supra* note 44.

<sup>49</sup> *What are Green Bonds*, *supra* note 3.

<sup>50</sup> See *Our Governance*, IFC, [http://www.ifc.org/wps/wcm/connect/corp\\_ext\\_content/ifc\\_external\\_corporate\\_site/about+ifc\\_new/IFC+Governance](http://www.ifc.org/wps/wcm/connect/corp_ext_content/ifc_external_corporate_site/about+ifc_new/IFC+Governance) (last visited Mar. 12, 2017) (explaining that the IFC is a member of the World Bank Group although it remains a separate legal entity).

<sup>51</sup> *CBI History*, *supra* note 43.

<sup>52</sup> See *id.* (describing how green bonds became mainstream investments).

<sup>53</sup> See Boule, *supra* note 39.

<sup>54</sup> See *id.* (creating more demand by issuing through larger well known corporate issuers).

<sup>55</sup> Compare SIFMA, *supra* note 19 (computing 2010 corporate bond issuances at \$1.03 trillion) with *Global Bonds*, THE WORLD BANK TREASURY, [\[treasury.worldbank.org/cmd/pdf/InvestorBriefsGlobalBonds.pdf\]\(http://treasury.worldbank.org/cmd/pdf/InvestorBriefsGlobalBonds.pdf\) \(last visited Mar. 10, 2017\) \(approximating annual World Bank bond issuances at \\$2 to \\$4 billion\).](http://</a></p></div><div data-bbox=)

<sup>56</sup> See Mike Cherney, *Massachusetts Goes ‘Green,’* WALL ST. J. (June 4, 2013, 7:33 PM), <http://www.wsj.com/articles/SB10001424127887324563004578525762271478512> (investing in water quality, energy efficiency, and pollution reduction across the State).

<sup>57</sup> *Id.*

<sup>58</sup> See Zanki, *supra* note 8 (detailing that funding will be distributed to water conservation projects and installing solar panels on public schools).

<sup>59</sup> See Scott M. Stringer, *A Green Bond Program for New York City*, N.Y.C. OFFICE OF THE COMPTROLLER 4 (2015), [https://comptroller.nyc.gov/wp-content/uploads/2016/06/Green\\_Bond\\_Program\\_Update.pdf](https://comptroller.nyc.gov/wp-content/uploads/2016/06/Green_Bond_Program_Update.pdf) (reporting that investors agreed for eligible green projects to be modeled after the systems of other successful issuers).

<sup>60</sup> *Id.* (recognizing that a high-quality program would improve the City’s risk profile among investors and verify NYC as a leader in the green municipal bond market).

<sup>61</sup> See Boule, *supra* note 39 (increasing market size when corporate issuers with deep pockets began issuing green bonds).

<sup>62</sup> *What are Green Bonds*, *supra* note 3; see generally *Safeguard Policies*, THE WORLD BANK, <http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTSAFEPOL/0,,menuPK:584441~pagePK:64168427~piPK:64168435~theSitePK:584435,00.html> (last visited Mar. 12, 2017) [hereinafter *Safeguard Policies*] (framing the World Bank’s policies for monitoring the social and environmental impacts of its investments).

<sup>63</sup> See Zanki, *supra* note 5 (conveying that a definitive green standard will prevent manipulation and increase transparency).

<sup>64</sup> See UNDP, *supra* note 24 (displaying the major concerns and risks in the green bond market).

<sup>65</sup> See Kapur, *supra* note 9 (asserting that without increased transparency investors will exit the market).

<sup>66</sup> See generally ILSR Admin, *Top 10 Ways Walmart Fails on Sustainability*, INST. FOR LOCAL SELF-RELIANCE (Apr. 17, 2012), <https://ilsr.org/top-10-ways-walmart-fails-sustainability/> (deducing that Wal-Mart is the most notorious greenwasher and has recently begun highlighting its sustainability efforts yet has failed to meet these promises and ignores its drastic environmental impact).

<sup>67</sup> See *About Greenwashing*, GREENWASHING INDEX, <http://greenwashingindex.com/about-greenwashing/> (last visited Mar. 12, 2017) (defining greenwashing).

<sup>68</sup> See *id.* (presenting common examples of greenwashing).

<sup>69</sup> See Phillip Ludvigsen, *Advanced Topics in Green Bonds: Risks*, ENVTL. FIN. (Nov. 24, 2015), <https://www.environmental-finance.com/content/analysis/advanced-topics-in-green-bonds-risks.html> (revealing that issuers may make environmental claims without supporting evidence).

<sup>70</sup> See Fred Pearce, *Greenwash: Why ‘Clean Coal’ is the Ultimate Climate Change Oxymoron*, THE GUARDIAN (Feb. 26, 2009), <https://www.theguardian.com/environment/2009/feb/26/greenwash-clean-coal> (publicizing that claims of modern coal being 70% cleaner come from a reduction of sulphur and nitrogen not carbon emissions).

<sup>71</sup> See Ludvigsen, *supra* note 69 (calling for up-to-date disclosure of projects environmental data to keep investors informed and able to monitor progress).

<sup>72</sup> See *id.* (explaining that increased disclosure of environmental impacts will help investors weigh decisions on which projects they deem green enough for their money).

<sup>73</sup> See INT’L CAP. MKTS. ASS’N, *supra* note 13, at 3.

<sup>74</sup> See *id.* at 2 (presenting that these requirements will prevent issuers from misleading the market).

<sup>75</sup> See *id.* at 3.

<sup>76</sup> See *id.* (listing the eligible broad green bond project categories based on environmental and sustainable sectors in need of financing).

<sup>77</sup> See *GBP Membership*, INT’L CAP. MKTS. ASS’N, <http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/green-bonds/membership/> (last visited Mar. 12, 2017) (listing eighty-eight issuers and underwriters who are members of the GBP).

<sup>78</sup> See Robert N. Freedman, *Financing Green: The Rise of the Green Bond*, LAW360 (June 26, 2014 5:47 PM), <http://www.law360.com/articles/552291/>

financing-green-the-rise-of-the-green-bond?article\_related\_content=1 (recognizing despite the benefits of the GBP, problems still exist in the market).

<sup>79</sup> See Kapur, *supra* note 9 (contending the lack of regulation will allow greenwashing to saturate the market and prevent meaningful change).

<sup>80</sup> See INT'L CAP. MKTS. ASS'N, *supra* note 13, at 1-6.

<sup>81</sup> See Zanki, *supra* note 5 (stressing the issues with the market subscribing to voluntary guidelines).

<sup>82</sup> See INT'L CAP. MKTS. ASS'N, *supra* note 13, at 2 (explaining the ICMA's argument for voluntary prescription).

<sup>83</sup> See *id.* at 2 (noting that green bond issuers are not required to follow the GBP).

<sup>84</sup> See *About Us*, INT'L CAP. MKTS. ASS'N, <http://www.icmagroup.org/About-ICMA/> (last visited Mar. 29, 2017).

<sup>85</sup> See Graham Cooper, *Green Bond Market Needs Dialogue with Policymakers, Says Think Tank*, ENVTL. FIN. (June 8, 2016), <https://www.environmental-finance.com/content/news/green-bond-market-needs-dialogue-with-policymakers-says-think-tank.html> (suggesting public sector development of standards would be beneficial for the green bond market).

<sup>86</sup> See *id.* (noting a clear definition of "greenness" is essential to the market).

<sup>87</sup> INT'L CAP. MKTS. ASS'N, *supra* note 13, at 3.

<sup>88</sup> See Cooper, *supra* note 85 (reiterating that integrity is crucial the markets financial and environmental success).

<sup>89</sup> See Ludvigsen, *supra* note 69 (arguing an implied benefit of environmental externalities can be valued).

<sup>90</sup> See INT'L CAP. MKTS. ASS'N, *supra* note 13, at 5 (verifying sustainability by comparing internal claims made by the issuer to external evaluations of reviewer).

<sup>91</sup> See *id.* at 4.

<sup>92</sup> See Ludvigsen, *supra* note 69 (rebuking second-party sources who provide ratings for a green bond project they helped create and declaring it an "independent" rating).

<sup>93</sup> See *Moody's Corporation*, MOODY'S, <https://www.moody.com/Pages/atc.aspx> (last visited Mar. 12, 2017) (describing Moody's role in the financial industry as issuing credit ratings and analysis for securities and bonds).

<sup>94</sup> See Dominic Rushe, *Credit Agencies Dropping Claims That They are 'Independent', Harvard Finds*, THE GUARDIAN (Apr. 9, 2015, 7:30 AM), <https://www.theguardian.com/business/2015/apr/09/credit-agencies-rejecting-claims-independent-harvard> (noting Moody's has shied away from referring to itself as "independent" after the 2008 financial crisis).

<sup>95</sup> See Rupert Neate, *Ratings Agencies Suffer Conflict of Interest, Says Former Moody's Boss*, THE GUARDIAN (Aug. 22, 2011, 1:18 PM), <https://www.theguardian.com/business/2011/aug/22/ratings-agencies-conflict-of-interest> (confirming credit rating agencies' role in the 2008 financial crisis).

<sup>96</sup> See Kat Greene, *SEC Says Conflicts of Interest Persist at Ratings Agencies*, LAW360 (Dec. 23, 2014 9:57 PM), <http://www.law360.com/articles/607603/sec-says-conflicts-of-interest-persist-at-ratings-agencies> (reporting that conflict of interests continue to exist).

<sup>97</sup> See Usman Hayat, *Green Bonds: What's Right, What's Wrong*, ENTER. INV. (July 9, 2015), <https://blogs.cfainstitute.org/investor/2015/07/09/green-bonds-whats-right-whats-wrong/> (arguing conflicts of interest will arise if current disclosure laws and service providers both advise and offer reviews to issuers).

<sup>98</sup> *Climate Bond Standard*, *supra* note 22.

<sup>99</sup> See *id.* at 8-9 (requiring issuers to disclose quantitative methods for determining sustainability impacts).

<sup>100</sup> See *Climate Bond Standard*, *supra* note 22, at 11-12 (outlining the pre-issuance and post-issuance certification process to ensure investors of the integrity of their funds).

<sup>101</sup> See *id.* at 3 (demonstrating the Climate Bond Standard is voluntary for issuers to show off their climate integrity).

<sup>102</sup> See Kapur, *supra* note 9 (explaining these voluntary guidelines come with costs not required for conventional bonds).

<sup>103</sup> See INT'L CAP. MKTS. ASS'N, *supra* note 13, at 3 (noting the difference between conservation projects that preserve wildlife habitats and sustainability projects that produce renewable energy and smart farms).

<sup>104</sup> See *Climate Bond Standard*, *supra* note 22, at 3 (stating the Climate Bond Standard follows the requirements of the GBP, which purposely do not weigh eligible projects against each other); see also INT'L CAP. MKTS. ASS'N, *supra* note 13, at 3.

<sup>105</sup> See *Protecting the Environment*, NUCLEAR ENERGY INST., <http://www.nei.org/Issues-Policy/Protecting-the-Environment> (last visited Mar. 12, 2017) (detailing the conservation concerns of nuclear power).

<sup>106</sup> See Env'tl. Fin. Staff, *Green Bond Comment- July 2016*, ENVTL. FIN. (July 27, 2016), <https://www.environmental-finance.com/content/analysis/green-bond-comment-july-2016.html> (pointing out without a standard the market will continue to permit controversial projects).

<sup>107</sup> See Giulio Boccaletti, *Not All Types of Water Projects Should Be Considered Green*, ENVTL. FIN. (Oct. 23, 2015), <https://www.environmental-finance.com/content/analysis/not-all-types-of-water-projects-should-be-considered-green.html> (arguing the lack of a definition for "sustainable resource management" makes classification of water projects as a green bond industry unclear).

<sup>108</sup> See *id.* (highlighting several of the negative environmental impacts of water projects that, some have argued, outweigh the benefits).

<sup>109</sup> See Hamza Ali, *US Munis Tap Green Bond Market for Water Projects*, ENVTL. FIN. (Aug. 31, 2016), <https://www.environmental-finance.com/content/news/us-munis-tap-green-bond-market-for-water-projects.html> [hereinafter Ali *Munis*] (stating that projects that provide drinking water may not be green).

<sup>110</sup> See *generally Water Climate Bonds Standard*, CLIMATE BOND INITIATIVE, <http://www.climatebonds.net/files/files/Climate%20Bonds-Draft%20Water%20Bond%20Standard-Consultation%20Paper%202010-11-2015.pdf> [hereinafter *Water Climate Bonds Standard*] (defining eligibility for water projects financed by green bonds and intending to provide investors with a framework to evaluate water related bonds).

<sup>111</sup> See Meg Wilcox, *San Francisco Public Utilities Commission (SFPUC) Issues World's First Certified Green Bond for Water Infrastructure*, CERES, (May 18, 2016), <https://www.ceres.org/press/press-releases/san-francisco-public-utilities-commission-issues-world2019s-first-certified-green-bond-for-water-infrastructure> (issuing \$240 million in green revenue bonds for sustainable storm water management and water projects based on the Water Climate Bonds Standard).

<sup>112</sup> See Sophie Robinson-Tillett, *Green Bond Market Risks Losing Credibility, Warns Allianz*, ENVTL. FIN. (Nov. 24, 2015), <https://www.environmental-finance.com/content/news/green-bond-market-risks-losing-credibility-warns-allianz.html> (emphasizing that standardization is needed in order to preserve the market).

<sup>113</sup> See Kapur, *supra* note 9 (noting that voluntary regulations come with lower costs but also enable greenwashed projects which do nothing to mitigate climate change and push away investors).

<sup>114</sup> See Robinson-Tillett, *supra* note 112 (stating that without regulatory intervention, a mixed market will never recover its credibility).

<sup>115</sup> See Zanki, *supra* note 5 (standardizing "green" provides clarity for all international market participants).

<sup>116</sup> See U.S. FOOD & DRUG ADMIN., *HOW IS THE TERM "ORGANIC" REGULATED?* (2016), <https://www.fda.gov/AboutFDA/Transparency/Basics/ucm214871.htm> (last visited Mar. 12, 2017) (outlining the process for regulating the term organic); see also U.S. DEP'T OF AGRIC., *ORGANIC REGULATIONS*, <https://www.ams.usda.gov/rules-regulations/organic> (last visited Mar. 12, 2017) (explaining the USDA's regulations of organics).

<sup>117</sup> See U.S. DEP'T OF AGRIC., *supra* note 116 (mentioning the regulation and comment review process).

<sup>118</sup> See U.S. DEP'T OF AGRIC., *BECOMING A CERTIFIED OPERATION* (addressing concerns of increasing regulatory costs by reimbursing eligible organic producers up to 75% of the certification costs).

<sup>119</sup> See U.S. DEP'T OF AGRIC., *supra* note 116.

<sup>120</sup> See *id.*

<sup>121</sup> See Cooper, *supra* note 85 (arguing for the government to lead the regulation of the market).

<sup>122</sup> See *generally* SEC. & EXCH. COMM'N, *WHAT WE DO*, <https://www.sec.gov/about/whatwedo.shtml> (last visited Mar. 12, 2017) (giving an overview of the SEC's role).

<sup>123</sup> ENVTL. PROT. AGENCY, *WHAT IS GREEN INFRASTRUCTURE*, <https://www.epa.gov/green-infrastructure/what-green-infrastructure> (last visited Mar. 12, 2017).

<sup>124</sup> See Kapur, *supra* note 9 (noting the industry is nervous that regulations will lower issuance rates).

<sup>125</sup> See *generally* Green City Bonds, *How to Issue a Green Muni Bond*, GREEN BOND COAL. 1-3 (July 28, 2015), <http://www.climatebonds.net/files/files/Green%20City%20Playbook.pdf> (illuminating the historic value of municipal bonds).

<sup>126</sup> See *id.* at 4 (combining a safe investment in municipal bonds with the budding potential municipalities possess to mitigate climate change).

<sup>127</sup> See Kapur, *supra* note 9 (reporting municipal bonds without verification are likely to be greenwashed).

<sup>128</sup> See *id.* (stating that investors are skeptical when verification is lacking).

<sup>129</sup> See generally *id.* (suggesting that tax benefits are useless without the intrinsic environmental benefits).

<sup>130</sup> See Robinson-Tillett, *supra* note 112 (highlighting how even the private sector is concerned about greenwashing and standardized regulation is needed in the green bond market).

<sup>131</sup> See Hamza Ali, *Moody's Issues First GBA of a US 'Muni' Bond*, ENVTL. FIN. (Aug. 11, 2016), <https://www.environmental-finance.com/content/news/moodys-issues-first-gba-of-a-us-muni-bond.html> [hereinafter Ali *GBA*].

<sup>132</sup> See Hamza Ali, *Moody's Announces Green Bond Assessment Criteria*, ENVTL. FIN. (Jan. 14, 2016), <https://www.environmental-finance.com/content/news/moodys-announces-green-bond-assessment-criteria.html> [hereinafter Ali *Criteria*] (explaining Moody's grading system for the new GBA).

<sup>133</sup> See *id.* (making clear that Moody's does not market GBAs as official credit ratings).

<sup>134</sup> See *id.* (allowing investors to make more educated decisions about the bonds they invest in).

<sup>135</sup> See generally *id.* (suggesting that although beneficial, GBAs do not solve the problems with voluntary prescription).

<sup>136</sup> See *id.* (admitting that the GBA is voluntary).

<sup>137</sup> Ali *GBA*, *supra* note 131.

<sup>138</sup> See generally Boccaletti, *supra* note 107 (summarizing the debate over whether water projects should be eligible for green bond status).

<sup>139</sup> See Graham Cooper, *US Municipalities Launch \$800m of Green Bonds for Water Projects*, ENVTL. FIN. (June 1, 2016), <https://www.environmental-finance.com/content/news/us-municipalities-launch-800m-of-green-bonds-for-water-projects.html> (announcing \$800 million in new green municipal bonds dedicated to water projects in Massachusetts, San Diego, and New Jersey).

<sup>140</sup> See Ali *Munis*, *supra* note 109 (acknowledging that without a clear definition, it is unclear how green a project needs to be).

<sup>141</sup> See Robinson-Tillett, *supra* note 112 (warning that standardization is needed for the market to remain healthy and robust).

<sup>142</sup> See generally MUN. SEC. RULEMAKING BD., ABOUT MSRB, <http://www.msrb.org/About-MSRB.aspx> (last visited Mar. 12, 2017) (publicizing the MSRB's role in the municipal bond market).

<sup>143</sup> See generally FIN. INDUS. REG. AUTH., <http://www.finra.org/about> (last visited Mar. 12, 2017) (stating that FINRA is a private corporation that works as a self-regulatory organization and is financed by its many broker-dealer members).

<sup>144</sup> See MUN. SEC. RULEMAKING BD., *supra* note 142 (clarifying the MSRB's rules are enforced by the SEC).

<sup>145</sup> See generally MUN. SEC. RULEMAKING BD., PRIMARY MARKET DISCLOSURES, <http://www.msrb.org/Market-Transparency/Primary-Market.aspx> (last visited Mar. 12, 2017) (increasing the MSRB's jurisdiction after the 2008 financial crisis).

<sup>146</sup> MSRB Rule, MSRB Rule G-32(a)(iii)(A), <http://www.msrb.org/rules-and-interpretations/msrb-rules/general/rule-g-32.aspx>.

<sup>147</sup> MUN. SEC. RULEMAKING BD., CONTINUING DISCLOSURES, <http://www.msrb.org/Market-Transparency/Continuing-Disclosure.aspx> (last visited Mar. 12, 2017).

<sup>148</sup> See Ludvigsen, *supra* note 69 (exclaiming investors can do little until some sort conformity is implemented).

<sup>149</sup> See *id.* (calling the GBP and CBI beneficial in defining a standard of care).

<sup>150</sup> See generally INT'L CAP. MKTS. ASS'N, *supra* note 13; *Climate Bond Standard*, *supra* note 22.

<sup>151</sup> See Ludvigsen, *supra* note 69 (suggesting that investors who assert false environmental promises from issuers were material to their investment decisions should be able litigate their claims).

<sup>152</sup> See *Zhu v. UCBH Holdings, Inc.*, 682 F. Supp. 2d 1049, 1052 (N.D. Cal. 2010) (allowing plaintiffs to consolidate claims if they relying on the same information to prevent "delay, confusion and prejudice").

<sup>153</sup> *Id.* at 1051.

<sup>154</sup> *Id.* at 1052.

<sup>155</sup> *Id.*

<sup>156</sup> *Id.*

<sup>157</sup> See Ludvigsen, *supra* note 69 (realizing that investors cannot point to a standard of care until regulations are made).

<sup>158</sup> See *Class Action Attorney: Answers About Class Action Lawsuits*, LIEFF CABRASER HEIMANN & BERNSTEIN, LLP, <https://www.lieffcabraser.com/about-us/class-action-faq/> (last visited Mar. 12, 2017) [hereinafter *Action Attorney*] (agreeing that class actions help individuals get remedies from large and powerful entities).

<sup>159</sup> See *Class Actions*, JUSTIA, <https://www.justia.com/trials-litigation/class-actions/> (last visited Mar. 12, 2017) [hereinafter *Class Actions*] (combining resources lowers the financial costs and can amplify legal arguments).

<sup>160</sup> See *Action Attorney*, *supra* note 158 (confirming it makes little financial sense to bring an individual case against large businesses).

<sup>161</sup> See *id.* (pursuing class actions are effective measures of stopping wrongdoers from continuing their behavior).

<sup>162</sup> See *Class Actions*, *supra* note 159 (litigating class actions requires greater resources and time to reach a conclusion).

<sup>163</sup> See *In re Oppenheimer Rochester Funds Grp. Sec. Litig.*, 2015 U.S. Dist. LEXIS 141073 at \*15-16 (D. Colo. Oct. 16, 2015) (discussing the procedural history of the case).

<sup>164</sup> *Id.* at \*25.

<sup>165</sup> *Id.* at \*26-27.

<sup>166</sup> *Id.* at \*27-28.

<sup>167</sup> See *id.* at \*30-31 (discussing how proof of false or misleading statements must be established).

<sup>168</sup> See *id.* at \*52-53 (ruling class action litigation is superior to any other form of adjudication in this case to prevent re-litigating cases and the high costs of individual litigation).

<sup>169</sup> *Id.* at \*15-16.

<sup>170</sup> See Kevin LaCroix, *Thinking About Bondholder Securities Class Actions*, THE D&O DIARY (Feb. 20, 2015), <http://www.dandodiary.com/2015/02/articles/securities-litigation/thinking-about-bondholder-securities-class-actions/> (explaining that bondholder class actions provide remedies for those misled by issuers and may act a deterrent against similar action in the future).

<sup>171</sup> See Ludvigsen, *supra* note 69 (identifying that investors cannot point to a standard of care until regulations are made).

<sup>172</sup> See *Abell v. Potomac Ins. Co.*, 858 F.2d 1104, 1109 (5th Cir. 1988).

<sup>173</sup> See *id.* at 1117-18 (ruling that the Plaintiff's must prove their reliance on false statements led to their investment in order to be compensated).

<sup>174</sup> See *id.* at 1118 (explaining that neither party demonstrated whether most of the class member relied upon the false statements).

<sup>175</sup> See *id.* at 1116-17 (holding the defendant's statements were indeed materially false because it advertised an investment as feasible when it was not)

<sup>176</sup> See *id.* at 1109 (showing that carrying out securities class actions can come at great expense for plaintiffs without that guarantee of compensation).

<sup>177</sup> See generally SEC. CLASS ACTION CLEARINGHOUSE, <http://securities.stanford.edu/about-the-scac.html> (last visited Mar. 12, 2017) (collecting information on court mandated securities class action settlements).

<sup>178</sup> See David Pierson, *PG&E Will Pay Residents Who Sued Over Groundwater Pollution*, L.A. TIMES (Feb. 4, 2006), <http://articles.latimes.com/2006/feb/04/local/me-erin4> (reporting a \$295 million settlement for class action victims of the defendant's pollution and cover-up).

<sup>179</sup> See Michael C. Gilleran, *The Rise of Unfair and Deceptive Trade Practice Act Claims*, AM. BAR ASS'N (Oct. 17, 2011), <http://apps.americanbar.org/litigation/committees/businesstorts/articles/fall2011-unfair-deceptive-trade-practice-act-claims.html> (awarding multiple settlements deters companies from committing business fraud by hurting their bottom line).

<sup>180</sup> See Zanki, *supra* note 5 (arguing despite the implementation of the GBP, a formalized standard is still needed).

<sup>181</sup> See Cooper, *supra* note 85 (recognizing the lack of a standard has created uncertainty).

<sup>182</sup> See Robinson-Tillett, *supra* note 112 (warning that issuers may take advantage of the lack of standard for financial gain).

<sup>183</sup> See Kapur, *supra* note 9 (cautioning that the market may depart from its intended purpose and lose credibility).

<sup>184</sup> See Robinson-Tillett, *supra* note 112 (asking for regulatory consistency before it's too late).

<sup>185</sup> See generally U.S. SEC. & EXCH. COMM'N, ABOUT THE DIVISION OF ENFORCEMENT, <https://www.sec.gov/divisions/enforce/about.htm> (last visited Mar. 12, 2017) (defining the SEC's enforcement role in the securities industry).

<sup>186</sup> See U.S. DEP'T OF AGRIC., *supra* note 116 (outlining the process for defining the term organic); see also U.S. FOOD & DRUG ADMIN., *supra* note 116 (explaining how FDA defines organic).

<sup>187</sup> See U.S. DEP'T OF AGRIC., *supra* note 116; see also U.S. FOOD & DRUG ADMIN., *supra* note 116 (describing the process for defining organic).

<sup>188</sup> ENVTL. PROT. AGENCY, *supra* note 123.

<sup>189</sup> See generally *id.* (explaining how EPA handbooks can easily be replicated for the green bond industry).

<sup>190</sup> See *Safeguard Policies*, *supra* note 62 (explaining the World Bank's policies for monitoring the social and environmental impacts of its investments).

- <sup>191</sup> See Kapur, *supra* note 9 (stressing the need for balance between regulation and market growth).
- <sup>192</sup> See generally U.S. SEC. & EXCH. COMM'N, *supra* note 185 (explaining the SEC's enforcement role in the securities industry).
- <sup>193</sup> See Kapur, *supra* note 9 (arguing investors will seek out bonds that verify their own "greenness").
- <sup>194</sup> See INT'L CAP. MKTS. ASS'N, *supra* note 13 (detailing the voluntary process guidelines for issuing green bonds).
- <sup>195</sup> See *id.* at 3 (describing why the broad categories were selected).
- <sup>196</sup> See generally *Water Climate Bonds Standard*, *supra* note 110 (proposing criteria for certifying bond offerings linked to water-related assets).
- <sup>197</sup> See Pearce, *supra* note 70 (advocating against "clean coal" projects); see also Ali *GBA*, *supra* note 131 (debating the problems of allowing green bonds to fund water projects).
- <sup>198</sup> See INT'L CAP. MKTS. ASS'N, *supra* note 13, at 2-3 (discussing pollution control projects and how to manage them).
- <sup>199</sup> See *id.* at 3 (noting agriculture and fishery projects can be eligible if they can manage their sustainable and conservation impact).
- <sup>200</sup> See *id.* (listing examples of eligible green bond conservation projects).
- <sup>201</sup> See *id.* (listing clean transportation as a commonly used type of project supported by the green bond market).
- <sup>202</sup> See generally LEED, *supra* note 30.
- <sup>203</sup> See INT'L CAP. MKTS. ASS'N, *supra* note 13, at 3 (listing energy efficient construction projects).
- <sup>204</sup> See Cooper, *supra* note 85 (endorsing projects that align with government standards is beneficial).
- <sup>205</sup> U.S. DEP'T OF AGRIC., ORGANIC LABELING, <https://www.ams.usda.gov/rules-regulations/organic/labeling> (last visited Mar. 12, 2017).
- <sup>206</sup> See Ali *Criteria*, *supra* note 132 (describing Moody's criteria for the GBA and scoring assessment).
- <sup>207</sup> See *Climate Bond Standard*, *supra* note 22, at 11 (explaining important factors considered in the certification process).
- <sup>208</sup> See Sarah Fister Gale, *Green Bonds: Are Your Projects a Good Fit?*, WATER WORLD, <http://www.waterworld.com/articles/print/volume-31/issue-3/features/green-bonds-are-your-projects-a-good-fit.html> (certifying green bonds will help municipalities signal to investors and stand apart from greenwashed projects).
- <sup>209</sup> See Kapur, *supra* note 9 (noting that only two municipal issuers received external reviews in 2015).
- <sup>210</sup> See generally MUN. SEC. RULEMAKING BD., *supra* note 142 (classifying the MSRB's role in the bond market).
- <sup>211</sup> See Gale, *supra* note 208 (disclosing the environmental impact of projects creates trust with investors).
- <sup>212</sup> See Ludvigsen, *supra* note 69 (explaining the risks associated with green fraud).
- <sup>213</sup> See INT'L CAP. MKTS. ASS'N, *supra* note 13, at 2 (following the same core elements established in the GBP).
- <sup>214</sup> INT'L CAP. MKTS. ASS'N, *supra* note 13 (recommending a high level of disclosure throughout the bonds maturation); see also MUN. SEC. RULEMAKING BD., *supra* note 147 (requiring municipal issuers to continuously disclose information).
- <sup>215</sup> See *Municipal Bonds*, AXA EQUITABLE FIN. SERVS., <https://us.axa.com/axa-products/investment-strategies/articles/municipal-bonds.html> (June 2015) (explaining how municipal bonds differ from corporate bonds with serial maturities).
- <sup>216</sup> See Cooper, *supra* note 85 (calling on the government to clarify and enforce eligible projects).
- <sup>217</sup> See INT'L CAP. MKTS. ASS'N, *supra* note 13, at 3 (creating nine categories of eligible projects).
- <sup>218</sup> See *id.* at 4 (allowing investors to compare green bonds based on the quality of their disclosed sustainability impact).
- <sup>219</sup> MUN. SEC. RULEMAKING BD., ELECTRONIC MUNICIPAL MARKET ACCESS (EMMA) WEBSITE, <http://www.msrb.org/About-MSRB/Programs/EMMA.aspx> (last visited Mar. 12, 2017).
- <sup>220</sup> See INT'L CAP. MKTS. ASS'N, *supra* note 13, at 4 (pushing issuers to keep readily available information on the use of proceeds so issuers may track their investment's progress).
- <sup>221</sup> See Swope, *supra* note 36 (calculating that the cost of an independent review ranges between \$10,000 and \$50,000).
- <sup>222</sup> See Kapur, *supra* note 9 (relaying concerns that balance is needed to keep "investment oxygen" in the market).
- <sup>223</sup> See Phillip Ludvigsen, *External Review of Green Bonds: Lessons Learned*, ENVTL. FIN. (Oct. 14, 2016), <https://www.environmental-finance.com/content/analysis/external-review-of-green-bonds-lessons-learned.html#refs> (asserting that investors rely on information disclosed in the review process).
- <sup>224</sup> See Iliana Lazarova, *The Wild West of Green Bonds*, CLEAN ENERGY FIN. F. (Mar. 2, 2016), <http://www.cleanenergyfinanceforum.com/2016/03/02/the-wild-west-of-green-bonds> (discussing how environmental impact, yield, and public confidence need to be weighed by all market participants).
- <sup>225</sup> See *id.* (indicating the responsibility placed on issuers, investors, banks, and regulators of reforming the market and allowing it to grow).
- <sup>226</sup> See *Action Attorney*, *supra* note 158 (stating that conjoining lawsuits levels the playing field for persons against deep-pocketed defendants).
- <sup>227</sup> See *id.* (emphasizing that little financial incentive exists to bring small individual claims against established defendants).
- <sup>228</sup> See LaCroix, *supra* note 170 (explaining that paying out large settlements to defendants sends a signal to issuers to change their practices or face similar law challenges).
- <sup>229</sup> See Ronald Barusch, *Dealpolitik: The Useful Corruption of Shareholder Lawsuits*, WALL ST. J. (Jan. 13, 2011 1:28 PM), <http://blogs.wsj.com/deals/2011/01/13/dealpolitik-the-useful-corruption-of-shareholder-lawsuits/> (asserting that fearing class action litigation is enough for businesses to make better decisions).
- <sup>230</sup> See *Action Attorney*, *supra* note 158 (requiring separate lawsuits could risk varying decisions in different courts).
- <sup>231</sup> See *In re Oppenheimer Rochester Funds Grp. Sec. Litig.*, 2015 U.S. Dist. LEXIS 141073 at \*23-24 (D. Colo. Oct. 16, 2015).
- <sup>232</sup> See LaCroix, *supra* note 170 (providing that bondholder class actions provide remedies and act as deterrents for similar conduct from issuers).
- <sup>233</sup> See Gilleran, *supra* note 179 (stating that granting multiple settlements deters fraud and leads to legitimate fair business practices).
- <sup>234</sup> See Ludvigsen, *supra* note 69 (arguing that misleading investors with environmental claims could be seen as material to their investment decision and thus open the possibility of litigation).
- <sup>235</sup> See *Abell v. Potomac Ins. Co.*, 858 F.2d 1104, 1117-18 (5th Cir. 1988) (noting the difference between materially false information and class member reliance on that information).
- <sup>236</sup> See Ludvigsen, *supra* note 69 (explaining the benefits of a "green" standard would have on setting industry good practices).
- <sup>237</sup> See LaCroix, *supra* note 170 (finding four out of five of the largest securities class action between 1996 and 2005 involved bondholder recoveries, although it is unclear whether there is a causal relationship between the size of a class action and bondholder recovery).
- <sup>238</sup> See *CBI History*, *supra* note 43 (reporting the story of the first green bond and its original purpose).
- <sup>239</sup> See Zanki, *supra* note 5 (publishing green bond issuance at \$42.4 billion in 2015).
- <sup>240</sup> See Env'tl. Fin. Staff, *Green Bond Comment—August 2016*, ENVTL. FIN. (Sept. 2, 2016), <https://www.environmental-finance.com/content/analysis/green-bond-comment-august-2016.html> (discussing 2016 green bond issuance projections of up to \$100 billion).
- <sup>241</sup> See Freedman, *supra* note 78 (arguing more regulation is needed to protect the integrity of the market).
- <sup>242</sup> Hank Paulson Jr., *How to Raise Trillions for Green Investments*, N.Y. TIMES (Sept. 20, 2016), <http://www.nytimes.com/2016/09/20/opinion/how-to-raise-trillions-for-green-investments.html>.