



---

Spring 3-1-2001

## Economics v. Equity II: The European Experience

Stephen M. Johnson

Follow this and additional works at: <https://scholarlycommons.law.wlu.edu/wlulr>



Part of the [Comparative and Foreign Law Commons](#), [Environmental Law Commons](#), and the [Law and Economics Commons](#)

---

### Recommended Citation

Stephen M. Johnson, *Economics v. Equity II: The European Experience*, 58 Wash. & Lee L. Rev. 417 (2001).

Available at: <https://scholarlycommons.law.wlu.edu/wlulr/vol58/iss2/3>

This Article is brought to you for free and open access by the Washington and Lee Law Review at Washington and Lee University School of Law Scholarly Commons. It has been accepted for inclusion in Washington and Lee Law Review by an authorized editor of Washington and Lee University School of Law Scholarly Commons. For more information, please contact [christensena@wlu.edu](mailto:christensena@wlu.edu).

# Economics v. Equity II: The European Experience

Stephen M. Johnson\*

## *Table of Contents*

Introduction .....	418
I. The Trend Towards Economic Approaches to Environmental Protection .....	419
II. The Inevitable Disparate Impacts of Economic Measures .....	422
III. Environmental Justice in Europe – A Historical Perspective ...	426
IV. Economic Environmental Protection Measures and Their Potential Disparate Impacts .....	430
A. A Primer on the European Union and Environmental Legislation in the European Union .....	430
B. Environmental Taxes and Deposit Refund Systems .....	433
C. Pollutant Trading Systems .....	438
D. Voluntary Agreements .....	442
E. Cost Benefit Analysis .....	446
V. Safety Nets in the Market .....	449
A. Public Participation .....	450
B. Information Access Laws .....	454
C. Environmental Assessment Requirements .....	461
D. Access to Justice .....	463
E. Constitutional or International Environmental Rights .....	468
F. The Nature of European Law .....	474

---

\* Professor, Walter F. George School of Law, Mercer University. B.S., J.D., Villanova University, LL.M., George Washington University School of Law. This Article was written while I was a Visiting Fellow at Queen Mary, University of London, and I would like to thank the faculty and the school for their generous support in this endeavour. As usual, though, the views expressed in this Article do not necessarily represent the views of Queen Mary, University of London, or its faculty. The Article is the sequel to *Economics v. Equity: Do Market-Based Environmental Reforms Exacerbate Environmental Injustice?*, 56 WASH. & LEE L. REV. 111 (1999).

VI. Economic Measures That Facilitate Environmental Justice . . . .	479
A. Pollution Release and Transfer Registers . . . . .	479
B. Environmental Labeling Programs . . . . .	482
C. Pollution Prevention . . . . .	484
Conclusion . . . . .	486

### *Introduction*

Lawmakers in the European Union and its member states,<sup>1</sup> like their counterparts in the United States, increasingly are using economic tools to protect the environment while reducing their focus on command and control regulation.<sup>2</sup> The reliance on economic approaches to environmental protection may disproportionately impact low income and minority communities. Although evidence of environmental injustice in Europe is not as strong as in the United States, several recent studies demonstrate that traditional environmental protection measures in Europe have disproportionately funneled pollution to low income communities.<sup>3</sup> Economic-based environmental measures can only exacerbate that trend.

In fact, the safety nets, such as freedom of information requirements, technical assistance provisions, opportunities for public participation, and access to the courts, that can limit the disparate impact of economic measures, are much weaker in Europe than in the United States.<sup>4</sup> To some extent, this is due to the structure of the European Union and the relationship of the Member States to the Union. The lack of adequate safety nets increases the possibility that economic approaches will exacerbate problems of environmental injustice. In addition, some of the economic approaches that could enhance opportunities for environmental justice, such as right-to-know laws and pollution prevention laws, are less likely to achieve these goals in Europe because the initiatives that are being pursued are quite modest.<sup>5</sup>

At the same time, though, the economic approaches that are being adopted by the European Union and its Member States include controls that are

1. Currently, the European Union includes the countries of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, and the United Kingdom. 1 Y.B. INT'L ORGS. 575 (Union of International Associations ed., 32d ed. 1995-1996).

2. See *infra* Part I (discussing trend toward environmental regulation using economic tools rather than command and control regimes).

3. See *infra* Part III (analyzing environmental injustice in Europe).

4. See *infra* Part V (comparing "safety nets" in European and American environmental measures).

5. See *infra* Part VI (describing environmental justice measures currently used in United States and Europe).

designed to reduce the impact of the laws on low income communities and the poor.<sup>6</sup> Furthermore, the structure of the European Union as well as provisions in international treaties and constitutions of the Member States may provide additional opportunities to limit the disparate impacts of pollution.<sup>7</sup>

This Article will compare and contrast the approaches that the United States and the European Union and its Member States are taking to address environmental justice issues as they move towards greater reliance on economic tools to achieve environmental protection. Part I of the Article discusses the trend towards economic approaches, and the reasons for the trend.<sup>8</sup> Part II examines the inevitable disparate impacts of economic approaches.<sup>9</sup> Part III analyzes the history of environmental justice in Europe.<sup>10</sup> Part IV outlines the economic environmental protection measures that are being implemented in Europe.<sup>11</sup> Part V compares the safety nets that are included in United States and European legislation.<sup>12</sup> Finally, Part VI compares the economic measures that are being used in the United States and Europe to achieve environmental justice, such as right-to-know laws and pollution prevention laws.<sup>13</sup>

### *I. The Trend Towards Economic Approaches to Environmental Protection*

The Fifth Environmental Action Program of the European Union,<sup>14</sup> launched in 1993, represented a substantial change in the focus of European policy on environmental protection.<sup>15</sup> The program emphasizes the use of "new environmental instruments," including "economic, fiscal and civil responsibility measures," "price corrections," measures to improve environmen-

---

6. See *infra* Part IV (discussing environmental justice measures and potential for disparate impact).

7. See *infra* Part V.E-F (discussing European statutory and treaty measures).

8. See *infra* Part I.

9. See *infra* Part II.

10. See *infra* Part III.

11. See *infra* Part IV.

12. See *infra* Part V.

13. See *infra* Part VI.

14. The Environmental Action Programs set priorities for legislation in the European Union. See Ian B. Bird & Miguel A. Veiga-Pestana, *European Community Environmental Policy and Law: An Introduction*, in *EUROPEAN COMMUNITY LAW AFTER 1992*, at 219, 222 (Ralph B. Lake ed., 1993) (stating that Environmental Action Programs spurred European community environmental legislation). However, they are not legally enforceable instruments. See Laurens Jan Brinkhorst, *European Environmental Law*, in *ENVIRONMENTAL LAW IN EUROPE* 1, 3 (Neils S. J. Koeman ed., 1999) (noting that programs "do not constitute a legal base for legislative action by the EC"). The First Environmental Action Program was adopted in 1972, and a new program is adopted, on the average, every five years. *Id.* at 2.

15. *Id.* at 2-3.

tal information and public access to information, and financial support mechanisms.<sup>16</sup> The program stresses increased reliance on economic measures and decreased reliance on command and control regulation. The focus on economic measures in the Fifth Environmental Action Program is tied closely to the concept of sustainable development that has been a central policy of European Union environmental law since the Treaty of Amsterdam.<sup>17</sup>

While the governing bodies of the European Union are strongly *encouraging* the use of economic measures by Member States, generally, they do not *require* countries to adopt such measures.<sup>18</sup> Instead, the European Union creates legislative frameworks that allow Member States to implement economic measures where necessary, according to local conditions.<sup>19</sup> The types of economic instruments that are being adopted in Europe include environmental taxes, tradeable permits, deposits, subsidies, environmental labeling or certification programs, right-to-know requirements, and voluntary agreements.<sup>20</sup>

16. See Council Resolution 93/138, §§ 6, 10, 1993 O.J. (C 138) 1 [hereinafter *Fifth Environmental Action Program*] (listing and describing new types of environmental measures to be used in European Union).

17. See Brinkhorst, *supra* note 14, at 2-3 (explaining development of Community environmental policy). The policy statements in the Treaties of the European Union that espouse sustainable development, the precautionary principle, and similar goals are not directly enforceable in Member States, but they significantly influence the content of legislation that is adopted by the European Union, which may be directly enforceable in the Member States. See Brian Jones, *Environmental Law in the United Kingdom*, in ENVIRONMENTAL LAW IN EUROPE, *supra* note 14, at 561, 562-63 (noting that "soft law" such as policy guidelines influence content of legislation but are not part of United Kingdom domestic law).

18. See Michael Bothe, *Economic Instruments for Environmental Protection: Introduction to the European Experience*, in ENVIRONMENTAL JUSTICE AND MARKET MECHANISMS: KEY CHALLENGES FOR ENVIRONMENTAL LAW AND POLICY 251, 256 (Klaus Bosselmann & Benjamin J. Richardson eds., 1999) [hereinafter ENVIRONMENTAL JUSTICE AND MARKET MECHANISMS] (explaining that although "[t]here is a lot of economic analysis of, even publicity for, the use of economic instruments . . . [a]ctual practice, however, is limited"); Catherine Redgwell, *Privatization and Environmental Regulation: A United Kingdom Perspective*, in ENVIRONMENTAL JUSTICE AND MARKET MECHANISMS, *supra*, at 257, 260 (explaining that Commission favors frameworks for introduction of market based measures). The reluctance of the European Union to require Member States to implement economic approaches is based, in part, on Article 175 (ex Article 130s) of the Consolidated Treaties of the European Union, which prohibits the European Union's Council of Ministers from enacting legislation "primarily of a fiscal nature" without the unanimous support of all of the member States. CONSOLIDATED VERSION OF THE TREATY OF THE EUROPEAN UNION AND CONSOLIDATED VERSION OF THE TREATY ESTABLISHING THE EUROPEAN COMMUNITY, art. 175, 1997 O.J. (C 340) 173-308 [hereinafter CONSOLIDATED EU TREATIES].

19. Redgwell, *supra* note 18, at 260.

20. See Klaus Bosselmann & Benjamin J. Richardson, *Introduction: New Challenges for Environmental Law and Policy*, in ENVIRONMENTAL JUSTICE AND MARKET MECHANISMS, *supra*

The Member States are adopting economic measures to address environmental problems for the same reasons that the United States is adopting such measures. Proponents assert that economic measures: (1) encourage polluters to reduce pollution in the most cost-effective manner; (2) achieve the same level of pollution reduction as command and control regulation at a lower cost; (3) eliminate information-gathering burdens on government that are necessary for command and control regulation; (4) provide incentives for companies to develop new technologies to reduce pollution beyond levels required by government; and (5) generate revenue for environmental programs in some cases.<sup>21</sup> In addition to those *theoretical* justifications for economic measures, in many countries the *practical* impetus for the adoption of such measures is the Kyoto Protocol.<sup>22</sup> Many industrialized countries are adopting or considering taxes and pollutant trading programs to cut emissions of carbon dioxide and other greenhouse gases by the levels required in the Kyoto Protocol.<sup>23</sup> In addition, the economic relationships of Member States and the elimination of market barriers within the Union, stimulates the adoption of economic measures. As the European Environment Agency recently noted in a report on environmental taxes, the "dispersal of traditional tax bases of

---

note 18, at 1, 15 (listing market-based instruments and noting "wide spectrum of mechanisms to choose from"); Bothe, *supra* note 18, at 252 (listing four categories of environmental instruments); Redgwell, *supra* note 18, at 261-62 (describing five types of environmental instruments); Jeremy Rowan-Robinson & Andrea Ross, *Non-Regulatory Instruments and Public Access to Environmental Information*, in ENVIRONMENTAL JUSTICE AND MARKET MECHANISMS, *supra* note 18, at 265, 268-73 (discussing two mechanisms: environmental agreements and tax credits). In the United Kingdom, for instance, the government has relied on voluntary agreements and environmental taxes to address pollution problems in the past, *see* Redgwell, *supra* note 18, at 262 (stating that environmental agreements are part of United Kingdom's "regulatory landscape"); Rowan-Robinson & Ross, *supra*, at 268 (noting "track record" of use of environmental agreements and tax credits in United Kingdom), and will likely increase its reliance on economic instruments in the future. *See* Redgwell, *supra* note 18, at 260-61 (stating that use of market-based instruments is "likely to increase in the future").

21. *See* Stephen M. Johnson, *Economics v. Equity: Do Market-Based Environmental Reforms Exacerbate Environmental Injustice?*, 56 WASH. & LEE L. REV. 111, 113 (1999) (addressing advantages of economic measures); *see also* Redgwell, *supra* note 18, at 260 (describing four main advantages of economic instruments).

22. *See generally* United Nations Conference on Environment and Development: Framework Convention on Climate Change, 31 I.L.M. 849 (1992) [hereinafter *Kyoto Protocol*].

23. *See Taxes, Voluntary Programs, Other Policies to Cut Greenhouse Gases Common in OECD*, 31 Env't. Rep. (BNA) No. 860-61 (May 5, 2000) (noting that "[m]ost member countries of the Organization for Economic Co-operation and Development are implementing tax credits, voluntary programs with industry and other policies to reduce greenhouse gas emissions"); European Environment Agency, *Recent Developments in the Use of Environmental Taxes in the European Union 1* (July 2000), at [http://reports.eea.eu.int/environmental\\_taxes\\_in\\_eu/en/taxes.pdf](http://reports.eea.eu.int/environmental_taxes_in_eu/en/taxes.pdf) (last visited Feb. 6, 2001) [hereinafter *EEA Tax Report*] (observing that focus on environmental taxes is strengthening due, in part, to Kyoto targets).

capital, [labor] and consumption due to the increased mobility of production and e-commerce increases the attraction of fixed and material factors such as energy, land and water as tax bases."<sup>24</sup>

As in the United States, though, economic measures in Europe are designed to complement, rather than replace, command and control environmental measures.<sup>25</sup> Many of the measures rely for their success upon an underlying program of government regulatory control.<sup>26</sup>

## II. *The Inevitable Disparate Impacts of Economic Measures*

While the economic approaches to environmental protection can provide all of the benefits described above, they also may inadvertently funnel pollution to low income communities. It is well established that low income communities suffer disproportionate exposure to various types of pollution under the command and control regulatory approach in the United States,<sup>27</sup> and research is beginning to demonstrate similar disparities in Europe.<sup>28</sup> To some extent, these disparities can be attributed to economic factors.<sup>29</sup> It has even

24. *EEA Tax Report*, *supra* note 23, at 1.

25. *See* Bosselmann & Richardson, *supra* note 20, at 4 (explaining that economic measures complement command and control methods); Bothe, *supra* note 18, at 251 (stating that "lower cost or more environmental improvement at the same cost" cannot be achieved through use of market mechanisms alone).

26. *See* Bosselmann & Richardson, *supra* note 20, at 8 (observing that although economic instruments are understood as "market mechanisms," they "are nested within state institutional processes"); Redgwell, *supra* note 18, at 260 (stating that economic instruments and command and control devices "[e]volve together" because of need for regulatory framework to set goals and standards); Gerald C. Rowe, *Environmental Justice as an Ethical, Economic and Legal Principle*, in ENVIRONMENTAL JUSTICE AND MARKET MECHANISMS, *supra* note 18, at 58, 70-71 (explaining that certain economic instruments "rely on an underlying prohibition and licensing system").

27. *See* Johnson, *supra* note 21, at 117 n.40 (citing studies that indicate that landfills, treatment facilities, and industries that emit large amounts of toxic chemicals are "sited predominantly in minority or low income communities") "[A]ll environmental regulatory measures can be expected to have distributive effects." *See* Rowe, *supra* note 26, at 66. In the traditional command and control regime, public resource and land management, decisions regarding the exercise of enforcement discretion, decisions regarding the permitting of polluting facilities, and decisions regarding the cleanup of hazardous waste sites can all have redistributive effects. *Id.* at 66-69. Similarly, the procedures and methods used to make environmental decisions, including cost-benefit analysis, can raise distributional issues. *Id.* at 66.

28. *See infra* notes 61-71 and accompanying text.

29. Professor Robert Verchick described the relationship between economics and waste disposal in the United States as follows:

While the production and disposal of waste is tightly regulated by federal law, the geographic distribution of most types of waste is not. But the absence of law is not the absence of form. Instead, external market forces – the cost of land, the cost of

been suggested that stringent command and control regulations can lead to the elimination of jobs and, therefore, increase risks to low income segments of the population.<sup>30</sup>

The disparities that arise under traditional command and control regulation inevitably will worsen as economic factors assume a more central role in environmental decisionmaking. As Professor Cass Sunstein noted, free markets often promote discrimination when they are functioning successfully.<sup>31</sup> Sunstein argued that a successful market promotes discrimination because it encourages persons to rely on stereotypes.<sup>32</sup> To the extent that there is a rational basis for a stereotype, a reasonable person will rely on stereotyping in his decisionmaking, because it is efficient to rely on the stereotype.<sup>33</sup> While stereotyping may be efficient, it breeds discrimination. A free market does not discourage such discrimination because the success of a market is measured independently of its redistributive impacts.<sup>34</sup> A market that allocates resources efficiently in the aggregate is a success, from an economic standpoint, regardless of whether resources are distributed equitably among the participants in the market.<sup>35</sup> To some extent, therefore, discrimination in the distribution of pollution is inevitable in an efficient and successful market.

Market *failures*, like market *successes*, can also prompt inequitable distribution of pollution. For example, in a traditional pollutant trading program,

---

transportation, the cost of facing public resistance – fill the void and gradually shape the topography of America's wastelands. . . . [W]aste moves from states with higher resident per capita incomes to states with lower resident per capita incomes.

*Id.*; Robert R. M. Verchick, *Critical Space Theory: Keeping Local Geography in American and European Environmental Law*, 73 TUL. L. REV. 739, 751-52 (1999) (citations omitted).

30. See CASS R. SUNSTEIN, *FREE MARKETS AND SOCIAL JUSTICE* 302-05 (1997) (stating that "private expenditures on regulatory compliance may produce less employment and more poverty").

31. See *id.* at 4, 8, 151 (stating that "free markets can produce economic inefficiency and (worse) a great deal of injustice . . . [e]ven well functioning economic markets should not be equated with freedom itself"); see also Bosselmann & Richardson, *supra* note 20, at 2 ("[T]here is a natural tension between environmental justice and market mechanisms"); Verchick, *supra* note 29, at 749 ("[I]deological forces such as free market liberalism . . . do not act neutrally.").

32. See SUNSTEIN, *supra* note 30, at 155-57 (suggesting that "discriminatory behavior is a response to generalizations or stereotypes that . . . provide a rational basis for employment decisions").

33. *Id.* at 155.

34. See Johnson, *supra* note 21, at 119-20 (noting that "economic theory does not address the important underlying question regarding whether an efficient allocation of resources is socially or ethically desirable").

35. *Id.*; see also SUNSTEIN, *supra* note 30, at 6, 109-10. As Professor Sunstein noted, the United States has the highest per capita gross domestic product in the world, but "it also has a higher rate of children living in poverty – one in five – than does any other wealthy country in the world." *Id.* at 110.



when Company A buys from Company B the "right" to discharge pollution, because it is cheaper for Company A to buy the "right" to pollute than to reduce the amount of pollution that it discharges, the transaction may be "cost-effective" for both companies. It may not, however, be an economically "efficient" transaction if the aggregate harms to persons or natural resources situated near Company A outweigh the benefits to Companies A and B and the third parties.<sup>36</sup> Traditional economic theory suggests that if the harm that a pollution trade caused third parties outweighed the benefits to those parties, the third parties would bargain with the trading parties to prevent the harm and resources would, therefore, be allocated efficiently in the market.<sup>37</sup> However, *market failures* will often prevent the efficient operation of the market for environmental or health resources and prevent low-income communities from even participating in the market.<sup>38</sup>

For a variety of reasons, third parties that are harmed by a pollutant trade might fail to bargain with the trading partners to prevent the harm. In some cases, while the aggregate harm to all third parties may outweigh the benefits of the trade, no single party, or group of parties, may suffer sufficient harm to be motivated to bargain to prevent the trade.<sup>39</sup> In other cases, third parties may be willing to bargain with the traders to prevent the trade, but may be unable to pay the traders enough money to prevent the trade.<sup>40</sup> Finally, in some cases, the third parties will not bargain with the traders because the third parties lack information about the potential health, environmental, and economic impacts of the trade to recognize that the trade will adversely affect them.<sup>41</sup> In each of those situations, the overall harms of a trade will outweigh the benefits, and yet the trade will be made, due to market failures.

If economic environmental protection measures may disparately impact low income communities, should governments play a role in limiting that impact? Free market proponents may argue that any government intervention will interfere with the efficient functioning of the market and should, therefore, be discouraged. However, markets depend on governments and laws for their existence.<sup>42</sup> As Professor Sunstein noted, "[w]e cannot have a system of private property without legal rules, telling people who owns what, imposing

---

36. See Johnson, *supra* note 21, at 122-23 (illustrating how market failures can lead to inequitable pollution distribution).

37. *Id.* at 123.

38. *Id.*

39. *Id.*

40. *Id.*

41. *Id.*; see also SUNSTEIN, *supra* note 30, at 327 (discussing that "information asymmetries" may allow dangerous products to drive safe products out of market).

42. See SUNSTEIN, *supra* note 30, at 9, 108 (observing that "markets depend for their existence on law").

penalties for trespass, and saying who can do what to whom."<sup>43</sup> The initial allocation of legal rights has a profound impact on the functioning of the market. It "serves to create, to legitimate, and to reinforce social understandings about presumptive rights of ownership . . . [creating an] endowment effect."<sup>44</sup> Studies demonstrate that a person who has been allocated a right by law will demand significantly greater compensation to surrender that right than they would be willing to pay to obtain that right.<sup>45</sup>

Laws and government regulations play another important role in shaping market activity in that they foster the creation of social norms,<sup>46</sup> which significantly influence an individual's rational choices in a free market.<sup>47</sup> Government can shape norms through education or persuasion initiatives, taxes and subsidies, time, place, and manner restrictions on activities, and even prohibitions of activities.<sup>48</sup>

Therefore, markets do not act independently of government regulation, and governments can, and should, play a role in limiting the disparate impact of economic environmental protection measures on low income communities. On the one hand, governments can do that by creating legal rights<sup>49</sup> to environmental amenities, such as the right to a clean environment. There are, however, much less intrusive ways for governments to limit the disparate impacts of economic measures.

Governments can include provisions in economic environmental protection measures to address some of the market failures that could otherwise lead to the disproportionate distribution of pollution in low income communities. For instance, economic environmental protection measures could include mechanisms to increase the availability of information and the opportunities for public participation to address situations where third parties fail to participate in the market because they lack sufficient information to understand the impacts that economic environmental protection measures may have on

---

43. *Id.* at 5.

44. *Id.* at 52.

45. *Id.* Sunstein stated:

One study found that people would demand about five times as much to allow destruction of trees in a park as they would pay to prevent the destruction of those same trees. . . . In another study, participants required payments to accept degradation of visibility ranging from 5 to more than 16 times higher than their valuations based on how much they were willing to pay to prevent the same degradation.

*Id.*

46. *Id.* at 34.

47. *Id.* at 8, 49, 52.

48. *Id.* at 56-57.

49. *Id.* at 7.

them.<sup>50</sup> In addition, to the extent that financial disparities reduce third party participation in the market, economic environmental protection measures could address the disparities to some extent through grants and loans.<sup>51</sup> Finally, economic environmental protection measures could include mechanisms that foster collective organization or provide safety nets for parties that fail to organize due to high transaction costs, in order to address the situation where third parties to a market transaction individually lack the motivation to participate in the market, although their collective injury exceeds the benefits of a particular transaction.<sup>52</sup>

Thus, information disclosure requirements, strong public participation requirements, financial and technical assistance programs, environmental assessment and planning requirements, and broad access to courts for citizens should be vital components of economic environmental protection measures. They are important tools that can be used to promote environmental justice in economic environmental protection measures.

### III. *Environmental Justice in Europe – A Historical Perspective*

While environmental justice has been a major focus of environmental law scholarship and policy in the United States over the past decade,<sup>53</sup> the environmental justice movement has not yet had a major impact on European law or politics.<sup>54</sup> Although there are dozens of studies that document the inequitable

50. See Johnson, *supra* note 21, at 124 (suggesting that "market-based initiatives should include mechanisms to increase the availability of information and the opportunities for public participation").

51. *Id.*

52. *Id.* at 123-24.

53. See generally Eileen Gauna, *Federal Environmental Citizen Suit Provisions: Obstacles and Incentives on the Road to Environmental Justice*, 22 *ECOLOGY L.Q.* 1, 6 n.22 (1995) (listing articles on "legal reformation in the civil rights area, challenges to discriminatory siting through alternative state claims, and reformation of facility siting procedures for toxic waste facilities"); Carita Shanklin, *Pathfinder: Environmental Justice*, 24 *ECOLOGY L.Q.* 333 (1997) (containing bibliography of recent environmental justice literature and resources).

54. See Gordon Walker & Karen Bickerstaff, *Polluting the Poor: An Emerging Environmental Justice Agenda for the UK?*, 2 *CRIT. URB. STUD. OCC. PAPER* 2-3 (1999) (describing lack of environmental justice movement in United Kingdom) (on file with author); Telephone Interview with Simon Bullock, Researcher, Friends of the Earth (Oct. 5, 2000); Telephone Interview with Gordon Walker, Head of Geography, Staffordshire University (Oct. 5, 2000). While environmental justice issues may be considered and debated when European countries are involved in treaty negotiations or disputes with developing countries outside of the European Union concerning the export of pollution to those countries or the creation of different standards for developing countries and developed countries, there has been relatively little focus on environmental justice in domestic politics in the countries of the European Union. See Telephone Interview with Simon Bullock, *supra*.

distribution of landfills and heavily polluting facilities and disparities in enforcement and hazardous waste cleanup rates in the United States, there are very few studies that examine these issues in the European context.<sup>55</sup> In addition, non-governmental organizations have not vigorously pursued environmental justice in Europe.<sup>56</sup>

However, environmental justice is becoming an important issue in Europe. Leaders of the burgeoning European environmental justice movement suggest that there are several reasons why more research has not been done, and why the movement has not taken center stage as quickly in Europe as it has in the United States. First, the environmental justice movement transformed environmental law and politics in the United States largely due to the work of the civil rights community.<sup>57</sup> So far, European civil rights groups have not played a major role in championing the issue in their countries.<sup>58</sup> Additionally, it has been difficult, until recently, for researchers in the European Union to obtain data from government agencies necessary to conduct studies that correlate pollution and demographic data.<sup>59</sup> Finally, the images that have fueled the United States environmental justice movement have not sparked a European movement because the central issues in the United States, hazardous waste landfills and incinerators, are not as incendiary in European politics.<sup>60</sup>

---

55. See Walker & Bickerstaff, *supra* note 54, at 2-3; Telephone Interview with Simon Bullock, *supra* note 54; Telephone Interview with Gordon Walker, *supra* note 54.

56. See Walker & Bickerstaff, *supra* note 54, at 2; Eva Berglund, *Social Divisions and Environmentalism*, Remarks at the Environmental Justice in a Divided Society Conference convened at Goldsmiths College, University of London (Feb. 25, 2000), at <http://www.goldsmiths.ac.uk/academic/an/environmental2.html> (last visited Feb. 6, 2001) (stating that "little has been done to examine unequal impacts in the environmental sphere").

57. See Julian Agyeman, *Environmental Justice: From the Margins to the Mainstream?*, Remarks at the Equity and the Environment Conference convened by the Royal Geographic Society (Nov. 8, 2000); Telephone Interview with Simon Bullock, *supra* note 54.

58. See Telephone Interview with Simon Bullock, *supra* note 54; Telephone Interview with Gordon Walker, *supra* note 54. Professor Walker suggested that one of the reasons that civil rights communities have not played a more central role in the movement in Europe is that "in the UK, the pattern of distribution of ethnic communities is less distinct and evidence of 'environmental racism' in facility siting less immediately apparent." Walker & Bickerstaff, *supra* note 54, at 3.

59. See Walker & Bickerstaff, *supra* note 54, at 4; Telephone Interview with Gordon Walker, *supra* note 54. Friends of the Earth postponed a study of the demographics of the communities in which landfills are sited in the United Kingdom due to the difficulty of obtaining adequate information about the types of landfills, their locations, and the hazards associated with them. See Telephone Interview with Simon Bullock, *supra* note 54.

60. See Walker & Bickerstaff, *supra* note 54, at 3. Walker and Bickerstaff suggested that "the high profile of toxics in the US . . . loaded accusations of environmental inequity with intense political symbolism." *Id.*

However, environmental justice is becoming an important issue in European environmental law and policy, and a few important studies have been released recently that correlate high levels of pollution with low-income populations. The most significant of these studies was released earlier this year by Friends of the Earth – U.K.<sup>61</sup> The organization examined the siting of the most heavily polluting industrial facilities in the United Kingdom,<sup>62</sup> and the authors of the study concluded that "the poorest families (reporting average household incomes below £5000) are twice as likely to have a polluting factory close by than those with average household incomes over £60,000."<sup>63</sup> In addition, the authors concluded that "[o]ver ninety per cent of London's most polluting factories are located in communities of below average income."<sup>64</sup> This was the first study completed in the United Kingdom to examine whether pollution disparately impacts low income communities.<sup>65</sup> While the study did not focus on the ethnic or racial composition of the communities, the authors of the study speculated that the correlation between economics and siting would be far greater than correlations between race or ethnicity and siting.<sup>66</sup> The authors plan to follow up their report with a study that examines the demographics of the communities in which incinerators are sited, as the United Kingdom embarks on an ambitious plan to greatly expand incineration capacity over the next few years.<sup>67</sup> Undoubtedly, as more studies are conducted, researchers likely will demonstrate that the tie between low income communities and pollution is as strong in Europe as in the United States.<sup>68</sup>

Another recent study in the United Kingdom is focusing directly on race and ethnicity. Professor Gordon Walker, at Staffordshire University, is exam-

---

61. See Friends of the Earth Trust, *The Geographic Relation Between Household Income and Polluting Facilities* (1999), at [http://www.foe.co.uk/campaigns/industry\\_and\\_pollution/factorywatch/pollution\\_and\\_poverty/income\\_and\\_pollution.html](http://www.foe.co.uk/campaigns/industry_and_pollution/factorywatch/pollution_and_poverty/income_and_pollution.html) (last visited on Feb. 6, 2001) [hereinafter *FOE Study*] (indicating presence of high levels of pollution in low income areas).

62. The study examined the siting of facilities that were registered under the United Kingdom's Integrated Pollution Control (IPC) framework, and examined household income distribution by postcode sector. *Id.*

63. *Id.*

64. *Id.*

65. See Telephone Interview with Simon Bullock, *supra* note 54.

66. See *FOE Study*, *supra* note 61 (stating that "poorer people in England and Wales are more likely to live in close proximity to a potentially polluting factory than richer people").

67. See Telephone Interview with Simon Bullock, *supra* note 54.

68. See Ted Schreker, *Money Matters: Incomes Tell a Story About Environmental Dangers and Human Health*, *ALTERNATIVES*, Summer 1999, at 12, 13-16 ("[V]ariations in health, and access to the most basic prerequisites for health, are inseparable from income and its distribution . . . . Environmental hazards . . . make a direct contribution to health inequalities, in rich countries just as in poor ones.").

ining the economic and ethnic background of communities that host "major accident hazard sites."<sup>69</sup> Although his findings have not yet been published, Professor Walker's research also suggests that major accident hazard sites are usually located in lower income communities.<sup>70</sup> Moreover, his preliminary analysis suggests that the sites impact Asian communities more heavily than other ethnic groups.<sup>71</sup>

In another sign of a burgeoning environmental justice movement, the press is criticizing European environmental agencies and non-governmental organizations for their failure to address the concerns of low-income and minority communities.<sup>72</sup> As a result, environmental groups are beginning to champion the environmental justice cause.<sup>73</sup> The fervor with which they are adopting the cause can be seen in the words of the director of Friends of the Earth-Scotland who, in announcing the organization's Environmental Justice campaign, said "This is not going to be a respectable campaign – it is born out of a great deal of anger and frustration."<sup>74</sup> In light of the fact that civil rights groups have not yet played a central role in the movement, European environmental justice advocates are focusing more heavily on issues of poverty and pollution than on issues of race and pollution.<sup>75</sup> Consequently, they will be

69. See Gordon Walker et al., *The People and the Hazard: the Spatial Context of Major Accident Hazard Management in Britain*, 20 APPLIED GEOGRAPHY 119, 121 (2000) ("Major accident hazards can be broadly defined as the storage or use of hazardous substances, where in the event of a major accident and release of toxic, explosive or flammable materials local people and the nearby environment could be seriously affected."). Professor Walker's research focused on "approximately 1100 installations . . . designated as major accident hazards through [the United Kingdom's] Hazardous Substances Consents Regulations (1992) . . . [and] a smaller subset of approximately 300 installations [that are] . . . defined as so-called 'top-tier' sites through the [Control of Industrial Major Accident Hazard] Regulations which . . . implemented the Seveso Directive." *Id.* at 123. Professor Walker is using the 1991 census data for the study. See Telephone Interview with Gordon Walker, *supra* note 54.

70. See Telephone Interview with Gordon Walker, *supra* note 54.

71. *Id.*

72. See Christopher Cairns, *Green for Stop as Racism Hits Environmental Organisations*, SUNDAY HERALD, Aug. 27, 2000, at 6, available at 2000 WL 23172858 (describing activist group, Black Environment Network).

73. In its report on pollution and poor communities, Friends of the Earth – U.K. states that "[j]ustice for poor people in England and Wales must include cleaning up their environment and reducing their exposure to health-threatening pollution." *FOE Study*, *supra* note 61; see also Christopher Cairns, *Friends of the Earth Demands 'Environmental Justice' for Blighted Areas*, THE SCOTSMAN, Apr. 28, 1999, at 9, available at 1999 WL 15111085 (describing launch, by Friends of Earth Scotland, of £250,000 campaign for environmental justice).

74. See Cairns, *supra* note 73, at 9.

75. For instance, as part of its "environmental justice" campaign, Friends of the Earth Scotland is calling for a "Warm Homes Bill" to address "fuel poverty." *Id.* Fuel poverty refers to the inability to heat one's home due to a low income and energy inefficient heating systems. *Id.*

concerned about economic-based approaches to environmental protection that could funnel more pollution into low-income communities. As noted in the next section, many economic environmental protection measures could have that impact.

#### *IV. Economic Environmental Protection Measures and Their Potential Disparate Impacts*

Economic environmental protection measures are being introduced in the European Union and its Member States, and this section will examine those measures and their potential disparate impacts.<sup>76</sup> However, before addressing the specific provisions, it might be helpful to discuss briefly the relationship that exists between the European Union and its Member States, the lawmaking procedures for European Union Legislation, and the effect of such legislation in the Member States.

##### *A. A Primer on the European Union and Environmental Legislation in the European Union*

Although the Treaty of Rome, which created the European Economic Community in 1957 did not explicitly authorize the Community to enact environmental legislation,<sup>77</sup> subsequent treaties have redefined the scope of

76. Bothe, *supra* note 18, at 251-52 ("The political debate on economic instruments in Europe, and corresponding legislative developments, have taken place both at the level of the European Community and at that of the Member States.") (footnote omitted). Bothe stated: "Economic instruments . . . involve questions of both national and Community law. Community law may, and to a certain extent does, limit national choices concerning those instruments." *Id.* at 253.

77. See Bird & Veiga-Pestana, *supra* note 14, at 221. Nevertheless, the Heads of State or government decided, at the 1972 Paris Summit, that the Community should develop an environmental policy program. *Id.* at 221-22. Although the Treaty of Rome did not explicitly authorize the Community to enact environmental legislation, it included two provisions that were frequently used as the basis for environmental laws prior to the adoption of the Single European Act in 1987, which explicitly addresses environmental law. See *id.* at 221 n. 7 ("Article 2 did refer to 'quality of life' issues and Article 36 allowed for the 'continuation or banning or restriction of the trade for reasons of public health, protection of animals and plants.'). Article 308 of the Treaty of Rome (ex Article 235) authorizes Community action if "necessary to attain, in the course of the operation of the common market, one of the objectives of the Community and [the Treaty of Rome] has not provided the necessary powers." CONSOLIDATED EU TREATIES, *supra* note 18, art. 308. It was widely used as a basis for environmental legislation. See Bird & Veiga-Pestana, *supra* note 14, at 222 n.12 (commenting on grant of power by former article 235, allowing European community to attain objectives where Treaty of Rome had not provided necessary powers). However, legislation under Article 308 must be adopted unanimously. See CONSOLIDATED EU TREATIES, *supra* note 18, art. 308. The other provision of the Treaty of Rome that was often used as the basis for environmental legislation was Article 94 (ex Article 100), which authorizes the adoption of directives for the approxima-

the Community's power,<sup>78</sup> and the European Union<sup>79</sup> now plays a central role in creating and influencing Europe's environmental legislative framework.<sup>80</sup> The lawmaking bodies of the European Union<sup>81</sup> have adopted more than three

---

tion (harmonization) of national laws directly affecting the establishment or operation of the Common Market. Bird & Veiga-Pestana, *supra* note 14, at 222 n.12; CONSOLIDATED EU TREATIES, *supra* note 18, art. 94. Like Article 308, though, Article 94 requires unanimous adoption of the legislative measures. CONSOLIDATED EU TREATIES, *supra* note 18, art. 94. Subsequently, Article 95 (ex Article 100A) amended the Treaty to provide for qualified majority voting in some cases. *Id.* art. 95.

78. The Single European Act (SEA), in 1987, and the Treaty on European Union, in 1992, added several provisions that explicitly address environmental law. See Bird & Veiga-Pestana, *supra* note 14, at 222 (discussing expansion of scope of environmental policymaking authority). Article 174 (ex Article 130r) authorizes the lawmaking bodies of the European Union to adopt environmental legislation, and Article 174(2) requires the European Union to consider environmental protection in all of its policies and actions. See CONSOLIDATED EU TREATIES, *supra* note 18, art. 174; see also Brinkhorst, *supra* note 14, at 3 (discussing impact of Single European Act of 1987, Treaty of Maastricht, and new Treaty of Amsterdam in increasing prominence of environmental issues). Although the Single European Act required unanimous approval of environmental legislation or international environmental actions, the Treaty on European Union (The Maastricht Treaty) amended the Treaty, so that it now provides that qualified majority voting is sufficient for most environmental action, other than environmental taxes, land use planning, water resources, and energy supplies, which require unanimous approval. CONSOLIDATED EU TREATIES, *supra* note 18, art. 175.

79. Since the Maastricht Treaty, which strives to create an economic and monetary union in Europe, the European Economic Community has been referred to as the European Union, rather than the European Community. See TREATY ON EUROPEAN UNION, Title I, art. A, 1992 O.J. (C 224) 1 (establishing "a European Union").

80. Bird & Veiga-Pestana, *supra* note 14, at 219.

81. The Council of Ministers, the European Commission and the European Parliament are the lawmaking bodies of the European Union. The legislative process normally begins when the Commission drafts a legislative proposal. See CONSOLIDATED EU TREATIES, *supra* note 18, art. 251 (outlining procedure for legislative enactment). There are twenty Commissioners who are appointed by the Member States for four year terms, but are not supposed to act as representatives of their States. *Id.* art. 213. Each Commissioner supervises at least one Directorate-General (department) of the Commission, which has specific administrative, legislative and law enforcement duties. See Bird & Veiga-Pestana, *supra* note 14, at 225 (explaining structure of European Commission and responsibilities of Commissioners). For instance, Directorate General XI is the Environment and Nuclear Safety Directorate. *Id.* Although the Commission drafts legislation, it does not adopt it. Instead, the Council of Ministers adopts legislation. See CONSOLIDATED EU TREATIES, *supra* note 18, art. 202 (delineating each body's sphere of action). The Council of Ministers consists of representatives of the governments of the Member States, and the representatives vary depending upon the topic of the legislation that is being considered. See Bird & Veiga-Pestana, *supra* note 14, at 223 (describing distribution of Council of Minister's duties into policy areas). For instance, a country's Environment Minister, or her representative, might sit on the Council of Ministers when the Council is considering environmental legislation. The Council cannot draft legislation itself, but it can request the Commission to draft legislation, and it can amend legislative proposals. *Id.* at 223-24 n.18.



hundred environmental laws over the past three decades.<sup>82</sup>

Generally, the European Union adopts legislation either in the form of a directive or a regulation.<sup>83</sup> A directive establishes policy for the European Union, but the provisions of the directive are not applicable and enforceable in a Member State until that State implements the provisions through a statute, constitutional amendment, presidential decree, administrative act, or other measure that is appropriate to the particular State.<sup>84</sup> Directives are "binding, as to the result to be achieved, . . . [but] leave to the national authorities the choice of form and methods."<sup>85</sup> While directives provide States with discretion regarding the appropriate implementation mechanisms, they do not provide States with discretion regarding the timing of implementation, and most directives require that the states implement them within a specified time frame.<sup>86</sup> Most environmental law in the European Union is adopted through directives. On the other hand, regulation are binding on and directly applicable to the Member States without additional legislative or executive action in the Member State.<sup>87</sup>

To the extent that legislation in a Member State conflicts with legislation of the European Union (EU), EU law is supreme, and the Member State has a duty to amend or repeal its law.<sup>88</sup> While Member States cannot enact or enforce laws that conflict with EU legislation, they can adopt environmental

The final "lawmaking" body, the European Parliament, has limited "lawmaking" power, but plays a strong consultative role. *See* CONSOLIDATED EU TREATIES, *supra* note 18, art. 251 (describing European Parliament's advisory capacity). The Parliament has a right to be consulted and to provide an opinion on legislative proposals and, in limited circumstances, it may propose amendments to legislation and it may veto legislative provisions. *Id.*

82. *See* Bird & Veiga-Pestana, *supra* note 14, at 222 (noting 300 pieces of environmental legislation); Francois Jarvis & Ann Sherlock, *The European Convention on Human Rights and the Environment*, 24 EUR. L. REV. 15, 24 (1999) (commenting on large volume of environmental directives).

83. The lawmaking bodies of the European Union may also take various non-legislative acts, including declarations, resolutions, notices, policy statements, recommendations, opinions and individual decisions. *See* Bird & Veiga-Pestana, *supra* note 14, at 232 (relating various mechanisms for implementing policy). While most of these measures are non-binding, a Council decision is directly binding on the Member States or parties to which it is addressed. *Id.* (citing Article 189 of Treaty of Rome).

84. *See* CONSOLIDATED EU TREATIES, *supra* note 18, art. 249 (leaving implementation of directives to national authorities).

85. *Id.*

86. *See, e.g.*, Council Directive 97/11, art. 3, 1997 O.J. (L 73) 5 (providing compliance timeline); Council Directive 96/61, art. 21, 1996 O.J. (L 257) 26 (same).

87. CONSOLIDATED EU TREATIES, *supra* note 18, art. 249.

88. *See* James Flynn, *Litigation in Europe*, in ENVIRONMENTAL LAW IN EUROPE, *supra* note 14, at 19, 29 (discussing concept of "primacy" requiring national law to give way to EU law).

laws that are more stringent or protective than the EU legislation, as long as they are compatible with the Treaty.<sup>89</sup>

Member States play an important role in the implementation of European Union environmental policy because the Treaties of the European Union explicitly require States to implement and enforce EU law.<sup>90</sup> Consequently, the courts of Member States generally implement and enforce EU environmental policies, rather than the institutions of the Union.<sup>91</sup> As might be expected, the level of commitment to implementation and enforcement of EU environmental laws and policies in the Member States varies greatly.<sup>92</sup> While some countries adopt stringent environmental laws and aggressively enforce EU requirements, other countries adopt modest environmental laws and enforce the EU requirements sporadically to attract businesses that would prefer to avoid the high costs of environmental compliance.<sup>93</sup> With this brief background, it is appropriate to return to the discussion of the specific economic environmental protection measures that the European Union and its Member States are implementing.

### *B. Environmental Taxes and Deposit Refund Systems*

One of the primary economic measures that European countries employ to address environmental problems is the environmental tax. The contribution of environmental taxes to the total tax revenue in European countries is steadily increasing, and countries are targeting a broader range of products and activities for taxation.<sup>94</sup>

The United States' experience with environmental taxes has been more modest. The federal government has pollution taxes to phase out the production of various chlorofluorocarbons and to encourage the manufacture of fuel-efficient cars, and many states impose fees on the sale of tires or fertilizers.<sup>95</sup> However, thus far, the federal government and states do not rely heavily on environmental taxes to address environmental problems.<sup>96</sup>

---

89. See CONSOLIDATED EU TREATIES, *supra* note 18, art. 176.

90. *Id.* arts. 10, 175(4).

91. See Christopher M.G. Himsworth, *Things Fall Apart: The Harmonisation of Community Judicial Procedural Protection Revisited*, 22 EUR. L. REV. 291, 294 (1997) (critiquing potential for lack of uniformity and calling for procedural rules or case by case supervision).

92. See Bird & Veiga-Pestana, *supra* note 14, at 220 (discussing different levels of commitment to environmental policy among Member States).

93. See *infra* notes 351-53 and accompanying text.

94. See *EEA Tax Report*, *supra* note 23, at 1, 2 (addressing rise in use of environmental taxes).

95. See Johnson, *supra* note 21, at 137-38 (explaining federal and state tax measures designed to reduce pollution).

96. See *id.* at 136 (noting federal and state government reluctance to use pollution taxes, fees, and charges).

The taxes implemented in Europe include emissions charges and product charges. For instance, France, Germany, and several other countries impose taxes on the discharge of wastewater or other water pollutants.<sup>97</sup> Nine countries in the European Union impose waste disposal taxes.<sup>98</sup> Sweden imposes taxes on emissions of air pollutants, such as NO<sub>x</sub>.<sup>99</sup> Recently, the United Kingdom reformed its vehicle excise tax to require persons who buy larger, more heavily polluting vehicles to pay a higher tax than persons who buy smaller cars.<sup>100</sup> Countries also tax batteries, packaging, and tires to encourage more responsible consumption of those products and management of their waste.<sup>101</sup> Many countries also are exploring new tax bases, such as fertilizers, pesticides, chemicals, groundwater, and tourism.<sup>102</sup>

The strongest use of environmental taxes in Europe, though, is in the energy and transport sectors. Almost 95% of the environmental tax revenue in Europe comes from energy and transportation taxes.<sup>103</sup> By next year, most of the European Union countries will apply carbon taxes.<sup>104</sup> Fuel taxes are also employed in several European countries.<sup>105</sup>

There are several reasons why European countries have chosen to implement environmental taxes. As noted previously, some of the rationale for adopting such taxes relates to the necessity of reducing greenhouse gas emissions to meet the requirements of the Kyoto Protocol, and to the necessity of finding new sources of stable tax revenue, as businesses and trade move more freely from one country to another in the global and electronic marketplace.<sup>106</sup> Environmental taxes provide several fundamental benefits that make them attractive tools to achieve those goals. First, they create economic incentives for persons or businesses to reduce the pollution that

97. See Bothe, *supra* note 18, at 253 (listing nations with water pollution taxes); *EEA Tax Report*, *supra* note 23, at 4 (same).

98. See Bothe, *supra* note 18, at 253; *EEA Tax Report*, *supra* note 23, at 1-2 (noting increase use of waste disposal taxes).

99. See Bothe, *supra* note 18, at 253; *EEA Tax Report*, *supra* note 23, at 4 (addressing effectiveness of environmental taxes such as those used in Sweden).

100. See *Market-Based Approaches Are Being Used in Europe to Address Environmental Concerns*, 31 *Env't Rep. (BNA)* No. 1531 (July 21, 2000) (observing change in vehicle excise duty).

101. See *EEA Tax Report*, *supra* note 23, at 9 (listing environmental taxes and evidence of their effectiveness).

102. *Id.* at 3.

103. *Id.*

104. *Id.* at 1.

105. *Id.* at 4; see also Bothe, *supra* note 18, at 253.

106. See *supra* notes 22-24 and accompanying text (explaining practical justifications for economic measures).

they generate or reduce their use of resources, in order to reduce their tax burden.<sup>107</sup> Second, they create a revenue source that governments can use to address the underlying environmental problems.<sup>108</sup> Third, they play an important role in shaping social norms by sending a signal that discourages certain activities that are environmentally harmful and should be discouraged.<sup>109</sup> Finally, in some respects, there is a sense of fairness to environmental taxes, in that the polluter (for polluting activities), or the user of a polluting product, is forced to pay for the actual environmental costs of their actions or consumption choices.

In studies evaluating the effectiveness of environmental taxes, researchers generally have concluded that the taxes are achieving those goals. Evaluations of the French and German water pollution taxes, the Swedish NO<sub>x</sub> charge, the Danish waste tax, the Finnish and Swedish CO<sub>2</sub> taxes, the Danish tax on sulphur in fuel, the tax differentiation between leaded and unleaded petrol, and the "fuel duty escalator" in the United Kingdom have demonstrated positive environmental results.<sup>110</sup>

While the countries in the European Union have adopted many types of environmental taxes, the European Union itself has not enacted any legislation that imposes environmental taxes, although it currently is considering a proposal to institute a CO<sub>2</sub> tax to reduce greenhouse gas emissions.<sup>111</sup> There are two major reasons why the Union has not adopted any environmental taxes, both of which relate to the structure of the Union. First, while the European Union can adopt many forms of legislation through qualified majority voting, fiscal measures must be adopted through unanimous approval.<sup>112</sup> Not surprisingly, it has been difficult to get the fifteen Member States to agree to impose a "European" tax on their citizens. Second, even if the Member States could agree that it was necessary to implement a European-wide environmental tax, it would be difficult to structure the tax because the tax systems of the Mem-

107. See *EEA Tax Report*, *supra* note 23, at 1-2, 4 (noting financial benefits of environmentally-friendly behavior).

108. See *id.* at 2, 4 (noting rise in revenue from environmental taxes).

109. See *id.* at 4 (arguing that environmental taxes increase attention to environmental issues).

110. *Id.*; see also SUNSTEIN, *supra* note 30, at 331 (noting that differential tax structure for unleaded gasoline in Britain increased its market share from four percent to thirty percent in less than one year).

111. See Kenneth A. Armstrong, *Governance and the Single European Market*, in *THE EVOLUTION OF EU LAW* 745, 773 (Paul Craig & Grainne de Burca ed., 1999) (remarking on "long life" of carbon tax proposal); Bothe, *supra* note 18, at 254 (outlining debate over greenhouse gas reduction proposal).

112. CONSOLIDATED EU TREATIES, *supra* note 18, art. 175; see also *EEA Tax Report*, *supra* note 23, at 3 (noting unanimity requirement).

ber States have not been "harmonized."<sup>113</sup> An environmental tax would be acceptable politically to most countries only if it were fiscally neutral, so that increases in environmental taxes were offset by decreases in other areas of taxation.<sup>114</sup> It would be practically impossible, due to the different structure of taxes in the Member States, to create an environmental tax that would be "fiscally neutral" in all the Member States.<sup>115</sup>

In addition to the obstacles to Europe-wide environmental taxes, there are impediments to further imposition of environmental taxes by the Member States. First, because the countries are part of an economic union, they have accepted some limits on their taxing powers under the Treaties. Emission charges and product charges must be structured so that they do not discriminate against products or companies from other countries and so that they do not conflict with European Union law or otherwise interfere with the free trade requirements of the European Union.<sup>116</sup> Similarly, in an open market, countries are reluctant to impose taxes that may weaken their competitiveness in the market.<sup>117</sup> Principles of fiscal neutrality also provide obstacles to the introduction of taxes in Member States, as in the European Union.<sup>118</sup> It is often difficult to offset a proposed environmental tax with a reduction in another tax in a manner that is politically acceptable.<sup>119</sup> Finally, in some countries, public opposition to environmental taxes has grown when the government did not use the taxes to achieve environmental objectives.<sup>120</sup> This makes it difficult to adopt new environmental taxes in those countries.

113. See Bothe, *supra* note 18, at 252 (explaining difficulty in imposing multi-national environmental taxes).

114. See *id.* (addressing impact of environmental taxes on general tax burden).

115. *Id.*

116. See *id.* at 253-54 (relating limits on national tax systems imposed by Community membership).

117. See *EEA Tax Report*, *supra* note 23, at 7 (observing concerns over effects of environmental taxes on individual Member States).

118. *Id.* at 7.

119. *Id.* at 4, 7.

120. For instance, the United Kingdom has instituted a gradually escalating tax on petrol to encourage consumers to reduce their consumption, and taxes account for about three quarters of the price of petrol in the United Kingdom. When truck drivers blockaded refineries in Britain recently to protest the high cost of petrol, there was very little discussion of the environmental goals of the tax. As the London Times reported shortly after the "crisis":

The current fuel tax might be easier to bear if the money raised were to be pledged to improvements in the public transport infrastructure, but it is not. Too often, duty has been piled on petrol because motorists are a captive source of revenue. In the 1995 mini-budget, it was perfectly obvious that the 16p slapped on a gallon of petrol was designed to raise the revenue for a penny cut in the income tax.

Janet Bush, *Duty-Bound to Rethink Environmental Issue*, LONDON TIMES, Sept. 18, 2000, at 23.

While there are some impediments to the expansion of environmental taxes in the European Union, taxes remain an important tool in the European arsenal of environmental protection measures. However, environmental taxes can have important negative impacts for environmental justice. Most significantly, pollution taxes could have regressive effects on low income populations.<sup>121</sup> For instance, low-income households would feel the impacts of an energy tax much more keenly than high-income households, because low-income households spend a greater proportion of their income on heat, electricity, and gasoline than high-income households.<sup>122</sup> Similarly, a tax on fertilizers and pesticides will have a much greater impact on a small family farmer than on a major agribusiness. Since European countries tax a greater variety of products and activities to achieve environmental benefits, there are greater opportunities for regressive impacts in Europe than in the United States.

However, the regressive effect is addressable in several ways. For instance, with regard to the energy tax, instead of imposing a flat tax on the use of energy, the government could impose a progressive tax on the end users, so that smaller users would pay taxes at a lower rate, or the government could exempt certain users from the tax.<sup>123</sup> Nations also could provide energy subsidies to low-income populations to reduce the impacts of the tax.<sup>124</sup> Furthermore, other complementary measures could be instituted,<sup>125</sup> such as measures to improve the energy-efficiency of low-income housing. To some extent, European governments are implementing this approach through the concept of fiscal neutrality.<sup>126</sup> However, in some cases, the taxes that are reduced to offset the environmental taxes do not remedy the regressive impacts of the tax and are wholly unrelated to the tax itself.<sup>127</sup> In those cases, the tax clearly has a redistributive impact.

---

121. See Bothe, *supra* note 18, at 256 (commenting on potential disparate impact of pollution taxes); Johnson, *supra* note 21, at 139 (same); Rowe, *supra* note 26, at 70 (same).

122. Johnson, *supra* note 21, at 139.

123. See *id.* (proposing measures to reduce burdens on low-income energy users); see also *EEA Tax Report*, *supra* note 23, at 8.

124. See Johnson, *supra* note 21, at 139 (suggesting measures to ameliorate disparate impact); Rowe, *supra* note 26, at 65-66.

125. *EEA Tax Report*, *supra* note 23, at 8.

126. See *id.* at 5, 7 (stating that majority of Member States implemented environmental taxes as part of wider fiscal reform); see also Bothe, *supra* note 18, at 256 (noting that Netherlands and Scandinavian countries are using fuel/energy tax approach).

127. See Bothe, *supra* note 18, at 254-56; *Market-Based Approaches Are Being Used in Europe to Address Environmental Concerns*, 31 *Env't Rep. (BNA)* 1531 (July 21, 2000) (noting that increase in taxes on fuel and heating oil were accompanied by decrease on requirements for insurance contributions). Such reductions may increase the political likelihood that a tax will be adopted, but do not redress the redistributive impacts of the tax.

### C. Pollutant Trading Systems

Another economic measure that is beginning to become popular in European countries is the pollutant trading system,<sup>128</sup> although it is not nearly as popular in Europe as it is in the United States.<sup>129</sup> The European Union has never implemented trading programs for pollutants,<sup>130</sup> although it has utilized quotas and transferable rights in the Union's Common Fisheries Policy, Common Agricultural Policy, and its program for reducing ozone depleting substances under the Montreal Protocol.<sup>131</sup> However, many of the countries within the European Union have enacted legislation<sup>132</sup> or are developing programs to implement trading programs for various pollutants.<sup>133</sup> As in the United States, the trading programs are designed to complement, rather than replace, traditional command and control regulatory approaches and other economic measures.<sup>134</sup>

---

128. In trading programs, entities are allocated the right to emit a specific amount of pollution. If they emit less than that amount, they can sell their surplus "rights" to others who cannot meet their limits. Since the total amount of pollution "rights" is fixed, a minimum level of environmental protection is assured. At the same time, though, the environment is protected in a cost-effective manner, and entities have an incentive to develop technologies that reduce pollution emissions. *See Green Paper on Greenhouse Gas Emissions Trading Within the European Union* COM(2000)87 at 4 (discussing emissions trading) [hereinafter *Greenhouse Gas Green Paper*].

129. Federal, state, and local governments in the United States have utilized pollutant trading programs to address sulfur dioxide, nitrogen oxides, particulates, carbon monoxide, lead, ozone, chlorofluorocarbons, halons, and various water pollutants. *See Johnson, supra* note 21, at 125-29 (describing United States federal and state emissions trading programs).

130. *See Bothe, supra* note 18, at 254 (stating that "there is practically no experience in Europe concerning tradeable permits").

131. *Greenhouse Gas Green Paper, supra* note 128, at 8.

132. Denmark recently enacted legislation that establishes a carbon dioxide trading program for electric utilities, beginning next year. *Id.* at 11. The United Kingdom also has the authority to establish trading programs for greenhouse gases and other pollutants. Section 3 of the U.K.'s Environmental Protection Act 1990 authorizes the Secretary of State to establish total emissions of a substance either nationally, or for a limited geographic area, and to allocate quotas for those emissions, and progressively reduce the total permitted emissions. Redgwell, *supra* note 18, at 261-62. Despite the statutory authorization, the United Kingdom has not yet established any pollutant trading programs. *Id.*

133. *See Greenhouse Gas Green Paper, supra* note 128, at 11, 15 (stating that "several other Member States are actively considering the use of domestic emissions trading"). The German government is developing a plan for a carbon dioxide trading program, which it hopes to launch between 2003 and 2005, after a limited test of the program in 2001-2002. Verena Schmitt-Roschmann, *Germany to Work on Emission Trading Plan with Help from Industry, Stock Exchange*, 31 *Env't Rep.* (BNA) 1565 (July 28, 2000); *see also Bothe, supra* note 18, at 254 (noting that different Member States have put forward several emissions trading proposals).

134. *See Greenhouse Gas Green Paper, supra* note 128, at 6, 21, 23-24 (discussing importance of emissions trading being compatible with other policies).

In addition to these initiatives by individual Member States, the European Union is earnestly pursuing the establishment of a Europe-wide pollutant trading program to reduce the Union's emissions of greenhouse gases.<sup>135</sup> Without a trading program, it is unlikely that the Union will be able to achieve the ambitious reductions that are required by the Kyoto Protocol.<sup>136</sup> Although the European Union could rely on separate trading programs within the Member States to reduce greenhouse gas emissions, proponents of the Europe-wide program argue that a uniform program would: (1) ensure a single price for allowances traded within Europe;<sup>137</sup> (2) reduce the potential for Member States to erect barriers to trade and commerce through the allocation or administration of individual programs within the States;<sup>138</sup> and (3) reduce the administrative costs of trading programs for the States.<sup>139</sup>

Since international greenhouse gas trading under the Treaty will begin in 2008,<sup>140</sup> the European Union is attempting to institute a European trading program by 2005.<sup>141</sup> Initially, the Europe-wide trading program would focus solely on large fixed point sources of carbon dioxide emissions.<sup>142</sup>

135. *Id.* at 4.

136. *Id.* Under the Kyoto Protocol, between 2008-2012, the European Union must reduce its emissions of greenhouse gases to a level that is 8% less than their 1990 emissions. In practice, the reductions amount to 14% reductions below "business as usual" levels. *Id.*

137. *Id.*

138. As the European Commission's Green Paper notes,

[t]he objective of the principle of freedom of establishment, under Article 43 and 48 of the EC Treaty . . . is to confer on companies or firms formed in accordance with the law of a Member State, the right to set up their principle establishment in another Member State or to create agencies, branches or subsidiaries in other member States.

*Id.* at 7. If each State established its own trading program, States might interfere with the single market of the European Union by exempting particular industries or entities from the requirements of the program, limiting the distribution of new pollution "rights" (and therefore, limiting market entry), or assisting domestic companies in obtaining pollution "rights." *Id.* at 5.

139. *Id.* at 4.

140. *Kyoto Protocol*, *supra* note 22, art. 17; see also *Greenhouse Gas Green Paper*, *supra* note 128, at 6.

141. *Greenhouse Gas Green Paper*, *supra* note 128, at 4. The European Commission's Green Paper describes the benefits of a 2005 launch as follows: "There would be considerable benefits in terms of 'learning-by-doing' that would ensure that the Community was better prepared for the start of international emissions trading from 2008 under the Kyoto Protocol. Such experience would give Community actors practical familiarity, and even a leading edge, in using the instrument." *Id.* at 10.

142. *Id.* at 10-11. Carbon dioxide emissions constitute approximately 80% of the European Union's greenhouse gas emissions, and the sources identified as targets for initial participation in the European Commission's Green Paper account for 45% of carbon dioxide greenhouse gas emissions in the European Union. *Id.* at 10-11, 13. Although the trading program



Although the European Union and its Member States gradually are adopting pollutant trading programs, it is not clear that they are adequately considering or addressing the potential disparate impacts that such programs can create. There are several ways that pollutant trading programs can disparately impact particular communities or socioeconomic groups. First, the initial allocation of pollution "rights" can have disparate impacts.<sup>143</sup> For instance, if "rights" are allocated in proportion to historic emission levels, heavy polluters receive more "rights." Similarly, if "rights" are allocated through a system that gradually phases out new "rights," existing polluters receive an advantage over new polluters. Because heavily polluting industries tend to be located in lower income communities,<sup>144</sup> rights allocation systems that advantage existing heavy polluters can disadvantage lower income communities. The allocation of the rights does not just perpetuate the pre-existing inequities, but, rather, exacerbates and institutionalizes them. As noted earlier, due to the "endowment effect," persons who are granted legally protected "rights" by the government tend to demand more compensation to surrender those rights than they would offer to obtain those rights.<sup>145</sup> Thus, the heavy polluters are likely to be reluctant to reduce their pollution emissions in response to demands from local communities.<sup>146</sup> In addition, those communities often lack the political or financial resources to encourage the polluters to reduce their emissions.<sup>147</sup>

The structure of the European Union and its guarantees of free trade and a single market may, however, limit the disparate impact of the allocation of allowances to some extent. While emission rights in the Europe-wide greenhouse gas trading program may be allocated based on historical emissions,<sup>148</sup>

---

would focus initially on a limited universe of sources and a single pollutant, the Commission's Green Paper stresses that the system should be designed so that it could be expanded gradually to cover all of the greenhouse gases and a wider universe of sources. *Id.* at 10.

143. See Rowe, *supra* note 26, at 70 (discussing equity concerns that arise with allocation of permits). Pollutant trading programs are different from traditional permitting or licensing programs in that traditional programs normally do not limit the number of permits that the government can issue. *Id.*

144. The nexus between heavily polluting industries and low income communities is clear in the United States, see Johnson, *supra* note 21, at 130-31, and it is being established gradually in Europe as well. See *supra* notes 61-71 and accompanying text.

145. See *supra* notes 44-45 and accompanying text.

146. *Id.*

147. See Johnson, *supra* note 21, at 131 (stating that "low-income communities often lack the political power to influence industries to adopt new pollution controls instead of buying pollution rights").

148. The European Union has not yet determined the method that will be used to allocate allowances among individual companies. See *Greenhouse Gas Green Paper*, *supra* note 128, at 9 ("The 6th Conference of the Parties to the UNFCCC may or may not specifically address the question of 'entity' involvement in emissions trading."). When the Europe-wide greenhouse gas trading program is established, the European Union and its Member States will have to

it is unlikely that the program will phase out the allocation of new "rights" over time.<sup>149</sup> A program that phased out the allocation of "rights" in Member States could prevent companies from relocating from one State to another and could, therefore, interfere with the freedom of establishment guarantees of the European Union Treaties.<sup>150</sup>

Although the structure of the Union may limit the disparate impact of trading in one respect, it could increase the potential disparate impacts of trading in another way. While pollutant trading programs promise to maintain or reduce *overall* pollution levels in a "cost-effective" way, they may often increase pollution levels in certain areas and create toxic hot spots, as older, heavily polluting industries find that it is more cost-effective to pollute than to reduce emissions.<sup>151</sup> Because those older, heavily polluting industries are

decide how to allocate allowances among Member States, among industrial sectors, *and* among individual companies. *Id.* Article 4 of the Kyoto Protocol requires the European Union, as a whole, to reduce its emissions of greenhouse gases by 8% from 1990 levels in 2008 through 2012, but it allows the Member States flexibility to decide that some countries must reduce their emissions more than others. *Id.* While the Member States will determine, through negotiation, the appropriate allocation of allowances among the States, the European Union, rather than the Member States, must determine how the allowances will be allocated among industrial sectors. The decision cannot be left to Member States because some States

may be tempted to exempt particular sectors from making any contribution . . . or set unchallenging sectoral targets. This could give rise to complaints from competing companies in other Member States. According to Community law, such concerns could fall under existing state aid and internal market provisions because they essentially concern potentially distortionary aid to particular sectors or companies.

*Id.* at 17-18.

149. *Id.* at 18-19.

150. The Commission's Green Paper notes that

[t]here are basically two ways to allocate: auctioning and allocation free of charge . . . . Periodic auctioning is technically preferable, as it would give an equal and fair chance to all companies to acquire the allowances they want in a transparent manner . . . . Auctioning avoids the need to take the difficult and politically delicate decisions about how much to give each company covered by the trading scheme. The complex issues raised above about state aid and competition would largely disappear. It would also guarantee fair terms for new entrants to join the system as they, like existing sources, would also have the same opportunity to buy the allowances that they needed. . . . The case of new entrants warrants special mention because, in the case of allowances being "grandfathered," companies that were not given allowances free at the outset should still be able to obtain them easily when they enter the market. For that reason, Member States should ensure that allowances are available for new entrants, which may be "foreign" companies wishing to enter the market, on equal terms.

*Id.*

151. See Johnson, *supra* note 21, at 129. The theory that trading programs will exacerbate toxic "hot spots" was challenged recently in a study of the Clean Air Act sulfur dioxide trading program. See Byron Swift, *Allowance Trading and SO<sub>2</sub> Hot Spots – Good News From the Acid*

often sited in lower income communities, those communities are disparately impacted by the trading program.<sup>152</sup> Although geographic limits on trading could reduce the potential volume of pollution in a toxic hot spot,<sup>153</sup> there are no plans, at present, to limit the geographic reach of trading in the Europe-wide greenhouse gas trading program. Indeed, such limits on trades could be seen as interfering with free trade and the single European market under the European Union Treaties.<sup>154</sup>

#### D. Voluntary Agreements

In addition to taxes and trading programs, European countries rely on voluntary agreements as economic environmental protection measures. Voluntary agreements are similar to regulatory waiver and variance programs like the Common Sense Initiative<sup>155</sup> and Project XL<sup>156</sup> in the United States, in that they

---

*Rain Program*, 31 Env't Rep. (BNA) 954 (May 12, 2000). The author of the study concluded that the effects of sulfur dioxide trading have been minimal in regards to hot spots, and likely even positive. *Id.* He determined that "[o]n a regional level, no significant trends can be discerned in the flow of traded allowances . . ." *Id.* However, his conclusion was based, in part, on his finding that 81% of allowances that were used to offset emissions came from the same state as the emitting source. *Id.* at 957. While that might suggest that it is less likely that hot spots are being created in one State as a result of pollution trades with another State, it does not rule out the possibility that hot spots are being created in a State due to trades within the State. Similarly, the researcher concluded that "net interregional trades of allowances constitute only 3 per cent of all allowances used." *Id.* at 954. Once again, though, this would merely suggest that hot spots are not being caused by trades from outside of the region. It does not reduce the likelihood that hot spots are being caused by trading within a region.

Finally, though, the author concluded that "the data shows that the plants with the largest emissions have cleaned up the most" and that trading programs "create incentives for the dirtiest plants to clean up the most, as the per-ton cost of emissions reductions may be expected to be the least." *Id.* at 957. To the extent that trading programs create incentives for the heaviest polluters to reduce their discharges, and to the extent that the heaviest polluters are located in low income communities, trading programs could have some beneficial effects for environmental justice.

152. Johnson, *supra* note 21, at 129.

153. *Id.*

154. The Treaty of Rome prohibits bans on imports or exports of goods, and measures that have the equivalent effect. *See* CONSOLIDATED EU TREATIES, *supra* note 18, arts. 28, 29. It is conceivable that those provisions could be interpreted to prohibit limits on the sale of pollution rights.

155. Through the Common Sense Initiative, the United States Environmental Protection Agency met with representatives of the automobile, computer, iron and steel, printing, metal finishing, and petroleum refining industries, to identify, through consensus, new environmental protection strategies for the industries, and changes to existing laws that would be necessary to enable the industries to protect the environment in more efficient ways. *See* United States Environmental Protection Agency, *Common Sense Initiative: An Industry Sector Approach to Protecting the Environment*, at <http://www.epa.gov/ooaujeag/csi/bckgrd.html> (last visited Feb. 6, 2001).

156. Project XL is a national pilot program that allows state and local governments,

are tools by which the government circumvents the normal law-making process to develop environmental protection requirements. Voluntary agreements are, as their name suggests, voluntary commitments by industry sectors or associations to comply with environmental protection requirements that the government and the industry sectors or associations established through negotiation.<sup>157</sup> The goal of the parties is to develop requirements that enable industry to meet environmental protection standards in a cost-effective manner,<sup>158</sup> and the agreements complement, rather than replace, other regulatory and economic approaches.<sup>159</sup> While the agreements produce environmental benefits and have been widely implemented,<sup>160</sup> the European Environment Agency suggests that they are most suitable for proactive industrial sectors, with a small number of firms, addressing environmental problems of limited scale.<sup>161</sup>

While the European Union has not negotiated any voluntary agreements,<sup>162</sup> several years ago, the European Commission issued a communication support-

business and federal facilities to develop with the EPA "innovative strategies to test better or more cost effective ways of achieving environmental and public health protection" as well as to produce "superior environmental results" beyond those that would be achieved under current and reasonably anticipated future regulations or policies. See United States Environmental Protection Agency, *What is Project XL?*, at <http://www.epa.gov/ProjectXL/file2.htm> (last visited Feb. 6, 2001). In exchange, the EPA issues regulatory, program, policy, or procedural flexibility to conduct the experiment. *Id.*

157. See European Environment Agency, *Environmental Agreements: Environmental Effectiveness*, in ENVIRONMENTAL ISSUES, series no. 3, Exec. Summ. (1997), at <http://themes.eea.eu.int/showpage.php/policy?pg=39279> (last visited Feb. 6, 2001) [hereinafter *EEA EA Paper*]. Depending on the intentions of the parties, voluntary agreements could merely establish voluntary codes of conduct or they could create legally binding standards. *Id.*

158. *Id.*

159. *Id.*

160. The European Environment Agency recently conducted a case study of environmental agreements and concluded that "generally, there have been environmental improvements since the EAs were signed . . . ." *Id.*

161. *Id.* In addition, the agency suggested that implementation of the agreements is more effective when

clear targets are set prior to the agreement; the agreement specifies the baseline against which improvements will be measured; the agreement specifies reliable and clear monitoring and reporting mechanisms; technical solutions are available in order to reach the agreed target; the costs of complying with the EA are limited and are relatively similar for all members of the target group; third parties are involved in the design and application of EAs.

*Id.*

162. *Id.* However, the Commission is currently discussing non-binding agreements with industries to phase out CFCs and to reduce CO<sub>2</sub> emissions. *Id.* While the Commission does not have any authority to enter into legally binding agreements, it can negotiate with industries to establish unilateral commitments to comply with specific requirements. See *Greenhouse Gas Green Paper*, *supra* note 128, at 21 (recognizing potential of "voluntary initiatives by and environmental agreements with industry").

ing their use by Member States and establishing guidelines for agreements.<sup>163</sup> Furthermore, the use of voluntary agreements is consistent with the goals of the Union's Fifth Environmental Action Program.<sup>164</sup> Member States entered into more than 300 agreements with industrial sectors, firms and associations by the mid-1990s, and the use of voluntary agreements continues to flourish.<sup>165</sup> The United Kingdom's experience is typical of many of the EU Member States. The United Kingdom has used voluntary agreements to protect and conserve natural or historic sites since 1949.<sup>166</sup> Since the 1970s, however, the United Kingdom has expanded its focus by entering into agreements relating to the storage and transport of pesticides, the banning of certain substances in washing products, the emission of hydrofluorocarbons,<sup>167</sup> and energy consumption.<sup>168</sup> Furthermore, the agreements have been used in some cases to modify or waive existing standards for a polluter to respond to local or unique factors.<sup>169</sup>

Although voluntary agreements can achieve environmental benefits in a cost-effective manner, they also can contribute to environmental injustice. Voluntary agreements generally are negotiated without public participation,

163. See Communication from the Commission to the Council and the European Parliament on Environmental Agreements, EUR. PARL. DOC. (COM 96) 561 (1996) (advocating broadening range of policy instruments) [hereinafter *Commission Communication on Environmental Agreements*]. The Commission stated that "[e]nvironmental agreements with industry have an important role to play within the mix of policy instruments sought by the Commission . . . . They can offer cost-effective solutions when implementing environmental objectives and can bring about effective measures in advance of and in supplement to legislation." *Id.* at 22.

164. *EEA EA Paper*, *supra* note 157. As the European Environment Agency notes, [t]he . . . Fifth Environmental Action Program . . . is seen as part of the longer term re-focusing of environmental policy in EU Member States and is aimed at integrating EU policy-making into a sustainable framework for economic and social development. Towards this end, the [program] highlighted the need for a broadening of the range of policy instruments to complement the regulations, including . . . voluntary environmental policy instruments.

*Id.*

165. *Id.* As of the mid-1990s, all of the EU Member States had entered into voluntary agreements. *Id.* The Netherlands entered into over 100 agreements, and smaller countries, such as Austria, Belgium, Denmark and Sweden used the agreements far more often than larger countries, such as France, Italy and the United Kingdom. *Id.*

166. See Rowan-Robinson & Ross, *supra* note 20, at 268 (discussing use of environmental agreements).

167. *Id.* at 269.

168. See Redgwell, *supra* note 18, at 262 (relating use of voluntary agreements in United Kingdom). In a recent agreement, the Chemicals Industry Association pledged to reduce energy consumption by its members by 20% over 1990 amounts by 2005, and to provide annual information to the government on energy consumption by its members. *Id.* In return, the government pledged to provide audits and consulting advice to small and medium sized businesses that are members of the Chemicals Industry Association. *Id.*

169. See *id.* (noting preference for flexible instruments).

or with limited public participation.<sup>170</sup> While the poor and the powerless often can rely on popularly elected representatives and deliberative lawmaking processes to protect, or at least address, their interests when laws are made in the legislatures of the Member States of the European Union, no one, generally, is advocating their interests in the negotiations on voluntary agreements. Limited opportunities for public participation and limited disclosure of information to the public about the process and implementation of the agreement<sup>171</sup> increase the likelihood that the process will be co-opted by special interests, and that the public interest will be minimized.<sup>172</sup> Voluntary agreements also are more difficult to monitor and enforce than traditional laws.<sup>173</sup>

To their credit, the European Commission and European Environment Agency, as well as agencies in the Member States, raise precisely these concerns with regard to environmental agreements. The Commission's Communication on Environmental Agreements establishes guidelines for agreements, which require the setting of quantified objectives, the monitoring of results, periodic reporting, the verification of results, and provisions for access to information.<sup>174</sup> The guidelines also emphasize the importance of involving interested parties and the public in the development of agreements.<sup>175</sup> All of those requirements are designed to improve the credibility of the agreements and to establish greater transparency. The European Environment Agency also has stressed the need for greater transparency *during* the negotiations, as well as reliable monitoring and reporting to ensure that parties implement the agreement.<sup>176</sup> Nevertheless, in most Member States, there remain very few opportunities for public participation in the negotiation of a voluntary agreement, or for access to information about an agreement during the negotiation process.<sup>177</sup>

---

170. See *EEA EA Paper*, *supra* note 157 (stating that if environmental agreements are to be used more widely "it is necessary to improve their credibility and accountability"); Armstrong, *supra* note 111, at 778 (claiming that crucial question raised by development of environmental interests "relates to the range of voices which might be heard in such a process of self-regulation").

171. The European Environment Agency, in its case study of environmental agreements, concluded that many of the agreements do not include monitoring or reporting requirements. *EEA EA Paper*, *supra* note 157.

172. See Armstrong, *supra* note 111, at 778 (noting that environmentalists and Member States are "anxious to ensure that a proliferation of agreements does not lead to the 'privatization' of regulation or of regulatory capture of regulators").

173. See *EEA EA Paper*, *supra* note 157 (commenting that many agreements surveyed do not include monitoring and reporting provisions); Armstrong, *supra* note 111, at 774 (stating that environmentalists were fearful that voluntary instruments would "take the place of binding legal requirements and become difficult to monitor and enforce").

174. *Commission Communication on Environmental Agreements*, *supra* note 163, at 6-10.

175. *Id.*

176. See *EEA EA Paper*, *supra* note 157 (calling for setting clear targets).

177. For instance, none of the statutory provisions in the United Kingdom that authorize

### E. Cost Benefit Analysis

The heavy reliance on cost-benefit analysis in the European Union treaty and legislation of Member States demonstrates the significance of economic measures. The significance of economic measures as environmental protection tools in Europe also is evident in the heavy reliance on cost-benefit analysis in European Union Treaty and legislation, and the legislation of Member States. For instance, Article 174(3) of the Treaty requires the Union, when taking environmental actions to consider "the potential benefits and costs of action or lack of action . . . [and] the economic and social development of the Community as a whole and the balanced development of its regions."<sup>178</sup>

Consequently, many of the environmental Directives of the European Union explicitly include cost-benefit analysis requirements. The Integrated Pollution Prevention and Control Directive (IPPC Directive) is one example.<sup>179</sup> The legislation directs Member States to establish programs to require industrial facilities that are within industrial sectors listed in an Annex to the Directive<sup>180</sup> to obtain permits for emissions to land, air and water.<sup>181</sup> The permits must include limits on pollution discharges that are based on the use of the best available technology.<sup>182</sup> Technologies are "available" if they have been "developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consider-

the government to enter into voluntary agreements authorize the public to participate in the negotiations. See Rowan-Robinson & Ross, *supra* note 20, at 270-71. Furthermore, none of the provisions require the government to provide access to information about the negotiations to the public during the negotiations. *Id.* at 270. Although there is nothing to prevent the government from providing additional information, government agencies in the United Kingdom have not done so. *Id.* at 270-71. Generally, most of the provisions authorize the public to obtain information about the agreement after it has been finalized. *Id.* at 270.

In contrast, though, the Netherlands recently involved interest groups and other parties in negotiations with industries to successfully develop a voluntary agreement addressing waste reduction and recycling. *Id.* at 274.

178. See CONSOLIDATED EU TREATIES, *supra* note 18, art. 174(3). The Treaty also lists, as one of the objectives of environmental policy in the European Union, "prudent and rational utilization of natural resources." *Id.* art. 174(1).

179. Council Directive 96/61 EC, 1996 O.J. (L 257) 26 [hereinafter *IPPC Directive*].

180. The industries regulated by the Directive include the following: the energy industry, metal production and processing, mineral, chemical, waste management, pulp and paper production, pretreatment and dyeing of textiles, treatment and processing of food products, and installations for surface treatment using organic solvents. *Id.* Annex I.

181. New facilities must be permitted by November 1999, and existing facilities must be permitted when they undergo a substantial change, or, within eight years after implementation of the Directive, whichever is earlier. *Id.* art. 5(1). The IPPC permit is required even though the facility may already have a permit under another program of the EU or a Member State. *Id.*

182. *Id.* art. 9(4). The permit must include limits for pollutants that are "likely to be emitted from the concerned installation in significant quantities . . ." *Id.* art. 9(3).

ation the costs and advantages . . . ."<sup>183</sup> In determining the Best Available Technology (BAT), Member States are directed to consider "the likely costs and benefits of a measure and the principles of precaution and prevention."<sup>184</sup> BAT, generally, is not established on a Union-wide level<sup>185</sup> but is, rather, established by Member States, "taking into account . . . geographical location and local environmental conditions . . . ."<sup>186</sup> In short, the Directive gives Member States broad discretion to set lower environmental standards if the costs of more stringent standards outweigh the benefits of those standards.<sup>187</sup>

The European Union's Air Pollution from Industrial Plants Directive<sup>188</sup> and the Volatile Organic Compound (VOC) Directive<sup>189</sup> also give Member States broad latitude to consider costs in choosing appropriate levels of environmental protection. The Air Pollution Directive requires States to develop permit programs for air pollution sources, and mandates that the sources implement "the best available technology not entailing excessive cost" (BATNEEC).<sup>190</sup> The Member States develop the BATNEEC standards.<sup>191</sup>

183. *Id.* art. 2(11).

184. *Id.* Healy stated:

The precautionary principle is the term that is used to describe the important shift in environmental law from a regime that required a showing of actual harm to human health or the environment before a regulatory response could be pursued by a regime that permits or requires a regulatory response when harm to human health or the environment is threatened.

Michael P. Healy, *England's Contaminated Lands Act of 1995: Perspectives on America's Approach to Hazardous Substance Cleanups and Evolving Principles of International Law*, 13 J. NAT. RESOURCES & ENVTL. L. 289, 291 (1997). In many cases, application of cost-benefit analysis would seem to require implementation of a more lenient standard than would be required through application of the precautionary principle. Despite this apparent conundrum, the Directive does not specify which principle takes precedence.

185. Although the standards are generally not set by the European Union, the Directive provides that the Council of Ministers will set standards for certain installations and substances for which "the need for Community action has been identified." See *IPPC Directive, supra* note 179, art. 18(1).

186. *Id.* art. 9(4).

187. See Rod Hunter & Koen Muylle, *European Community Environmental Law: Environmental Legislation*, 29 ENVTL. L. REP. 10297, 10308 (1999) (discussing implementation of BAT). As Hunter and Muylle noted, "a southern European country that is anxious to encourage industrial development, and that has a relatively pristine environment, might rely on local environmental conditions to justify coming up with a less rigorous interpretation of BAT." *Id.*

188. Council Directive 84/360 on the Combating of Air Pollution from Industrial Plants, 1984 O.J. (L 188) 20 (1984) [hereinafter *Air Pollution Directive*].

189. Council Directive 99/13 on the Limitation of Emissions of Volatile Organic Compounds Due to Use of Organic Solvents in Certain Activities and Installations, 1999 O.J. (L 85) 1 (1999) [hereinafter *VOC Directive*].

190. *Air Pollution Directive, supra* note 188, art. 4.

191. *Id.*



Unlike the IPPC Directive or the Air Pollution Directive, the VOC Directive establishes stringent limits on VOC emissions for industries that are covered by the Directive, instead of delegating the development of standards to the Member States.<sup>192</sup> However, the Directive authorizes Member States to approve "alternative reduction schemes" for facilities in lieu of the stringent limits established by the Directive, placing few limits on the States' discretion to approve those schemes.<sup>193</sup>

Cost-benefit analysis is also a central component of legislation in many of the Member States, partly because many of the States implement the European Union's Directives without imposing more stringent limits. The strong focus on cost benefit analysis in Member State legislation is evident in the environmental laws of the United Kingdom. The Environment Act 1995 requires the Environment Agency, before exercising any powers conferred on it, to "take into account the likely costs and benefits of the exercise or non-exercise of the power or its exercise in the manner in question."<sup>194</sup> This theme is carried through in many other pieces of United Kingdom environmental law. The United Kingdom's Contaminated Land Act,<sup>195</sup> which regulates the cleanup of hazardous substances, includes several cost-benefit requirements.<sup>196</sup> First, unlike the Superfund law in the United States, which generally requires liable persons to clean up property to a level that protects human health, the Contaminated Lands Act merely requires liable persons to take reasonable measures, based on a consideration of the costs and seriousness of the harm, to clean up a release of hazardous substances.<sup>197</sup> In addition, the Act allows polluters to avoid or reduce their liability for the release of a hazardous substance based on financial hardship.<sup>198</sup> Another law, the United Kingdom's Environmental Protection Act 1990, creates a permitting program for air pollution sources and establishes pollution standards for the sources based on the best available technology not entailing excessive cost.<sup>199</sup>

---

192. *VOC Directive*, *supra* note 189, Annex II.

193. *See* Hunter & Muylle, *supra* note 187, at 10312 (discussing scope of VOC legislation).

194. Environmental Act of 1995, § 39(1) (Eng.); *see also* Jones, *supra* note 17, at 568, 578 (describing provisions of Environmental Act of 1995).

195. Environmental Act of 1995, ch. 25, § 57 (Eng.) [hereinafter *CLA*].

196. The drafters of the legislation did not want to incorporate many of the provisions of the United States' Superfund law, which they felt was too costly. *See* Healy, *supra* note 184, at 289-90 (comparing CERCLA and CLA).

197. *CLA*, *supra* note 195, § 78H; *see also* Healy, *supra* note 184, at 297-98 (discussing provisions of CLA).

198. *CLA*, *supra* note 195, § 78P; *see also* Healy, *supra* note 184, at 304 (relating limitations of liability under CLA).

199. *See* Jones, *supra* note 17, at 579-80.

Reliance on cost benefit analysis could disparately impact low income communities in several ways. Under cost benefit analysis, as it is used most often, the government takes a particular action if it determines that the *net* benefits of the action exceed the *net* costs.<sup>200</sup> This approach ignores the fact that although society as a whole may benefit, particular groups in society may suffer from the action.<sup>201</sup> Several features of cost benefit analysis increase the likelihood that application of the analysis will disparately impact low income communities and the poor. First, while the costs of government actions may be readily determinable, the benefits of the action, such as the number and value of lives saved and the decreased likelihood of cancer or other health risks, are often difficult to quantify.<sup>202</sup> In many cases, the value of a benefit is calculated based on the willingness, or rather, ability, of the recipient to pay for the benefit.<sup>203</sup> Since the poor are less able to pay for benefits, the value of benefits to them will be given less weight in cost benefit analysis.<sup>204</sup> In addition, in many cases, the benefits of a government action will only become apparent after careful study and opportunities for public involvement in the study.<sup>205</sup> To the extent that low income communities lack the resources to participate in such studies, it is less likely that the decisionmaking process will identify the benefits of a proposed action for low income residents.

#### V. Safety Nets in the Market

It is obvious, from the discussion in Part IV of this Article, that the economic environmental protection measures that are being implemented in Europe could have disparate impacts on low income communities. However, as noted in Part II, strong public participation requirements, information disclosure requirements, financial and technical assistance programs, environmental assessment and planning requirements, and broad access to courts for citizens could empower communities and minimize the likelihood that the measures will have disparate impacts. This Part of the Article examines the limited extent to which these "safety nets" have been incorporated into European environmental law, and contrasts the greater reliance on these tools in the United States.

---

200. See Rowe, *supra* note 26, at 73 (explaining public decision-making methodologies).

201. *Id.*

202. See SUNSTEIN, *supra* note 30, at 129. Sunstein suggested that the way to address this limitation of cost benefit analysis is to undertake the analysis "in a way that is alert to problems of quantification and that is sophisticated about methods for valuing variables that are hard to quantify." *Id.* This is, perhaps, much easier said than done.

203. *Id.* at 129; see also Rowe, *supra* note 26, at 73.

204. See SUNSTEIN, *supra* note 30, at 129 (noting bias against poor in cost-benefit analysis).

205. *Id.* at 138-39.

### A. Public Participation

Public participation in government decisionmaking is essential, not only for purposes of environmental justice, but also for economic efficiency, as broad public input reduces the information gathering burden on the government and reduces the likelihood that the government will allocate resources in an inefficient manner due to incomplete information.<sup>206</sup> Accordingly, economic environmental protection measures, as well as traditional regulatory environmental laws, should include broad opportunities for public participation, and guarantees of balanced representation in government decisionmaking processes.<sup>207</sup>

In the United States, citizens are guaranteed a role in most governmental decisionmaking through the Administrative Procedures Act, which requires government agencies, in most cases, to notify the public when they are planning to issue a regulation, issue a permit, or take other actions, and to hold a hearing or provide other opportunities for citizens to participate in the decisionmaking process, such as the submission of written comments.<sup>208</sup> Many of the federal environmental laws impose additional procedural requirements on government, such as requirements for earlier and broader notice of proposed actions,<sup>209</sup> the creation of dockets<sup>210</sup> and advisory committees.<sup>211</sup> The government also is incorporating broad public participation procedures into some of the economic environmental protections that it is implementing, such as Project XL.<sup>212</sup>

The situation is a little different in the European Union and its Member States. First, there is no general Administrative Procedures Act in the European Union that guarantees opportunities for public participation in govern-

206. See Bosselmann & Richardson, *supra* note 20, at 13 (discussing benefits of public participation in drafting environmental legislation); Johnson, *supra* note 21, at 159 (same); Rowe, *supra* note 26, at 89 (praising efficiency of broad inclusion in public decision-making).

207. See Johnson, *supra* note 21, at 159-60 (describing obstacles to participation in decision-making by low income and minority groups); Rowe, *supra* note 26, at 89 (detailing benefits of inclusive representation). Rowe suggested that "opportunities for participation should be extensive, including devices such as committee membership, hearings, consultation, advertising and special advocacy assistance. There should be a strengthening of interest group representation in systematically disadvantaged communities." *Id.*

208. See 5 U.S.C. ch. 5 (1994).

209. See 42 U.S.C. § 7607(d) (1994) (Clean Air Act); 42 U.S.C. § 9617 (1994) (Superfund); see also Johnson, *supra* note 21, at 159-61.

210. See 42 U.S.C. § 7607(d)(2) (1994) (Clean Air Act docket requirement for several types of regulatory acts).

211. See, e.g., 33 U.S.C. § 1363, 1374 (1994) (Clean Water Act advisory committees); 42 U.S.C. § 7417 (1994) (Clean Air Act advisory committees).

212. See Johnson, *supra* note 21, at 161 (describing market-based programs to increase participation by low income and minority communities).

ment decisionmaking. To some extent, the subsidiarity principle of European Union law suggests that rules regarding the procedures for public participation in the decisionmaking of Member State governments are better left to Member States than to the European Union.<sup>213</sup> The subsidiarity principle prohibits European Union institutions from taking actions in areas where they do not exclusively have power under the European Union Treaties unless the Member States cannot sufficiently achieve the objectives that the European institutions seek to achieve.<sup>214</sup>

The subsidiarity principle also influences the nature of the public participation provisions that are included in the environmental directives of the European Union. Usually, the directives include vague and general provisions regarding public participation, and delegate broad discretion to the Member States regarding the timing and form of participation. For instance, the IPPC Directive merely requires that permit applications must be made "available for an appropriate period of time to the public, to enable it to comment on them before the competent authority reaches its decision."<sup>215</sup> Similarly, the Environmental Impact Assessment Directive requires that "[a]ny request for development consent and any information gathered pursuant to this directive is to be available to the public," and the "public concerned" [as determined by the Member State] is to be afforded "the opportunity to express an opinion before the development consent is granted."<sup>216</sup>

While Member States could establish broad public participation procedures to implement the EU environmental directives, most countries have adopted fairly modest public participation requirements. For instance, German public participation requirements are quite limited. As Professor Karl-Heinz Ladeur has noted,

The German administrative procedural law is characterized by a strong orientation on the protection of a subjective right . . . it excludes of course all kinds of interests from having a say in administrative decision-making. And if they are given the possibility to be heard, at all, it may not be based on a right in the strict sense but rather with reference to a purely administrative logic, i.e. as a kind of assistance given to the administration which may have difficulty in taking all aspects of a case into consideration.<sup>217</sup>

---

213. See Himsworth, *supra* note 91, at 294 (defining principle of subsidiarity - that Community should not interfere with matters that Member States are competent to handle internally).

214. See Treaty on European Union, art. 3B, 31 I.L.M. 247, 258 (mandating that action should be taken in accordance with principle of subsidiarity).

215. *IPPC Directive*, *supra* note 179, art. 15(1).

216. Council Directive 97/11, art. 6, 1997 O.J. (L 73) 5.

217. Karl Heinz Ladeur, *The German Conception of Administrative Procedure and Court Control of Procedural Mistakes - The Example of Environmental Impact Assessments - A European Law and Comparative Law View* 1 (1998) (on file with author).

Although the situation is a little different in the United Kingdom, its public participation requirements are still somewhat limited. There is no general Administrative Procedures Act in the United Kingdom, but there are some judicially created general procedural requirements,<sup>218</sup> and the Kingdom's environmental laws include some public participation requirements.<sup>219</sup> However, the public participation requirements in the environmental laws are not very ambitious. For instance, a law that establishes a permit program for air and water polluters requires permit applicants (rather than the government) to advertise the application in a local paper, make information about the application available during business hours in a location near the site of the proposed permit, and notify the public that they can submit comments on the application within twenty-eight days.<sup>220</sup> The permit applicant, rather than the government, controls the public participation processes. The Contaminated Lands Act is another example of an environmental law that contains modest public participation requirements. The Act requires the authority that is cleaning up a hazardous substances site to pursue "reasonable consultation" with various persons when it formulates a cleanup plan, but it does not require that plans be made available to the general public for review or comment before they are finalized.<sup>221</sup> While the air and water pollution permitting and hazardous substance cleanup laws contain minimal participation requirements, other environmental laws, such as the law that regulates waste management licenses, do not include any requirements for government notification of, or consultation with, the public prior to government action.<sup>222</sup>

As noted above, Member States also are failing to develop strong public participation requirements for voluntary agreements, pollutant trading programs, and cost-benefit analyses.<sup>223</sup> Indeed, some commentators suggest that public participation procedures are incompatible with market-based environmental protection measures.<sup>224</sup> On the contrary, though, pollutant trading

218. See Jones, *supra* note 17, at 574. For instance, courts often find that legislation implicitly requires the government to give some prior notice, and provide an opportunity to make representations, to persons likely to be affected by the government's exercise of its powers, before it reaches a final decision or take an action. *Id.*

219. *Id.* at 565. For instance, many laws require the government, before issuing legislative rules, to consult with parties identified generally or specifically in the legislation. *Id.*

220. *Id.* at 595-96.

221. See Healy, *supra* note 184, at 309 (explaining that Act "requires that the enforcing authority pursue reasonable consultation with directly affected persons prior to serving the remediation notice" but does not require general review or comment).

222. See Jones, *supra* note 17, at 596 (stating that, under waste management license law, "[t]here is no provision for consultation with the public").

223. See *supra* notes 170-172, 205, and accompanying text (discussing lack of public participation).

224. See Rowan-Robinson & Ross, *supra* note 20, at 268 (stating that "the drive to bring

programs can only succeed, and rights will only be traded, if trading programs include rigorous enforcement and monitoring provisions.<sup>225</sup> Public participation in enforcement and monitoring, as well as in the trading process, should strengthen trading programs, rather than frustrate them.<sup>226</sup>

While public participation procedures in economic environmental protection measures and traditional regulatory programs in the European Union and its Member States may not be overly ambitious at present, they likely will be strengthened considerably over the next few years due to the Convention on Access to Information, Public Participation in Decision-Making, and Access to Justice in Environmental Matters (Aarhus Convention),<sup>227</sup> which has been described as a "milestone in European environmental policymaking."<sup>228</sup> The Convention was signed by thirty-five countries and the European Union, excluding Germany,<sup>229</sup> and requires countries to follow several procedures when issuing permits for activities that are covered by the Convention.<sup>230</sup> Specifically, countries must notify citizens, by public or individual notice, of permitting actions early in the decision-making process.<sup>231</sup> The notice must identify the proposed activity, the agency responsible for decision-making, and the procedures for public participation.<sup>232</sup> Countries must allow the public to submit any comments, information, analyses or opinions that it considers relevant to the proposed activity.<sup>233</sup> Further, countries must ensure that the final decision is made accessible to the public promptly, with the reasons and

the discipline of the market to environmental protection would not seem to be obviously compatible with the drive to promote public access to information and public participation").

225. *Greenhouse Gas Green Paper*, *supra* note 128, at 5.

226. *See id.* at 9 (reasoning that "involvement of companies in emissions trading 'will be cost effective'").

227. U.N. Doc. ECE/CEP/43 (1998), at <http://www.un.org/Depts/Treaty/collection/notpubl/27-13eng.htm> (last visited Feb. 6, 2001) [hereinafter *Aarhus Convention*].

228. *See* Sean T. McAllister, *Human Rights and the Environment: The Convention on Access to Information, Public Participation in Decision-Making, and Access to Justice in Environmental Matters*, 1998 COLO. J. INT'L ENVTL. L. & POL'Y 187, 188 (1998) (describing convention as "milestone" because it "could increase citizens access to environmental information").

229. *Id.* at 188. The United States did not sign the Treaty because it felt that ratification was inappropriate because the Treaty dealt mostly with European issues, and because the principles in the Treaty were already part of United States law. *Id.* at 197.

230. *Id.* at 193. The activities covered include: (1) energy production; (2) metal production and processing; (3) mineral and chemical production activities; (4) waste management activities; (5) paper and pulp production; (6) transportation infrastructure development; (7) animal-based food production activities; (8) water resources transfers; and (9) other activities that could have a significant effect on the environment. *Id.* at 193.

231. *Aarhus Convention*, *supra* note 227, art. 6(2).

232. *Id.* arts. 6(2), 6(3).

233. *Id.* art. 6(7).

considerations on which the decision is based.<sup>234</sup> Although the Convention includes less ambitious procedural requirements for rulemaking,<sup>235</sup> on the whole, it will require European Union countries to establish more aggressive and inclusive public participation procedures.<sup>236</sup>

### B. Information Access Laws

While public participation procedures are vital to ensure that economic and traditional regulatory environmental protection measures do not exacerbate problems of environmental injustice, access to information is essential to effective public participation.<sup>237</sup> In many cases, access to information is significantly influenced by wealth, and low income communities lack the resources and contacts that are available to wealthier communities to obtain information.<sup>238</sup> As a result, even when environmental protection laws include broad public participation requirements, the views of low income communities can be marginalized in environmental decision-making. Broad information disclosure requirements can, therefore, increase opportunities for low

234. *Id.* art. 6(8).

235. *Id.* art. 8. Article 8 of the Convention provides that:

[e]ach party shall strive to promote effective public participation at an appropriate stage, and while options are still open, during the preparation . . . of executive regulations and other generally applicable legally binding rules that may have a significant effect on the environment. To this effect, the following steps should be taken: (a) Time-frames sufficient for effective participation should be fixed; (b) Draft rules should be published or otherwise made publicly available; and (c) The public should be given the opportunity to comment, directly or through representative consultative bodies. The result of the public participation shall be taken into account as far as possible.

*Id.*

236. *See* McAllister, *supra* note 228, at 188 (stating that signatory countries will have to alter their laws to comply with treat provisions).

237. *See* Proposal for a Directive of the European Parliament and of the Council on Public Access to Environmental Information, COM (2000) 402, Expl. Mem. at 4, at [http://europa.eu.int/comm/environment/docum/00402\\_en.htm](http://europa.eu.int/comm/environment/docum/00402_en.htm) (last visited Nov. 7, 2000) (proposing to increase supply of environmental information to public) [hereinafter *Proposal for an Amended EU Access to Information Directive*]; Dinah Shelton, *Environmental Justice in the Postmodern World*, in ENVIRONMENTAL JUSTICE AND MARKET MECHANISMS, *supra* note 18, at 21, 27 (arguing that right to information is prerequisite to public participation in decision-making). The importance of access to information to informed public participation is a theme that appears in many international treaties and European environmental materials, including the Aarhus Convention, *supra* note 227, Principle 10, and Agenda 21 of the Rio Declaration on Environment and Development, 1992, 31 I.L.M. 876, and the United Kingdom's policy document, *This Common Inheritance*, in Rowan-Robinson & Ross, *supra* note 20, at 267.

238. *See* Rowe, *supra* note 26, at 73 (noting that wealthier citizens have important advantages in gaining information).

income communities, and all communities, to participate in environmental decision-making.<sup>239</sup> In addition, as noted above, information disclosure requirements can remedy some of the market failures that prevent economic environmental protection measures from operating efficiently.<sup>240</sup>

In the United States, the public is guaranteed access to environmental information, and most other government information, through the Freedom of Information Act (FOIA).<sup>241</sup> Thus, much of the information relating to the government's decisions in, and actions to implement, economic environmental protection measures in the United States are accessible to the public under FOIA. Environmental laws impose additional information disclosure requirements on federal, state and local governments.<sup>242</sup> The European Union, however, has not enacted any broad freedom of information laws.<sup>243</sup> Similarly, many of the Member States do not have broad freedom of information laws.<sup>244</sup>

However, within the past decade, the European Union has taken a few important steps to improve citizen access to environmental information. First, in 1990, the European Union created the European Environment Agency to

---

239. Professor Sunstein argued, however, that information disclosure requirements may have little effect on people who are undereducated, elderly or poor. See SUNSTEIN, *supra* note 30, at 339.

240. See *supra* note 41 and accompanying text; see also SUNSTEIN, *supra* note 30, at 327-28; Rowan-Robinson & Ross, *supra* note 20, at 267 (explaining that information allows for better consumer decisions). As Sunstein noted, information disclosure requirements can remedy information deficits that are inherent in free markets and, therefore, can promote economic efficiency. SUNSTEIN, *supra* note 30, at 327-28.

241. 5 U.S.C. § 552 (1994).

242. See, e.g., 42 U.S.C. § 300g-3(c)(3) (1994 & Supp. 1999) (Safe Drinking Water Act) (requiring notice to owner or operator of public water system); 42 U.S.C. §§ 9651, 9660 (1994) (Superfund) (outlining process for selecting sites for Hazardous Materials research); 42 U.S.C. § 11044 (1994) (Emergency Planning and Community Right to Know Act) (requiring that emergency response plans be made known to public).

243. The European Human Rights Convention provides may enable persons to obtain information in limited situations, see *infra* notes 327-38 and accompanying text, but it is a far cry from a "freedom of information" law.

244. See Public Sector Information: A Key Resource for Europe: Green Paper on Public Sector Information in the Information Society, COM(98) 585, at Intro. § 3; David Vaver, *Recent Copyright Developments in Europe*, OXFORD ELEC. J. INTELL. PROP. RIGHTS WP 06/9 (1999), at <http://www.oiprc.ox.ac.uk/EJWP0699.html> (last visited Nov. 7, 2000) (stating that, in Europe, "freedom of information laws are not the norm"); Friends of the Earth-Scotland, *National Campaigns-Access All Areas-New Freedom of Information Proposals for Scotland*, available at <http://www.foe-scotland.org.uk/nation/ej5.html> (last visited Nov. 7, 2000) (describing situation in Scotland). Although there have been several proposals for a broad freedom of information law in the United Kingdom over the past few years, existing legislation only provides citizens with access to limited types of information. Interview with Kenneth Armstrong, Professor, Queen Mary College, in London, England (Oct. 5, 2000); Telephone Interview with Gordon Walker, *supra* note 54.



collect, process, and distribute data on the environment.<sup>245</sup> Perhaps more importantly, in the same year, the Council of Ministers issued a Directive on Public Access to Environmental Information that requires Member States to provide access to environmental information possessed or controlled by the government,<sup>246</sup> and the European Commission recently has proposed substantial amendments to the Directive, in part to comply with the requirements of the Aarhus Convention.<sup>247</sup> The proposed Directive even includes a provision that requires Member States to ensure that persons who are denied information from the government can challenge the denial in court or in an alternative forum that is "expeditious and either inexpensive or free of charge."<sup>248</sup>

While the EU Directive and the proposed revision increase access to environmental information, there are notable differences between the EU approach and the FOIA in the United States, which could raise significant barriers for low income communities and environmental justice. First, in contrast to the United States approach, the scope of information that is available under the EU directive is limited to "environmental information," and does not include information about the demographic composition of communities that will be impacted by government action, socio-economic information, or any other information that does not fit within the definition of "environmental information."<sup>249</sup> Second, FOIA clearly describes the costs that the

245. See Council Regulation 1210/90, 1990 O.J. (L 120) 1 (establishing European Environment Agency). However, the agency did not begin operating until 1994. See Brinkhorst, *supra* note 14, at 5 (stating that agency did not begin operating until 1994). The agency does not have broad rulemaking, enforcement and inspection powers like the United States Environmental Protection Agency, but gathers information, acts as a clearinghouse, and publishes reports on environmental issues, including a periodic State of the European Environment Report. See Hunter & Muylle, *supra* note 187, at 10298 (describing agency's powers).

246. Council Directive 90/313, 1990 O.J. (L 158) 56 [hereinafter *EU Access to Information Directive*]. While the Directive does not apply to the institutions of the European Union, the Council of Ministers and Commission have adopted a Code of Conduct that provides public access to Council and Commission documents, and, in a separate decision, the European Union has provided access to documents held by the European Environment Agency. Hunter & Muylle, *supra* note 187, at 10298.

247. See *Proposal for an Amended EU Access to Information Directive*, *supra* note 237, at 2. The proposed directive is necessary "to correct the shortcomings identified in the practical application of the [existing Directive] . . . ; pave the way towards ratification by the European Community of the [Aarhus Convention] . . . [and] . . . adapt [the existing Directive] to developments in information technologies . . ." *Id.* Expl. Mem. at 2. While the existing Directive only ensures freedom of access to environmental information, the Proposed Directive would create a *right* of access to environmental information. *Id.* at 9.

248. *Proposal for an Amended EU Access to Information Directive*, *supra* note 237, art. 6.

249. See *EU Access to Information Directive*, *supra* note 246, art. 2(a). FOIA authorizes persons to obtain any records from government agencies, as long as they don't fall within one of the exceptions to disclosure, regardless of the type of information contained in them. 5 U.S.C. § 552(a)(3) (1994).

government can charge persons for access to information<sup>250</sup> and provides an exemption from fees for access to information for a public purpose.<sup>251</sup> The EU Directive merely requires that costs must be "reasonable," and does not include any public purpose exemption from fees.<sup>252</sup> Third, the EU Directive allows government agencies two months to reply to a request for information,<sup>253</sup> in contrast to the twenty days required by FOIA.<sup>254</sup> Fourth, the exemptions from the disclosure requirements are much broader in the EU Directive than in FOIA.<sup>255</sup> Fifth, although FOIA requires agencies to explain

---

250. The law requires agencies to establish fee schedules for information access requests, and limits the fees to the direct costs of document search, review and duplication. 5 U.S.C. § 552(a)(4)(iv) (1994). It further specifies that costs may not include any costs incurred in resolving issues of law or policy that may be raised in the course of processing a request. *Id.*

251. The law provides that

[d]ocuments shall be furnished without any charge or at a charge reduced below the fees established under clause (ii) if disclosure of the information is in the public interest because it is likely to contribute significantly to public understanding of the operations or activities of the government and is not primarily in the commercial interest of the requester.

5 U.S.C. § 552(a)(4)(A)(iii) (1994).

252. *EU Access to Information Directive, supra* note 246, art. 5. The Proposed Directive does not provide any further guidance regarding what costs are "reasonable." *Proposal for an Amended EU Access to Information Directive, supra* note 237, art. 5.

253. The Proposed Directive would reduce the response time to one month. *See Proposal for an Amended EU Access to Information Directive, supra* note 237, art. 3(2)(a).

254. 5 U.S.C. § 552(a)(6)(A) (1994). In addition, although FOIA requires agencies to provide information in the format requested, § 552(a)(3)(B), the existing EU Directive does not. The Proposed EU Directive would, however, change that. *Proposal for an Amended EU Access to Information Directive, supra* note 237, art. 3(4).

255. For instance, the EU Directive includes a broad exemption for "the confidentiality of the proceedings of public authorities," *see EU Access to Information Directive, supra* note 246, art. 3(2), while FOIA merely exempts "inter-agency or intra-agency memorandums or letters which would not be available by law to a party other than an agency in litigation with the agency." 5 U.S.C. § 552(b)(5) (1994). Similarly, while the EU Directive includes an exception for non-disclosure of information that would adversely affect "international relations, public security and national defence," *see EU Access to Information Directive, supra* note 246, art. 3(2), the FOIA exemption is limited to records

(A) specifically authorized under criteria established by an Executive order to be kept secret in the interest of national defense or foreign policy and (B) are in fact properly classified pursuant to such Executive order; (A) specifically authorized under criteria established by an Executive order to be kept secret in the interest of national defense or foreign policy and (B) are in fact properly classified pursuant to such Executive order.

5 U.S.C. § 552(b)(1) (1994).

More significantly, though, the EU Directive exempts disclosure of any information that would adversely affect "the interests of any person who supplied the information requested on a voluntary basis unless that person has consented to the release of the information concerned."

their reasons for failing to disclose information that is requested under the law, and to file, and make publicly available, annual reports that describe the number of FOIA requests that they received, and their responses and response times to the requests,<sup>256</sup> the existing EU directive does not include any of those transparency requirements.<sup>257</sup>

Many of the differences outlined above are due to the fact that the EU legislation is more vague and general than the United States legislation, and leaves more discretion to the Member States. As noted previously, the subsidiarity principle limits the legislative power of European Union institutions in areas where the Treaties do not explicitly authorize European Union action.<sup>258</sup> In order to avoid legislating in areas that are outside of its jurisdiction, therefore, the EU institutions often draft legislation in very general terms, and grant Member States broad authority to implement the legislation in a manner that is appropriate to their legal and regulatory structure.<sup>259</sup>

While the EU Directive and proposed revision are more modest than FOIA, they can, nevertheless, empower communities and consumers. One important feature of the proposed revision to the EU Directive is its emphasis on technology, and the delivery of information through new technologies. The Proposal clarifies that computerized records can be "environmental informa-

*See EU Access to Information Directive, supra* note 246, art. 3(2). FOIA does not include such an exemption. Finally, while FOIA requires agencies to redact protected information from documents and provide requesters with the portions of the document requested that are not privileged, *see* 5 U.S.C. § 552(b) (1994), the existing EU Directive allows the government to withhold entire documents if part of the documents are privileged.

256. 5 U.S.C. § 552(e) (1994).

257. Although the existing Directive doesn't require government agencies to explain the reasons for withholding information, the Proposed Directive would require them to provide a written notification of a refusal to make all or part of any information requested available, and to state the reasons for the refusal. *See Proposal for an Amended EU Access to Information Directive, supra* note 237, Expl. Mem. at 14.

258. *See supra* notes 213-15 and accompanying text (discussing subsidiarity principle). The Explanatory Memorandum to the Commission's proposed revisions to the environmental information directive indicates that the proposal "leaves it to the Member States to define the practical arrangements under which environmental information should effectively be made available respecting thereby the subsidiarity principle." *Proposal for an Amended EU Access to Information Directive, supra* note 237, Expl. Mem. at 5.

259. As Professor Armstrong noted,

[t]he . . . introduction of the principle of subsidiarity . . . was symbolic of a fear among Member States about the extension of Community competence and the growth of [European Community] legislative activities. . . . [I]n its 1993 report on adapting EU legislation to subsidiarity, the Commission referred to the need to remove excessive detail from EU legislation, if national or international instruments or controls could achieve the same goal.

Armstrong, *supra* note 111, at 756, 758.

tion,<sup>260</sup> subject to disclosure and, more importantly, it requires governments to maintain environmental information "in forms or formats that are readily reproducible and accessible by computer telecommunications or by other electronic means."<sup>261</sup> The Internet is a vital tool for accessing environmental information and for organizing communities and interest groups on environmental issues, and can be an important tool for environmental justice activists.<sup>262</sup> While Internet access in Europe historically has been more limited than in the United States,<sup>263</sup> partly due to high telecommunications costs<sup>264</sup> and

260. See *Proposal for an Amended EU Access to Information Directive*, *supra* note 237, art. 2 (noting that environmental information includes electronic information).

261. *Id.* art.7(1). The Explanatory Memorandum notes as follows:

the proposal will oblige Member States to have greater recourse to modern computer technology for making information available to the public. . . . An active policy of making information available to the public through modern computer technology should enable many information searches to be carried out directly by applicants. This should result in a reduction of the administrative costs incurred in the handling of individual requests for access to environmental information. It will also improve public understanding of the functioning of public authorities improving thereby public confidence.

*Id.* Expl. Mem. at 7.

262. See Stephen M. Johnson, *The Internet Changes Everything: Revolutionizing Public Participation and Access to Government Information Through the Internet*, 50 ADMIN. L. REV. 277, 277-337 (1998) (providing more general critique of value of Internet as tool for accessing information and increasing public participation); John Vidal, *Modem Warfare: E-mail and the Net Are Revolutionising the Way Environment, Human Rights and Social Justice Groups Work*, THE GUARDIAN (London), Jan. 13, 1999, at 4 (noting activists increased use of Internet to further their causes). As Vidal suggested, the Internet has become "the most potent weapon in the toolbox of resistance to globalism and the rampant free market." Vidal, *supra*, at 4.

263. Approximately 20% of the population of Western Europe had access to the Internet by the end of 1999, see Lisa Kelly, *Europeans Still Wary of Buying Online*, VUNET.COM, at <http://www.vnunet.com/print/601801> (last visited Apr. 6, 2001), compared to 50% of the population in the United States. The level of Internet access within the European Union varies greatly, with the highest levels of access in Norway (50%), Sweden (44%), and Finland (38%). Matthew Wall, *The Wired Divide*, SUNDAY TIMES (London), April 23, 2000, 1 (Features). Less than 20% of the German population has Internet access, and the level of access is even lower in France (15%), and Greece (12%). *Id.*

264. See Wall, *supra* note 263, at 47 (observing that recent European telecom privatization has spurred competitive forces and reduced online costs). The cost of Internet access in the United Kingdom is twice as high as the United States, largely due to British Telecommunications' monopolistic control of access to the phone lines. See David Hewson, *BT Holds the Net to Ransom*, SUNDAY TIMES (London), Sept. 24, 2000, 49 (Features) (calling British Telecom private monopoly and noting that British pay more than twice what Americans pay for Internet access). Similarly, Spain's 6% Internet adoption rate is caused, in part, by the substantial charges for telephone calls imposed by Telefonica and Retevisión. See *Doing the Bolsa Nova*, NEW MEDIA AGE, Dec. 16, 1999, at 29 (describing high cost of calls as hindrance to development of Internet market in Spain).

cultural factors,<sup>265</sup> European Internet access and use is growing rapidly.<sup>266</sup> The explosive growth of mobile phones, and their nascent ability to access the Internet, has played an important role in the trend, and telecommunication reforms also have played a role in some countries.<sup>267</sup> The European Union is attempting to accelerate the European Internet revolution by proposing a series of directives to reform and harmonize telecommunications laws in all of the Member States.<sup>268</sup> Increased European Internet access, coupled with the revisions to the EU Environmental Information Directive, should mean increased access to environmental information in the European Union. As noted above, access to information is a vital safety net for communities as European

265. See Wall, *supra* note 263, at 1 (noting that culture is important aspect of Internet adoption). With regard to the cultural factors, Nicholas Negroponte, director of the media laboratory at Massachusetts Institute of Technology, suggested that "the dominance of North American English as the web's chosen language has clearly accelerated take-up throughout English-speaking countries. . . . The fiercely patriotic French . . . perceive the dominance of English on the web as a kind of cultural imperialism." *Id.* He also argued that:

a liberal social and economic climate is essential if the Internet is to flourish. . . . Countries that respect individualism and entrepreneurship . . . will readily embrace the Internet . . . . Italy, Spain and Latin America all have a reputation for cash-based underground economies that thrive irrespective of who is in power. . . . [T]hat attitude . . . is just right for nurturing the net. . . . [On the contrary], the cultural forces in [Germany and France] – the centralism, the top-down nature of management and government – mitigate against a bottom-up, decentralised, distributed world, which is what the Internet is all about.

*Id.* He even suggested that the different rates of Internet adoption in Europe are related to the fact that "Internet access through personal computers has mostly been an indoors activity," while many European cultures center around outdoor activities. *Id.*

266. The population of Europeans online nearly doubled, from forty-one million to eighty-one million, between 1998 and 2000. Kelly, *supra* note 263.

267. See Wall, *supra* note 263, at 1 (noting increased use of mobile phones and privatization of telecom companies). Europe is forecast to overtake the United States in mobile phone use by the end of 2000, and the "imminent impact of mobile phones cannot be overstated." *Id.* Other factors that are fueling the European Internet revolution are the launch of free Internet Service Providers, *id.*, access to the web via television, and the growth of cybercafes. See *Cheap Bytes and Beverages at Net Cafes*, CHRISTIAN SCI. MONITOR, May 3, 2000, at 1 (detailing Internet café phenomenon).

268. In the press release announcing the proposals, the European Commission suggested that the proposals "put particular emphasis on the stimulation of affordable high-speed Internet access and providing a light touch legal framework for market players. This package of proposals represents a comprehensive reform for telecommunications in Europe and is aimed at providing the best conditions for a dynamic and competitive industry in Europe." See European Commission, Press Release, at [http://europa.eu.int/rapid/start/cgi/guesten.ksh?p\\_action.gettxt=gt&doc=IP/00/749\[0\]RAPID&lg=EN](http://europa.eu.int/rapid/start/cgi/guesten.ksh?p_action.gettxt=gt&doc=IP/00/749[0]RAPID&lg=EN) (July 12, 2000). The package includes a regulation to liberalize telecommunications markets by unbundling access to the local loop and a directive to ensure that Member States maintain universal service obligations for telecommunications providers. *Id.*

countries move towards greater reliance on economic environmental protection measures.

### C. Environmental Assessment Requirements

Environmental impact assessment requirements take advantage of the benefits of public participation, access to information, and market forces to empower citizens to play a vital role in governmental decision-making regarding projects and decisions that could adversely affect their community. While environmental impact assessment requirements may not apply to many of the economic environmental protection measures, they can limit the disparate impacts of traditional regulatory and permitting actions by government.

The European Union issued an Environmental Impact Assessment Directive in 1985,<sup>269</sup> and amended it in 1997.<sup>270</sup> The EU Directives are similar in many ways to the environmental impact statement requirements of the National Environmental Policy Act (NEPA) in the United States.<sup>271</sup> Both laws require the development of an environmental impact assessment for certain major activities that may harm the environment before the activities can proceed.<sup>272</sup> Both laws merely establish procedural requirements for development projects and do not prohibit actions that will have adverse environmental impacts.<sup>273</sup>

However, there are some differences between the EU approach and the NEPA that are significant for environmental justice. First, even when an environmental impact statement is not mandated the NEPA requires government actors to consider environmental impacts and alternatives to proposed actions.

---

269. Council Directive 85/337, 1985 O.J. (L 175) 40 [hereinafter *Original EIA Directive*].

270. Council Directive 97/11, 1997 O.J. (L 73) 5 [hereinafter *Amended EIA Directive*].

271. 42 U.S.C. §§ 4321-4370 (1994).

272. NEPA requires the preparation of an environmental impact statement for proposals for legislation and major federal actions significantly affecting the quality of the human environment. 42 U.S.C. § 4332(2)(C) (1994). The EU Directive takes a different approach and specifically identifies the projects for which an environmental impact assessment must be prepared. *Amended EIA Directive, supra* note 270, Annex I. In a separate Annex, the Directive lists other projects for which an assessment may be required by Member States pursuant to criteria or requirements established by the Member States. *Amended EIA Directive, supra* note 270, Annex II.

273. See *Balt. Gas & Elec. Co. v. NRDC*, 462 U.S. 87, 105 (1983) (noting that Court's only task under NEPA is to determine if agency considered relevant factors and articulated rational connection between factors found and choice made). The Court has stated that "NEPA itself does not mandate particular results, but simply prescribes the necessary process . . . . Other statutes may impose substantive environmental obligations on federal agencies, but NEPA merely prohibits uninformed – rather than unwise – agency action." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350-51 (1989). Similarly, the EU Directive imposes procedural, rather than substantive, requirements. See *Hunter & Muylle, supra* note 187, at 10299 (noting that directive does not provide substantive environmental protection standards; rather, it provides procedural requirements).

The EU directive, however, does not include any general environmental assessment requirement.<sup>274</sup> In fact, unlike the NEPA, the EU Directive establishes a system in which the environmental planning requirement is imposed on private developers rather than the government.<sup>275</sup> Second, while the regulations promulgated pursuant to the NEPA require agencies to identify alternatives to a proposed action, including a "no action" alternative, and the environmental impacts of those alternatives,<sup>276</sup> the original EU Directive did not require any identification of alternatives. The revised EU Directive only requires an outline of the main alternatives considered by the developer and leaves the developer with complete discretion to determine what alternatives should be considered.<sup>277</sup> Third, unlike the NEPA,<sup>278</sup> the EU Directive does not seem to require or authorize persons to consider or weigh the socioeconomic impacts of a proposed action (i.e. does the action adversely affect a low income or minority community?) in the environmental impact assessment.<sup>279</sup> Fourth, the EU Directive only includes vague, general requirements for public participation and leaves the development of detailed participation processes to the Member States.<sup>280</sup> Finally, while an EIS and the government's failure to prepare an EIS can be challenged in court in the United States, the EU Directive does not require Member States to establish any system of judicial review to challenge environmental impact assessments or the failure to prepare an assessment.<sup>281</sup>

274. Even when an environmental impact statement is not required, NEPA requires agencies to "study, develop and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(2)(E) (1994).

275. See *Amended EIA Directive*, *supra* note 270, arts. 3, 5 (imposing environmental planning requirement on private developers).

276. See 40 C.F.R. §§ 1508.8, 1508.25 (1999) (describing what actions, alternatives and impacts agencies must consider in determining scope of environmental impact statements).

277. *Amended EIA Directive*, *supra* note 270, art. 5; see also Hunter & Muyllé, *supra* note 187, at 10299.

278. See Stephen M. Johnson, *NEPA and SEPA's in the Quest for Environmental Justice*, 30 LOY. L.A. L. REV. 565, 579-88 (1997) (noting that NEPA requires federal government to consider socioeconomic and health effects when it prepares Environmental Impact Statement).

279. The Directive requires the developer to identify the effects of the project on "[(1)] humans, fauna, and flora; [(2)] soil, water, air, climate and the landscape; [(3)] material assets and the cultural heritage; and [(4)] the interaction between [these elements]." *Amended EIA Directive*, *supra* note 270, art. 3. Perhaps the effects on "humans" or the "cultural heritage" could be read broadly to include socioeconomic impacts, but the courts have not yet interpreted the language in that manner. In addition, while NEPA refers to assessing the impacts of a proposed action on the "human environment," the EU Directive refers simply to "environmental effects." *Amended EIA Directive*, *supra* note 270, art. 5.

280. See *Amended EIA Directive*, *supra* note 270, art. 6 (stating that information must be made available to public for comment).

281. See *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 375 (1989) (stating that court can review agency action). Although NEPA does not include a judicial review provision, the

The environmental impact assessment laws of the Member States replicate many of these differences, especially if the laws merely adopt the provisions of the EU Directive and do not impose more stringent requirements. For instance, the Town and Country Planning Regulations,<sup>282</sup> which govern environmental impact assessment in the United Kingdom, only require developers to provide an outline of alternatives that they considered, do not require the developers to consider socioeconomic impacts of their action, and do not include a general environmental assessment requirement.<sup>283</sup> Further, they establish modest public participation requirements and the developer, rather than the government, controls these requirements.<sup>284</sup> Fortunately, the regulations do provide for judicial review of regulatory violations.<sup>285</sup>

#### D. Access to Justice

Public participation provisions, information access requirements, and environmental impact assessment requirements enable citizens to play a greater

---

Administrative Procedure Act creates a right of review for final agency actions under NEPA. *Id.* The general federal question jurisdictional statute enables federal district courts to hear challenges to an agency's environmental impact statement, or failure to prepare an environmental impact statement. *See* 28 U.S.C. § 1331 (1994) (stating that "district courts shall have original jurisdiction of all civil actions arising under the Constitution, laws or treaties of the United States"). The district court will review the agency's decision to proceed without preparing an EIS or EA under the "hard look" arbitrary and capricious standard. *See Marsh*, 490 U.S. at 376 (concluding that proper standard of review is "arbitrary and capricious"); *see also* David C. Shilton, *Is the Supreme Court Hostile to NEPA? Some Possible Explanations for a 12-0 Record*, 20 ENVTL. L. 551, 562 n.52 (1990) (noting Justice Stevens's opinion in *Marsh* that courts should apply arbitrary and capricious standard when determining whether EIS was required). As part of that analysis, a district court will determine whether the agency looked at all of the relevant factors before it decided to proceed without preparing an EIS or EA. *See Marsh*, 490 U.S. at 378 (concluding that court must review whether agency looked at "relevant factors" (citing *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 416 (1971))).

282. England and Wales Town and Country Planning Regulations (1999), SI 1999/293, available at <http://www.hms.gov.uk/si/si1999/99029303.htm>. (last visited March 29, 2001).

283. *See id.* sched. 4 (stating that applicant must include "outline of main alternatives studied").

284. *See id.* §§ 14, 17, 18 (citing examples of regulations controlled by developers). For instance, Regulation 14 requires the developer, rather than the government, to publish a notice in the paper that states that the developer has applied for development approval, and describes the process for public participation in the development review. *See id.* § 14 (stating that applicant must publish notice and make clear how public can participate). Similarly, it is the developer's responsibility to ensure that information about the development proposal and the environmental impact statement are made available to the public. *See id.* § 17 (mandating that applicant is responsible for making reasonable number of copies available). Further, the developer can charge the public reasonable fees for copies of the information. *See id.* § 18 (allowing applicant to charge copy fees).

285. *See id.* § 30 (authorizing judicial review under Section 288 of Town and Country Planning Act 1990).



role in environmental decision-making and possibly to prevent actions that will adversely affect them. However, broad access to justice provisions is equally important to empower communities in the battle for environmental justice when an action or decision that adversely affects them has already been taken.<sup>286</sup>

Despite a few recent Supreme Court decisions that tightened standing requirements,<sup>287</sup> citizens in the United States enjoy fairly broad access to courts to challenge violations of environmental laws that may harm them. Most of the federal environmental statutes include "citizen suit" provisions that explicitly authorize individual citizens to sue to enforce the statute.<sup>288</sup> As long as the action that the plaintiff is challenging has caused her to suffer, or will imminently cause her to suffer, some actual injury (no matter how small), and the relief that she is seeking will redress that injury, the plaintiff generally will have standing to sue.<sup>289</sup> In addition, most of the statutes include provisions that authorize courts to award attorneys' fees to the prevailing party,

286. See John E. Bonine, *Standing to Sue: The First Step in Access to Justice*, Remarks for the Mercer Virtual Guest Speaker Program, at <http://www.law.mercer.edu/claw/standingtalk.html> (last visited June 18, 2001) (discussing importance of public access to justice). As Professor John Bonine argued,

Widespread access to justice is more likely to result in *equal* justice. Of course, inequalities will always exist. Those with power and resources will always have a bigger effect on governmental and private decisions than those lacking power and resources. But this inequality is magnified where access to courts is restricted, because restrictions are less likely to affect powerful economic interests. They easily have access to the courts. . . . Citizens and their organizations often do not have such equal access to justice . . . .

*Id.*

287. See *Steel Co. v. Citizens for a Better Env't*, 523 U.S. 83, 109 (1998) (deciding environmental group has no standing to sue). But see *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. Inc.*, 528 U.S. 167, 180-88 (2000); *FEC v. Akins*, 524 U.S. 11, 26 (1998) (deciding that group of voters has standing to challenge FEC determination); *Bennett v. Spear*, 520 U.S. 154, 178-79 (1997) (concluding that ranch operator and irrigation districts met standing requirements).

288. See, e.g., 16 U.S.C. § 1540(g)(1) (1994) (containing Endangered Species Act citizen suit provision); 33 U.S.C. § 1365(a)(1) (1994) (containing Clean Water Act citizen suit provision); 42 U.S.C. § 6972(a) (1994) (containing Resource Conservation and Recovery Act citizen suit provision); 42 U.S.C. § 7604(a) (1994) (containing Clean Air Act citizen suit provisions); 42 U.S.C. § 9659 (1994) (containing Comprehensive Environmental Response, Compensation, and Liability Act citizen suit provision).

289. See *Friends of the Earth*, 528 U.S. at 181 (stating that "relevant showing" is injury to plaintiff); *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992) (describing three elements of standing); *Sierra Club v. Morton*, 405 U.S. 727, 738-741 (1972) (stating that standing requires individualized injury). The plaintiff must also demonstrate that the interest that they are seeking to protect through litigation is arguably within the zone of interests sought to be protected by the statute under which they are suing. See *Ass'n of Data Processing Serv. Orgs. v. Camp*, 397 U.S. 150, 153 (1970) (stating that standing requires plaintiff's interest to be within "zone of interests").

thus reducing the financial disincentive for citizens to sue.<sup>290</sup> Further, provisions for class action suits enable citizens collectively to sue for claims that, individually, would have been cost-prohibitive to prosecute.<sup>291</sup> Contingency fee provisions also reduce the financial impediments to bringing a law suit.<sup>292</sup> Although financial and other barriers to universal access to justice in the United States still remain,<sup>293</sup> citizen enforcement is a centerpiece of American environmental law.<sup>294</sup>

Despite the fact that citizen enforcement also is recognized as an important component of environmental protection in Europe,<sup>295</sup> citizen enforcement of European Union law is more limited than in the United States. Article 230 of the Treaty of Rome authorizes a "natural or legal person" to file suit in the European Court of Justice<sup>296</sup> to challenge and seek to annul regulations, direc-

290. See, e.g., 16 U.S.C. § 1540(g)(4) (1994) (allowing cost of litigation under Endangered Species Act); 33 U.S.C. § 1365(d) (1994) (authorizing reward of litigation costs under Clean Water Act); 42 U.S.C. § 6972(e) (1994) (allowing reward of litigation costs under Resource Conservation and Recovery Act); 42 U.S.C. § 7604(d) (1994) (permitting litigation costs under Clean Air Act).

291. See Verchick, *supra* note 29, at 776 (noting that class action suits "allow citizens to pool their claims in order to fund and staff litigation that no member could individually maintain").

292. See *id.* (stating that contingency fees allow plaintiffs who ordinarily would not be able to sue to bring lawsuits).

293. See Verchick, *supra* note 29, at 775 (explaining disadvantages of bringing suit). As Professor Verchick observed,

[L]ocal community groups or neighborhood coalitions lack the resources to identify environmental violations in their areas or to bring lawsuits . . . . Larger, national environmental groups traditionally have shown little interest in championing the causes of poor, minority areas. . . . Attorney's fee provisions are too stingy . . . . Courts remain skeptical when certifying classes involving environmental torts. Well-heeled industrialists still threaten to "out-gun" the small litigant.

*Id.* at 775-77.

294. See Stephen M. Johnson, *Private Plaintiffs, Public Rights: Article II and Environmental Citizen Suits*, 49 U. KAN. L. REV. 383, 384-385 (2001) (stating that "[c]itizen suits are a major component of the enforcement program for federal environmental laws").

295. See Verchick, *supra* note 29, at 768 (explaining that European Community officials view citizen enforcement as effective). Citizen involvement is vital because the European Commission does not have the resources to adequately enforce the environmental directives of the European Union, and it often lacks information about implementation, or non-implementation, of the directives in Member States. *Id.* at 782. While Member States can sue other Member States in the European Court of Justice, no Member State has ever sued another Member State to enforce an environmental directive. *Id.*

296. See Flynn, *supra* note 88, at 19 (describing composition of European Court of Justice). The European Court of Justice is the judicial body of the European Union. Fifteen Judges and nine Advocates-General make up the European Court of Justice. *Id.* at 19. A Judge assigns an Advocate-General to each case. *Id.* at 19-20. The Advocate-General provides a nonbinding decision on the case to the Judges who, in turn, decide each case in unanimous opinions. *Id.*

tives, or enforcement decisions of European Union institutions.<sup>297</sup> Article 232 authorizes a "natural or legal person" to sue European Union institutions when they fail to act as required by the Treaty.<sup>298</sup> However, unlike in the United States, plaintiffs must demonstrate that the challenged action "is of direct and individual concern."<sup>299</sup> This requirement can present problems for plaintiffs. First, because most of the European Union environmental legislation is in the form of Directives, the legislation will not directly impact a plaintiff until a Member State adopts it.<sup>300</sup> Further, to the extent that other persons will suffer injuries that are similar to the plaintiff, the plaintiff will not be individually affected by the action.<sup>301</sup> The "direct and individual concern" test, thus, raises important barriers to access to justice. In fact, as of 1997, individuals have brought only six cases before the European Court of Justice under Article 230 and in each case the Court determined that the plaintiff lacked standing to sue.<sup>302</sup>

However, because most of the European Union environmental legislation will be implemented in Member States only after it is adopted by the State, many of the actions that individuals may wish to challenge in court will not

297. See CONSOLIDATED EU TREATIES, *supra* note 18, at 272, art. 230 (allowing person to "institute proceedings against a decision"). Article 230 (ex Article 173) applies to actions of the Council of Ministers, the European Commission, the European Central Bank, joint actions of the Council and the European Parliament, and actions of the European Parliament that are intended to produce legal effects on third parties. *Id.* It does not apply to actions of Member States. *Id.* The Court can annul an action of a European Union institution on any of four grounds: (1) "lack of competence;" (2) infringement of an essential procedure; (3) infringement of the Treaty of Rome or any related rule of law (including general principles of European Union law and international law); or (4) "misuse of powers." *Id.*

298. See *id.* at 273, art. 232 (stating that person may complain to European Court of Justice).

299. See *id.* at 272-273, art. 230, 232 (stating that person may sue if institution "has failed to address to that person any act other than a recommendation or opinion"). Plaintiffs also can sue if the decision is addressed to them, but few decisions ever mention individuals by name. See Verchick, *supra* note 29, at 777 (explaining that plaintiff could sue if ruling specifically is addressed to plaintiff).

300. See Verchick, *supra* note 29, at 778 (describing case in which European Court of Justice denied standing to plaintiff because Member State was not required to adopt challenged directive).

301. See *id.* at 777-79 ("Persons . . . [may] claim to be concerned individually only if the decision affects them because of certain characteristics which are peculiar to them or by reason of a factual situation which is, as compared with all other persons, peculiarly relevant to them, and by reference to which they may be individually described in a way similar to the addressee of the decision.") (citing Case 25/62, *Plaumann & Co. v. Commission*, 1963 E.C.R. 95, 107 (1964)).

302. See Verchick, *supra* note 29, at 781 (noting that as of 1997 plaintiffs lost on standing in all six cases brought); see also Flynn, *supra* note 88, at 25-26 (describing dim prospects for citizen lawsuits before European Court of Justice). Private parties also do not have a right to intervene in actions brought in the European Court of Justice by Member States or European Union institutions. See *id.* at 26.

likely be actions of the European Union Institutions, but rather, actions or inactions of their own government. Article 234 of the Treaty of Rome authorizes courts in the Member States to refer to the European Court of Justice questions concerning a Member State's compliance with or violation of European Union law, or the validity of the European Union law, or of actions of the European Union Institutions.<sup>303</sup> However, referral by the courts of the Member States is discretionary.<sup>304</sup> Further, plaintiffs can only raise these issues in courts of Member States if they can get into court in the State in the first place.

Access to justice is more limited in many Member States than in the United States. Explicit citizen suit provisions are less prevalent in Europe.<sup>305</sup> Standing barriers also may prevent plaintiffs from suing.<sup>306</sup> In Italy and Germany, for instance, environmental groups can participate in legal actions related to their interests if they have registered their interests with the government and the government has recognized them through a decree.<sup>307</sup> Financial considerations also can limit access to justice in some countries. For many years, the illegality of contingency fee arrangements in the United Kingdom was a disincentive to private lawsuits for environmental wrongs.<sup>308</sup> Class actions also are very restricted in European countries.<sup>309</sup>

While the European Union theoretically could require Member States to provide more access to courts in their countries, the Union has been reluctant to take that step.<sup>310</sup> Once again, the Aarhus Convention could change this

---

303. See CONSOLIDATED EU TREATIES, *supra* note 18, at 273-274, art. 234 (explaining jurisdiction of European Court of Justice).

304. See CONSOLIDATED EU TREATIES, *supra* note 18, at 274, art. 234 (noting that court of Member State can request Court of justice to give ruling); see also Verchick, *supra* note 29, at 780 (stating that "the decision to refer E.C. issues is generally within the national court's discretion").

305. See Cliona J.M. Kimber, *Environmental Federalism: a Comparison of Environmental Federalism in the United States and the European Union*, 54 MD.L. REV. 1658, 1681-82 (1995).

306. *Id.*

307. See Bonine, *supra* note 286 (noting that Italy and Germany allow registered groups to sue). The European Commission developed a proposed access to justice directive based on this model in 1992, but the directive was never adopted. See Verchick, *supra* note 29, at 783-84 (explaining "access to justice" directive).

308. See Jones, *supra* note 17, at 570 (describing recent allowance of contingency fee as possibly having effect on willingness to sue); Verchick, *supra* note 29, at 784-85 (stating that contingency fees were viewed as "unethical").

309. See Verchick, *supra* note 29, at 784-85 (stating that European countries restrict class action suits).

310. See Himsworth, *supra* note 91, at 291. Himsworth stated:

The efficacy of Community law, and in particular, its capacity to be equally applied, enforced and, as necessary, challenged by those with a wish to do so across all Member States depends on consistency of approach across the Community . . . .

dramatically. Article 9 of the Convention provides that citizens of countries that sign the Convention must be able to judicially challenge any act by a public authority or private party that violates national environmental laws. It also states that courts in the signor countries must be able to enjoin violations or provide other forms of equitable relief to plaintiffs.<sup>311</sup> Even if the European Union enacts legislation to implement this requirement, standing may still be an impediment to lawsuits in Member States because Article 9 provides that countries can limit access to justice to plaintiffs who have a "sufficient interest" in the lawsuit, consistent with national laws, as well as the spirit of the Convention.<sup>312</sup>

### *E. Constitutional or International Environmental Rights*

To the extent that economic measures are used to protect the environment, each of the measures described above can be used to empower communities to participate in the marketplace for environmental rights, without fundamentally altering the underlying market. Laws that explicitly require government decisionmakers to consider whether their actions disparately impact low income or minority communities also could enhance the bargaining power of communities while leaving the market structure intact, although neither the United States nor the European countries have focused heavily on this approach.<sup>313</sup>

Another approach, however, that could be used to protect low income and minority communities which could fundamentally alter the balance of power in the market for environmental rights. Instead of merely requiring governments to consider the impacts of their actions, laws could prohibit governments

---

[H]owever, that logical demand . . . has collided with resistance generated within national legal systems and sympathetically accommodated by the Court of Justice. It has been a resistance to any substantial harmonisation of domestic court procedures . . . in consequences of guidance laid down in Court of Justice decisions. In recent years this approach has been paraded under the broad banner of subsidiarity.

*Id.*

311. See *Aarhus Convention*, *supra* note 227, art. 9 (stating that person who has been wronged should have "access to review procedure"); see also *McAllister*, *supra* note 228, at 194-195 (describing Article 9 provision to allow judicial review of agency's denial of citizen's request for environmental information).

312. See *Aarhus Convention*, *supra* note 227, art. 9 (mandating that person "having a sufficient interest" should receive judicial review).

313. See *Johnson*, *supra* note 21, at 162-165 (discussing whether command and control safety nets are necessary to protect low income communities in market based environmental protection system); *Rowe*, *supra* note 26, at 87 (noting that "exercise of administrative discretion should expressly include the distributive effects of environment-related decisions"). As *Rowe* noted, instead of prohibiting actions that harm communities, the laws could allow the government to take actions that harm communities as long as the communities are compensated for the harms. *Id.*

from taking actions that disparately impact low income and minority communities, including the approval of pollution trades or the waiver of regulatory requirements through agreements.<sup>314</sup> Although federal environmental laws in the United States and Europe generally do not take this approach,<sup>315</sup> several European countries have created a constitutional right to a clean or healthy environment.<sup>316</sup> The creation of a constitutional right to a clean environment could, theoretically, transform the market for environmental rights as fundamentally as a prohibition on actions that disparately impact communities. More than fifty countries in the European Union including Austria, Switzerland, the Netherlands, Spain and Portugal have established this type of constitutional "right."<sup>317</sup> Similarly, several international declarations, including the Stockholm Declaration,<sup>318</sup> the Declaration of the Hague,<sup>319</sup> and the Rio Declaration recognize a "right" to a healthy environment.<sup>320</sup> While the United States has acted more aggressively than many European countries in creating access to justice and strengthening public participation, information access, technical assistance, and environmental assessment requirements, it has not

314. See Johnson, *supra* note 21, at 162 (discussing failure of environmental laws to control government action).

315. *Id.* at 162-65 (noting that existing provisions of United States environmental laws could be used to require government to consider demographic impacts of its actions). Although environmental laws do not prohibit government discrimination, the Equal Protection clause of the United States Constitution and Title VI of the Civil Rights Act prohibit government actions that discriminate against persons based on race. 42 U.S.C. § 2000d (1994). These measures do not, however, provide any protection for the poor, independent of the racial protections.

316. See Ernst Brandl & Hartwin Bungert, *Constitutional Entrenchment of Environmental Protection: A Comparative Analysis of Experiences Abroad*, 16 HARV. ENVTL. L. REV. 1, 14-15 (1992) (discussing proposals in United States for constitutional right to clean environment); Malgosia Fitzmaurice, *The Right of the Child to a Clean Environment*, 23 S. ILL. U. L.J. 611, 616 (1999) (noting that more than fifty constitutions include provisions for clean environment).

317. See Fitzmaurice, *supra* note 316, at 616 (noting countries that have included right to clean environment in their constitutions). However, many of the larger European countries, such as Great Britain, do not have constitutional protection for environmental rights. See Jones, *supra* note 17, at 562 (noting Great Britain's lack of written constitution).

318. Principle 1 of the Stockholm Declaration provides that "Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well being . . ." *Report of the United Nations Conference on the Human Environment*, June 16, 1972, U.N. Doc. A/CONF. 48/14/Corr. 1 (1972), 11 I.L.M. 1416, 1417 (1972).

319. The 1989 Declaration of the Hague recognizes "the right to live in dignity in a viable global environment . . ." *Hague Declaration on the Environment*, March 11, 1989, 28 I.L.M. 1308, 1309 (1989).

320. Principle 1 of the 1992 Rio Declaration on Environment and Development provides that "[h]uman beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature." *United Nations Conference on Environment and Development: Rio Declaration on Environment and Development*, June 13, 1992, U.N.C.E.D. Doc. A/CONF. 151/5/Rev. 1, 31 I.L.M. 874, 876 (1992).

taken the bold step of constitutionally recognizing the importance of environmental protection.

While critics argue that many of the provisions are merely aspirational and unenforceable,<sup>321</sup> the "endowment effect" created by government recognition of the right to a minimal level of environmental quality could play an important role in the marketplace for environmental rights.<sup>322</sup> Thus, a constitutional environmental right could be a valuable tool in the battle for environmental justice in Europe, and the United States could import the concept. It is important to frame the "right" narrowly, to ensure that its enforcement.<sup>323</sup> Instead of a "right to a clean or healthy environment," it may be useful to establish a right to be free from government action that affects the environment in a way that harms human health. If the United States were to adopt that approach, it would empower low income and minority communities in the United States in at least two ways. First, if plaintiffs challenged government actions as a violation of equal protection or due process guarantees, the courts may subject government action to a higher level of scrutiny due to the constitutional recognition of a fundamental right to a certain level of environmental protection. More importantly, litigants would have a separate cause of action, in addition to equal protection, due process, and other existing causes of action, to pursue if the government were to take some action that threatened to harm their health by harming the environment.

Calls for an environmental rights amendment in the United States are not novel.<sup>324</sup> Indeed, since the late 1960s, everyone from school children to major environmental groups have lobbied for various forms of "environmental rights" amendments to the Constitution.<sup>325</sup> Professor J.B. Ruhl recently criticized prior proposals for constitutional environmental rights amendments on the grounds that, unlike any prior constitutional amendments that the United States has adopted, these proposals were merely aspirational<sup>326</sup> and attempted to regulate

321. See J.B. Ruhl, *The Metrics Of Constitutional Amendments: And Why Proposed Environmental Quality Amendments Don't Measure Up*, 74 NOTRE DAME L. REV. 245, 252 n.22 (1999) (noting limited power of many constitutional provisions concerning environment).

322. See *supra* notes 38-39 and accompanying text (discussing endowment effect).

323. See Rowe, *supra* note 26, at 85-86 (proposing method of legislating to ensure discrimination avoidance); Ruhl, *supra* note 321, at 254 (describing requirements for effective environmental amendment to Constitution).

324. See J. William Futrell, *Environmental Rights and the Constitution*, in AMERICAN LAW INSTITUTE-AMERICAN BAR ASSOCIATION, BLESSINGS OF LIBERTY: THE CONSTITUTION AND THE PRACTICE OF LAW 43, 50 (1988) (advocating Constitutional amendment for environmental rights); Ruhl, *supra* note 321, at 247-48 (noting trend of proposals for environmental amendments).

325. See Ruhl, *supra* note 321, at 247-48 (discussing lobby to enact environment amendment). While the proposals slowed in the 1980s, they reemerged when federal environmental laws were strengthened. *Id.* at 248-49. These proposals arose in response to concerns about conservation of biodiversity. *Id.*

326. Ruhl noted that "[n]o purely aspirational expressions exist in any amendment to the

relations between citizens, rather than between the citizens and government.<sup>327</sup> However, the proposal for a right to be free from government action that affects the environment in a way that harms human health focuses on relations between the government and citizens and operates to prohibit specific government actions or create individual rights. This proposal, therefore, is quite similar to the existing Amendments to the Constitution.<sup>328</sup> While this proposal does not go as far as prior suggestions for constitutionalized "environmental rights," it would be a significant tool in the fight for environmental justice because government action or inaction has caused many of the existing environmental inequities.<sup>329</sup>

---

Constitution. . . . [T]he absence of aspirational text in the United States Constitution is one of its defining characteristics." *Id.* at 258.

327. See *id.* at 253-54 (explaining that environmental quality amendments do not govern citizen to citizen relations). Ruhl analyzed the Constitutional amendments in a biaxial matrix based on the function and target of each amendment. *Id.* at 253. He suggested that there are four possible institutional roles for amendments (the function), including: "(1) altering the operational rules of government; (2) prohibiting specified government action; (3) creating or affirming rights; or (4) expressing aspirational goals." *Id.* The possible social relations that are the target of each amendment include: "(1) intra and intergovernmental relations; (2) relations between government and citizen; or (3) relations between citizens." *Id.* Ruhl argued that none of the Constitutional amendments that have been adopted in the past were aspirational or focused on relations between citizens, and that any amendment that attempts to do so should satisfy several stringent requirements, called filters. *Id.* at 254. He outlined these filters in his article. *Id.* Because he determined that past environmental quality amendments, were aspirational and focused on relations between citizens, Ruhl analyzed them under his filters, and found them lacking. *Id.* at 254-72.

328. *Id.* at 257, 259 (describing focus of existing amendments in context of restricting government power over citizens).

329. For instance, studies have suggested that the federal government is bringing enforcement actions under environmental laws and making cleanup decisions under Superfund in a discriminatory manner. See Robert D. Bullard, *Environmental Justice for ALL*, in *UNEQUAL PROTECTION: ENVIRONMENTAL JUSTICE AND COMMUNITIES OF COLOR* 7-11 (Robert D. Bullard ed., 1994) (arguing that application of environmental laws is not uniform); Marianne Lavelle & Marcia Coyle, *Unequal Protection, the Racial Divide In Environmental Law, a Special Investigation*, *NAT'L L.J.* S1, S2 (1992) (discussing unequal application of environmental clean-up laws); Rae Zimmerman, *Social Equity and Environmental Risk*, 13 *RISK ANALYSIS* 649, 652 (1993) (same). Further, the federal government establishes regulations under a variety of environmental laws to protect persons from exposure to hazardous levels of toxic substances based on assumptions that may not protect various ethnic or racial communities. See Robert R. Kuehn, *The Environmental Justice Implications of Quantitative Risk Assessment*, 1996 *U. ILL. L. REV.* 103, 105 (1996) (stating that minority groups face higher risk of negative environmental impact). In addition, federal, state, and local governments play an integral role in the siting of hazardous waste facilities and industrial facilities, and studies indicate that hazardous waste landfills and treatment facilities, and industries that emit the greatest amounts of toxic chemicals, have been sited predominantly in minority or low-income communities. See *COMMISSION FOR RACIAL JUSTICE, UNITED CHURCH OF CHRIST, TOXIC WASTES AND RACE IN THE UNITED STATES: A NATIONAL REPORT ON THE RACIAL AND SOCIO-ECONOMIC CHARACTERISTICS OF COMMUNITIES WITH HAZARDOUS WASTE SITES* 23 (1987) (arguing minority communities are



European citizens have relied on another environmental safety net that is conceptually analogous to the constitutional right to a clean environment, but that American citizens have not utilized in any significant way. International human rights conventions increasingly are being used to address environmental harms, as human rights abuses and environmental degradation are often closely linked.<sup>330</sup> The United Nations Charter, the Universal Declaration of Human Rights, and conventions such as the International Convention on the Elimination of all Forms of Racial Discrimination (CERD), the International Covenant on Economic, Social and Cultural Rights (ICESCR), the International Covenant on Civil and Political Rights (ICCPR), and the European Convention on Human Rights can all be used, to some extent, to protect communities and individuals from adverse health and environmental effects.<sup>331</sup> While the conventions do not explicitly protect a right to a clean environment,<sup>332</sup> they

---

more susceptible to negative environmental conditions); BENJAMIN A. GOLDMAN, NOT JUST PROSPERITY: ACHIEVING SUSTAINABILITY WITH ENVIRONMENTAL JUSTICE 2 (1993) (examining disparities of environmental amenities across different communities); BENJAMIN A. GOLDMAN & LAURA FITTON, TOXIC WASTES AND RACE REVISITED: AN UPDATE OF THE 1987 REPORT OF THE RACIAL AND SOCIO-ECONOMIC CHARACTERISTICS OF COMMUNITIES WITH HAZARDOUS WASTE SITES 14-15 (1994) (noting unequal enforcement of environmental laws); U.S. GENERAL ACCOUNTING OFFICE, SITING OF HAZARDOUS WASTE LANDFILLS AND THEIR CORRELATION WITH RACIAL AND ECONOMIC STATUS OF SURROUNDING COMMUNITIES 17 (1983) (noting increasing inequality in enforcement of environmental laws).

330. See Caroline Dommen, *Claiming Environmental Rights: Some Possibilities Offered by the United Nations' Human Rights Mechanisms*, 11 GEO. INT'L ENVTL. L. REV. 1, 3 (1998) (discussing impact of environmental degradation on human rights laws); Shelton, *supra* note 237, at 26 (noting connection between environmental protection and human rights). As Dommen noted:

The relevance of human rights mechanisms is all the more apparent when one recalls that the worst victims of environmental harm tend also to be those with the least political clout, such as members of racial and ethnic minorities, the poor, and those who are geographically isolated from the locus of political power within their country.

Dommen, *supra*, at 3.

331. See Dommen, *supra* note 330, at 4-7 (describing potential impact of U.N. human rights regime on environmental protection); Francois Jarvis & Anne Sherlock, *The European Convention on Human Rights and the Environment*, 24 EUR. L. REV. HR/15 (1999) (discussing Court of Human Rights cases that utilize European Convention on Human Rights to effect environmental change); Shelton, *supra* note 237, at 27-28 (noting organizations that have utilized human rights principles to formulate policies concerning environment).

332. Professor Fitzmaurice discussed the relationship between human rights and the right to a clean environment as follows:

[T]here are broadly three main schools of thought. The first school strongly supports the view that there are no human rights without an environmental right. . . . [A] right concerning the environment is absolutely fundamental to the existence of other human rights.

In contrast, another school of thought believes that a "generic international environmental entitlement . . . is a highly questionable proposition." . . . Finally, there is a school of thought which takes an intermediate position. This school admits the

often protect the right to seek and receive information, the right to participate in public decision-making and governance, and the rights to life, health, association, expression, personal liberty, equality, and legal redress.<sup>333</sup> Accordingly, they provide many potential avenues for citizens to challenge environmentally harmful actions that affect them.<sup>334</sup> Unlike international environmental treaties, many of the major human rights conventions authorize private citizen enforcement.<sup>335</sup>

There are, however, some important limits to the reach of human rights conventions. First, the obligations in the conventions are binding only on countries, and not on the citizens of the countries.<sup>336</sup> Thus, citizens have limited available remedies.<sup>337</sup> Furthermore, the treaties bind the countries only

existence of some environmental right, but believes it derives its existence from other human rights.

Fitzmaurice, *supra* note 316, at 613.

333. *See id.* at 625-26 (describing environmental rights in context of other rights); Shelton, *supra* note 237, at 26 (noting human rights protections that may also effect positive changes in environmental policy). Article 2 of the CERD protects the right to be free from racial discrimination, Article 6 of the ICCPR protects the right to life, Article 27 protects the rights of members of minorities, Article 17 protects the right to be free from interference with one's private or family life, Article 6 of the ICESCR protects the right to safe and healthy working conditions, Article 11 protects the right to an adequate standard of living, and Article 12 protects the right to health. *See* Dommen, *supra* note 330, at 10-11 (noting relationship between human rights and environmental protection rights).

The European Convention includes several provisions that might be relevant to environmental disputes. For instance, Article 2 provides that "no one shall be deprived of his life intentionally" which has been interpreted to impose a positive duty on governments to safeguard the lives of those within their jurisdiction. *See* Jarvis & Sherlock, *supra* note 331, HR/17 (analyzing Court of Human Rights' use of Article 2 to impose duty to safeguard citizens or States). Article 8 creates a right to respect for private and family life, *id.* HR/20, and was utilized by litigants in *McGinley v. U.K.*, App. Nos. 21825/93 and 23414/94, 27 Eur. H.R. Rep. 1, 31-34 (court report) (1998); *Guerra v. Italy*, App. No. 14967/89, 26 Eur. H.R. Rep. 357, 382-83 (court report) (1998); *Ostra v. Spain*, App. No. 16798/90, 20 Eur. H.R. Rep. 277, 287-291 (court report) (1994); and *Arrondelle v. U.K.*, App. No. 7889/77, 5 Eur. H.R. Rep. 118, 121 (court report) (1992). Article 10, which creates a limited right to receive information, has also been used with some success in environmental cases. *See* Jarvis & Sherlock, *supra* note 331, at 21.

334. Only a small number of environmental cases have been brought before the European Court of Human Rights under the European Convention on Human Rights, but such lawsuits are becoming more frequent today. *See* Jarvis & Sherlock, *supra* note 331, HR/15 (stating that Court of Human Rights' exposure to environment cases is limited).

335. *See* Dommen, *supra* note 330, at 3 (contrasting ease of bringing human rights claim with difficulty in bringing environment claim); Shelton, *supra* note 237, at 26-27 (discussing ability of individuals to petition governments for redress of human rights abuses).

336. *See* Shelton, *supra* note 237, at 28 (noting that human rights obligations apply only to States).

337. Under many of the United Nations Conventions, for instance, the Committee that reviews compliance with the human rights requirements of the treaty cannot impose any sanctions on countries for failing to comply with the treaty and can only issue a report that outline the

if they have signed and ratified the treaties.<sup>338</sup> In addition, communities and individuals can use the treaties to challenge environmentally harmful actions only to the extent that they can demonstrate that the action violates some other right that the treaties protect, such as the right to life.<sup>339</sup> The treaties do not protect "public" rights.<sup>340</sup> Finally, in many treaties, standing requirements can limit citizen enforcement.<sup>341</sup> Nevertheless, when strong environmental controls are not found in other international or domestic legislation, international human rights conventions can provide a minimal safety net for communities and the "rights" created by the treaties can have an impact in the marketplace for environmental protection.

#### F. *The Nature of European Law*

It should not be surprising that European Union environmental laws, and the safety nets those laws incorporate, are more modest than those of the United States. The structure of the Union, and the process for developing legislation within the Union, ensures that European Union laws will include fewer procedures, regulatory requirements, or other protections for politically or economically powerless communities or individuals within Member States.

First, as noted previously, European Union legislation generally creates few procedural requirements and delegates broad discretion to Member States regarding implementation of legislation because of the subsidiarity principle.<sup>342</sup> The Union has been particularly sensitive to subsidiarity concerns with regard to environmental legislation over the last few years because it was

treaty violations. *See* Dommen, *supra* note 330, at 21 (acknowledging that Committee reports are not binding on countries). Since the report is public, however, it can have some value in motivating further citizen action at the national or local level, instead of at the international level. *Id.* at 17-18.

338. *See* Dommen, *supra* note 330, at 21 (noting limitations to raising environmental issues); Jarvis & Sherlock, *supra* note 331, HR/27 (noting limited redress to individuals whose injuries occurred prior to country's signing). Even then, treaty provisions may not be enforceable in the countries that have adopted them. For instance, in the United Kingdom,

treaty provisions are not to be regarded by the courts as a direct source of U.K. law. . . . If the law in any part of the United Kingdom is found to be inconsistent with the provisions of the Convention the obligation of the judge has been to give effect to that non-conforming law, and to leave the disappointed litigant to whatever remedy might be available in Strasbourg.

Jones, *supra* note 17, at 563.

339. *See* Jarvis & Sherlock, *supra* note 331, HR/15 (noting that design of European Convention on Human Rights is "to protect civil and political rights").

340. *See id.* at 27 (discussing standing requirements for bringing claim under Convention).

341. *See* Dommen, *supra* note 330, at 28 (acknowledging that standing is problem with raising environmental claims).

342. *See supra* notes 207-08 and accompanying text (describing concept of subsidiarity principle).

criticized in the past for enacting environmental laws that were too prescriptive and rigid.<sup>343</sup> The voting procedures for European Union environmental legislation also affect the form of the laws. The drafting of environmental laws must be in vague and general terms to attract broad support from Member States and to ensure sufficient votes to enact the laws through the qualified majority voting that applies to most environmental legislation.<sup>344</sup>

The "transnational conflict paradigm," hypothesized by Eyal Benvenisti, suggests another reason why European Union environmental legislation does not include strong public participation requirements, information access requirements, or other provisions to protect low income or minority communities.<sup>345</sup> According to Benvenisti, while countries are not monolithic entities, they often advocate positions in negotiations on international agreements that are espoused primarily by small, well-organized interest groups, such as producers and employers, whose positions are detrimental to other segments of the country.<sup>346</sup> Because the interest groups are organized transnationally, the groups can influence simultaneously the negotiating positions of many countries and ensure that the international agreements that the countries negotiate advance their interests. Alternatively, they adopt a sufficiently *laissez-faire* approach so as to not disturb their interests.<sup>347</sup> The resulting agreement, however, causes tensions within the countries that are parties to the agreement, because the countries adopting monolithic negotiating positions often ignore the interests of non-state third parties, such as workers and consumers.<sup>348</sup>

Benvenisti suggested that employers and producers are able to co-opt the agreement development process because it is easier for these groups to orga-

---

343. See Armstrong, *supra* note 111, at 772 (noting change in environmental regulatory strategy). As Professor Armstrong noted, many of the Union's environmental directives have been "reformed" to ensure that "regulatory activity is carried out further down the regulatory chain and is refracted through the specific national administrative systems." *Id.* at 773.

344. Pursuant to the Treaty Establishing the European Community (The Maastricht Treaty), qualified majority voting is sufficient for most environmental action, other than environmental taxes, land use planning, water resources, and energy supplies, which require unanimous approval. See Treaty Establishing the European Community, Nov. 10, 1997, art. 175, O. J. (C 340) 3 (1997) (outlining voting scheme for environmental action). In addition, the European Union can adopt legislation to harmonize markets in the Union through qualified majority voting. *Id.* art. 95.

345. See Eyal Benvenisti, *Exit and Voice in the Age of Globalization*, 98 MICH. L. REV. 167, 169 (1999) (noting that conflicts among well organized domestic interests groups with strong political influence impede global action to protect smaller, less organized groups).

346. *Id.* at 169. Benvenisti contrasted his paradigm with the prevailing "Westphalian paradigm," which suggests that countries are "unitary actors engaging in international competitions." *Id.* at 168.

347. *Id.* at 169-71. Benvenisti argued that this pattern has been repeated from the "birth of modern international law," *id.* at 175, through recent debates over global warming. *Id.* at 180.

348. *Id.* at 178.

nize collectively since they are small. These groups also have a greater incentive to organize because there are high per capita benefits to be achieved through cooperation with other group members and low costs of monitoring and sanctioning free riders.<sup>349</sup> He also theorizes that small interest groups have a competitive edge in obtaining, assessing and distributing information on policies and laws due to their greater organizational capabilities.<sup>350</sup> In the context of European Union environmental legislation, his theory would explain the lack of strong protections for low income and minority communities.

Although European Union environmental legislation does not include strong protections for low income and minority communities, the legislation of Member States could incorporate such provisions. However, economic forces and the free market requirements of the European Union reduce the incentive for Member States to include those protections. For instance, one State could challenge legislation in another Member State that prohibits transfer of pollution rights to a region that is disparately impacted by pollution, or legislation that taxes new pollution sources in disparately impacted communities more stringently than other sources, as measures that restrict imports or prevent companies from other Member States from establishing businesses in that State, in violation of the Treaty of Rome.<sup>351</sup> Countries have limited ways to control the flow of solid and hazardous waste into or out of the countries because of the import/export restrictions within the European Union.<sup>352</sup> Further, in the absence of strong protections for low income and minority communities in European Union legislation, Member States have economic incentives to avoid including even modest protections, such as public participation and information access requirements, if those protections discourage companies from establishing businesses in the State. Because the Treaty of Rome and European Union legislation attempt to reduce barriers to the free movement of goods and services among Member States, States have an even stronger incentive than in the United States to reduce environmental protection requirements to attract business in a race to the bottom.<sup>353</sup>

---

349. *Id.* at 171-172.

350. *Id.*

351. *See supra* notes 132, 142, 144, and 148, and accompanying text (discussing free trade among Member States and elimination of trade barriers); *see also infra* note 352 (noting that restrictions on imports and exports are not absolute).

352. *See Verchick, supra* note 29, at 758 (discussing factors that lead to active trading of waste in European Union). According to Professor Verchick, exported waste "generally travels from Member States with more restrictive environmental standards to those with less restrictive environmental standards and from Member States where disposal costs are higher to those where the disposal costs are lower." *Id.*

353. *Id.* at 758; *see also Benvenisti, supra* note 345, at 168 (noting that increasing global competition hinders individuals' rights to participate in national decision-making process). Professor Verchick argued that

The race to the bottom is apparent not only in the failure of Member States to enact stronger environmental protection measures on the national level, but also in their failure to enforce and implement the legislation of the European Union. Most of the European Union environmental legislation is accomplished through directives, rather than regulations, and the Union has limited resources to enforce the legislation; therefore, implementation and enforcement of European Union environmental law is primarily a responsibility of the Member States.<sup>354</sup> While the States vary in their commitment to the environment,<sup>355</sup> as a whole, Member States have been fairly lax in implementing environmental directives of the European Union.<sup>356</sup> While this has negative implications for communities that pollution adversely affects, it also negatively impacts economic measures that the Union is attempting to use to protect the environment. The Union's economic measures are unlikely to thrive unless strong regulatory requirements also exist.<sup>357</sup> Recent changes to

---

the economic disparity between Member States encourages less affluent countries to sacrifice long-term environmental quality for short-term economic gain by positioning themselves as hosts for all sorts of industrial and development activity. . . . By making it easier for investment capital to search for the best opportunities throughout the [European] Community, economic integration increases the temptation of Member States to softpedal environmental enforcement in hopes of attracting such investment.

Verchick, *supra* note 29, at 758.

354. See CONSOLIDATED EU TREATIES, *supra* note 18, art. 175 (stating that Member States will find and implement European Union's environmental policy); Himsworth, *supra* note 91, at 295 (same). Pursuant to Article 226 (ex Article 169), the European Commission can bring an action in the European Court of Justice against a Member State that fails to fulfill its obligations under the Treaty. See CONSOLIDATED EU TREATIES, *supra* note 18, art. 226. However, Article 226 prosecutions are discretionary, and the Commission rarely institutes an action unless a complaint has been filed with the Commission. See Bird & Veiga-Pestana, *supra* note 14, at 240 ("Community environmental law only comes to life when it is incorporated within national policies."). Delays in the complaints procedure can take up to four years, so Member States may be out of compliance with European Union law for long periods of time before they are prosecuted by the Commission. *Id.* at 241 n. 86. Also, while Article 227 of the Treaty of Rome authorizes Member States to sue other States in the European Court of Justice, States rarely institute such actions. See CONSOLIDATED EU TREATIES, *supra* note 18, art. 227 (providing that Member State that believes another Member State failed to comply with EU Treaty may litigate in Court of Justice).

355. See Bird & Veiga-Pestana, *supra* note 14, at 220 (noting differences in comprehensiveness of Member States' national environmental policy).

356. See Brinkhorst, *supra* note 14, at 8 (noting that 1992 report by Court of Auditors concluded that there is "significant gap between the European Union environmental rules in force and their actual application" (citing *Special Report No. 3*, 1992 O.J. (C 245) 1)). Due to the lack of enforcement by Member States, the number of cases brought before the European Court of Justice and the Court of First Instance concerning non-implementation of environmental directives increased by 70% between 1995-1997 compared to the period of 1992-1994. *Id.*

357. See *supra* notes 19-20 and accompanying text (discussing role of economic measures in European Union and need for governmental regulation for their success); see also Jones,

European Union law that authorize the European Court of Justice to fine States for failing to implement and comply with EU law and the Court's first exercise of that power earlier this year may provide Member States with greater incentives to implement and enforce EU environmental law.<sup>358</sup>

Although the factors outlined above discourage the enactment of strong public participation requirements, information access requirements, and similar protections for low income and minority communities in the European Union, other factors inherent in the structure of the Union provide a degree of counterbalance. First, in order to appease the environmentally zealous countries within the European Union, Article 95 of the Treaty of Rome requires the Union to base harmonization legislation on a "high level" of environmental protection, instead of harmonizing State laws at the lowest common denominator.<sup>359</sup> Second, while some European countries may "race to the bottom" in setting environmental standards, other countries view a clean environment and strong environmental provisions as assets to attract businesses. Indeed, the Treaty of Rome authorizes countries to adopt environmental laws that are more stringent than the European Union laws, as long as they are compatible with those laws and the Treaty.<sup>360</sup> Third, although the restrictions on imports and exports in the Treaty of Rome seem to limit the power of countries to enact legislative bans on activities to protect communities from disparate impacts of pollution, the restrictions are not absolute.<sup>361</sup> Over the past few

---

*supra* note 17, at 570-71 (noting that United Kingdom, for example, lacks system in which administrative agencies impose penalties for violation of law, making regulation difficult).

358. See Brinkhorst, *supra* note 14, at 8 (citing rise in legal actions before Court of Justice for failing to implement directives of European Union). The Maastricht Treaty authorized the European Court of Justice to levy fines against Member States. On July 4, 2000, the Court exercised the power for the first time by imposing a fine of \$22,000 per day on Spain for failure to implement European Union waste disposal laws. See *European Court of Justice Imposes First Penalty*, 31 *Env't Rep. (BNA)* 1533 (2000) (describing Court of Justice's first penalty imposed for non-compliance with legislation).

359. See CONSOLIDATED EU TREATIES, *supra* note 18, art. 95 (implementing action regarding health, safety, and environmental protection within European Union); Brinkhorst, *supra* note 14, at 3 (noting that harmonization at lowest common denominator would not have been acceptable to Member States).

360. See CONSOLIDATED EU TREATIES, *supra* note 18, art. 176 (providing that Member States may implement more stringent laws as long as they are consistent with Treaty).

361. Article 30 (ex Article 36) of the Consolidated EU Treaties provides that the import and export provisions of Articles 28 and 29 do not preclude prohibitions or restrictions "justified on grounds of public morality, public policy, or public security; [or] the protection of health and the life of humans, animals or plants . . ." *Id.* art. 30. However, Article 30 also provides that such prohibitions or restrictions shall not "constitute a means of arbitrary discrimination or a disguised restriction on trade between Member States." *Id.* For laws that are facially discriminatory, the Court utilizes a rule of proportionality, under which the government defending the law must demonstrate that the same legislative goal cannot be achieved through "less restric-

decades, the European Court of Justice has been more willing than the United States Supreme Court to uphold bans on waste imports.<sup>362</sup>

### VI. Economic Measures That Facilitate Environmental Justice

While this Article has focused on the potential inequities that economic environmental protection measures could cause and the tools that countries could use to minimize those inequities, there are some economic measures that can enhance the prospects for environmental justice. These economic measures include pollution registers, pollution prevention laws, and labeling requirements. The remainder of the Article focuses on those measures, and compares the European initiatives with those in the United States.

#### A. Pollution Release and Transfer Registers

One of the most powerful and most successful economic environmental protection measures is the pollution release and transfer register (PRTR).<sup>363</sup>

---

five measures." See Verchick, *supra* note 29, at 760-61 (noting European Court of Justice's narrow interpretation of Article 36's exception to EC Treaty Article 30).

362. *Id.* at 765-66 (showing willingness of European Court of Justice to uphold some regional environmental laws that affect imports and exports among Member States). Professor Verchick noted that the United States Supreme Court has struck down almost every challenged state or local restriction on waste imports for the last twenty years, ensuring that "leachate and fallout from waste facilities will occupy space in poorer, less populated, and more polluted states throughout the country." *Id.* at 755. Quoting Justice Rehnquist, Verchick observed that "[t]he law of economics suggests that landfills will sprout in places where land is cheapest and population densities least." *Id.* As a result, he argued, "by erasing market borders in the name of evenhandedness, courts insure a nonuniform geography of pollution 'hot spots' . . . . Within state borders, . . . these same market forces will tend to push landfills, incinerators and other polluting facilities into poorer communities, communities of color, and communities that have less influence with local decisionmakers." *Id.*

While the European Union's efforts to discourage market barriers among Member States resulted in similar patterns of waste distribution in Europe, the European Court of Justice continues to respond differently than the United States Supreme Court to legislative efforts to curb waste imports. *Id.* at 761-62, 765. For instance, in 1992, the European Court of Justice upheld an embargo by the Wallonia region of Belgium against the import of waste from outside the region. *Id.* at 764; see also C-2/90, Comm'n v. Belg. (Walloon Waste), 1992 E.C.R. I-4431, I-4480 (1992). Although the embargo appeared to be facially discriminatory, the court did not review the Wallonia legislation under the strict scrutiny standard required by Article 30. *Id.* Instead, the court determined that waste has a "special characteristic," and that accumulation of waste constitutes a threat to the environment because of the limited capacity of each region or locality for receiving it. *Id.* Most commentators suggest that the court then upheld the legislation under the less stringent test that it uses to review facially neutral laws that affect trade. See Verchick, *supra* note 29, at 764-65 (noting that court did not apply strict scrutiny standard and standard actually applied is less stringent than standard for facially neutral trade laws). Under that test, laws are upheld as long as the burdens on trade are not disproportionate to the aims of the legislation. *Id.* at 764-65.

363. See Bradley C. Karkkainen, *Information as Environmental Regulation: TRI and Performance Benchmarking, Precursor to a New Paradigm?*, 89 GEO. L. J. 257, 348 (2001); see



Perhaps the most famous register is the United States' Toxic Release Inventory (TRI).<sup>364</sup> A PRTR is "an inventory of pollutants released [by industrial facilities] to air, water and soil, and waste transferred off-site for treatment and/or disposal."<sup>365</sup> Industries must report their emissions of various pollutants to the government, and the government makes the information available to the public in a database that is usually accessible by computer.<sup>366</sup> Theoretically, registers enable the market for environmental rights to operate more efficiently by reducing information deficit, a traditional market failure.<sup>367</sup> Citizens armed with data from the register can "negotiate with polluters to encourage them to reduce their releases, lobby legislators or agencies to limit pollution, boycott polluters, or even use the information as the basis for citizen suits when the information discloses violations of other environmental laws."<sup>368</sup> The data enables governments and citizens to identify hot spots and to target regulatory enforcement efforts to reduce those hot spots, thereby enhancing environmental justice.<sup>369</sup> The United Nations, at the 1992 Earth

also NGO Conference "Environment Europe," *NGO Resolution on the Public Participation Convention* (1998), at <http://www.participate.org/arhus/resolution.htm> (last visited June 18, 2001).

364. See 42 U.S.C. §11023(j) (1994).

365. See *PRTR Implementation: Member Country Programs*, OECD Doc. ENV/EPOC (2000) 8/FINAL, available at <http://www.oecd.org/ehs/ehshomono/00080892.pdf> (July 12, 2000) [hereinafter *OECD Report*] (discussing implementation of Pollutant Release Transfer Register and progress of implementation by Member countries).

366. See *id.* at 8 (stating objective of PRTR is to collect data on release of potentially harmful chemicals). According to OECD, the basic characteristics of a PRTR include "a list of potentially hazardous chemicals for site-specific reporting; multi-media or integrated reporting of releases and transfers . . . ; reporting of data by source; periodic (usually annual) reporting; [and] availability of data and information (generally facility-specific) to the public." *Id.* at 9.

367. See Johnson, *supra* note 21, at 150 (noting that increase in disclosure of information discourages inefficient allocation of market resources).

368. *Id.*; see also Organization for Economic Cooperation and Development, *More About Pollution Release and Transfer Registers*, at <http://www.oecd.org/ehs/prtr/moreprtr.htm> (last visited Nov. 7, 2000) (citing benefits of PRTR reporting process including encouraging firms to reduce pollutants). While the United States has the most extensive system for dissemination of data, other countries and nongovernmental organizations are taking aggressive action to publicize their data, as well. See *OECD Report, supra* note 365, at 12 (noting reporting requirements existing in some countries and how these countries disseminate data). For instance, in the United Kingdom, Friends of the Earth has developed a website that allows citizens to click on a map to identify the polluters and emission levels in their community. See Friends of the Earth – UK, *FactoryWatch*, at [http://www.foe.org.uk/campaigns/industry\\_and\\_pollution/factorywatch](http://www.foe.org.uk/campaigns/industry_and_pollution/factorywatch) (last visited Nov. 7, 2000).

369. See Johnson, *supra* note 21, at 150-51 (discussing benefits of information disclosure laws); *OECD Report, supra* note 365, at 8 (elaborating objective of PRTR in gathering information for pollution prevention based on individual's country's needs). Promotion of pollution prevention is a primary goal of PRTRs. *Id.* at 11.

Summit, strongly endorsed pollution release and transfer registers,<sup>370</sup> and the Organization for Economic Cooperation and Development (OECD) has developed guidelines for PRTRs,<sup>371</sup> and issued a recommendation to its Member States that encourages them to develop and implement PRTRs.<sup>372</sup>

The European Union created a PRTR as part of the IPPC Directive discussed earlier in this Article. There are, however, some important differences between the EU register and the United States' TRI. First, the EU register only includes releases to air and water.<sup>373</sup> It does not include releases to land or pollution transfers. Second, the EU law only requires reporting of emissions every three years, as opposed to the annual reporting requirement in the United States, and many industrial facilities that the law will cover have not yet been required to submit any reports.<sup>374</sup> Third, unlike the TRI, the EU register does not include any reporting on pollution prevention efforts.<sup>375</sup> Fourth, Member States provide the information in the EU register while industrial facilities directly supply the information contained in the TRI.<sup>376</sup> Fifth, although the law in the United States includes civil, criminal and administrative penalties,<sup>377</sup> the EU law merely requires Member States to take measures to ensure that the reporting requirements are enforced.<sup>378</sup> Finally, while the United States' law authorizes citizens to sue companies that do not file the information required

---

370. See Report of the United Nations Conference on Environment and Development, U.N. Doc.A/Conf.151/26/Rev.1 (Vol I) ch. 19, at 315 (1993).

371. See generally *Guidance Manual for Governments on PRTR*, OECD Doc. GD (96) 32 (1996) (providing design and implementation procedures of PRTR to promote environmentally effective policies).

372. See generally Recommendation of the Council on Implementing Pollutant Release and Transfer Registries C(96) 41/FINAL General Distribution available at <http://www.oecd.org/ehs/ehsmono/prc9641e.pdf> (March 21, 1996) (listing recommendation of Environmental Policy Committee).

373. See *OECD Report*, *supra* note 365, at 9 n.5 (noting that current proposal for European Pollutant Emission Register only includes water and air releases).

374. See *IPPC Directive*, *supra* note 179, art. 15 (providing that Member States public inventory of principal emissions and sources occur every three years). As noted in the earlier discussion of the IPPC Directive, new facilities must comply with the Directive by 1999, but existing facilities have significantly longer to comply. See *supra* note 181.

375. The Pollution Prevention Act requires companies that must file toxic chemical release forms to include, in their reports information about source reduction and recycling. See 42 U.S.C. § 13106(a) (1994) (mandating that facility operators include toxic chemical source reduction and recycling report with annual toxic release form).

376. See Hunter & Muyllé, *supra* note 187, at 10309 (stating that Member States will provide information for publication in emissions register).

377. See 42 U.S.C. § 11045 (1994) (listing civil, administrative, and criminal penalties for violations).

378. See *IPPC Directive*, *supra* note 179, art. 14 (providing that Member States take necessary steps to ensure compliance).

by law and to sue the government if it does not comply with the law, the EU directive does not require Member States to establish any judicial review procedures for its citizens.<sup>379</sup>

While some of the Member States have created more ambitious PRTRs than the EU, they generally are less stringent than the TRI in the United States. By the end of the last century, the United Kingdom, Ireland, and the Netherlands had developed PRTRs, and Belgium, Denmark, Finland, Italy, and Sweden were developing them.<sup>380</sup> Based on data from an OECD Report, there are several important differences between the European PRTR programs and the TRI. First, the United States system requires reporting for approximately two to three times as many pollutants as the European registers.<sup>381</sup> Second, many of the PRTRs outside of the United States do not include information regarding off-site waste transfers.<sup>382</sup> Third, few of the other PRTRs include information about pollution prevention. Nevertheless, most of the European PRTRs are more ambitious than the EU register, and they should prove to be useful tools for environmental justice.

### B. Environmental Labeling Programs

Environmental labeling programs are similar to pollution register programs and other information disclosure programs, in that they attempt to correct information deficit market failures creating a more efficient market for environmental rights. Sustainable consumption is encouraged by identifying "environmentally-friendly" products for consumers.<sup>383</sup> While the United States has established some moderate labeling programs, such as the Energy Star label for energy efficient electronic products,<sup>384</sup> in 1992 the European Union created a broad eco-labeling program.<sup>385</sup> The program was based on the suc-

379. See 42 U.S.C. § 11046(a) (1994) ("Authority to bring civil actions").

380. See *OECD Report*, *supra* note 365, at 4, 9 (summarizing PRTRs in operation).

381. For instance, the United States system requires reporting on 643 pollutants, compared to 183 in the United Kingdom, and 180 in the Netherlands. *Id.* at 72 (listing number of chemicals subject to reporting).

382. See *id.* at 11 (discussing collection of data on off-site waste transfers).

383. See Brinkhorst, *supra* note 14, at 10 (explaining European Union's goal of promoting sustainable consumption through such information).

384. See generally United States Environmental Protection Agency, *About Energy Star*, at <http://www.epa.gov/nrgystar/about.html> (last visited Feb. 11, 2001) (discussing Energy Star program). The EPA also has embarked on a Consumer Labeling Initiative, working with the specialty pesticide industry to develop redesigned labels for products that are easier to read and understand. See United States Environmental Protection Agency, *Consumer Labeling Initiative*, at <http://www.epa.gov/opptintr/labeling> (last visited Feb. 11, 2001) (describing labeling program).

385. See Council Regulation (EEC) 880/92 on a Community Award Scheme for an Eco-Label, 1992 O.J. (L 99) 1 [hereinafter *EU Eco-Label Regulation*] (introducing eco-labeling regulation).

successful programs that many Member States had implemented.<sup>386</sup>

The European Commission, assisted by a Committee of representatives from the Member States,<sup>387</sup> identifies product categories to be covered by the program and develops criteria for "environmentally friendly" products within the categories.<sup>388</sup> These actions are based on an assessment of the general impact of products on the environment throughout their life cycle, including overall waste generation, potential to contaminate soil, air or water, consumption of energy and natural resources, and its impact on the ecosystem.<sup>389</sup> Thus far, the European Commission has established criteria for fifteen product categories.<sup>390</sup> Once criteria for a product category exist, producers can voluntarily apply to have their product certified by representatives in their country as complying with the criteria.<sup>391</sup> Once representatives certify the product, the producer can advertise the product as complying with the Ecolabeling program and include the Ecolabel in their advertising.<sup>392</sup> To the extent that labeling programs encourage consumers to purchase more environmentally friendly products, they reduce overall pollution levels, encourage pollution

386. See Department of Environment, Transport and the Regions, *The European Ecolabel*, at <http://www.environment.detr.gov.uk/ecolabel/index.htm> (last visited Feb. 11, 2001) (discussing motivations behind ecolabeling scheme) [hereinafter *DETR Ecolabel Webpage*] The aims of the EU program are "to promote the design, production, marketing and use of products which have a reduced environmental impact during their entire life cycle and to provide consumers with better information on the environmental impacts of products, without compromising product or workers' safety or significantly affecting the properties which make a product fit for use." *EU Eco-Label Regulation*, *supra* note 385, at 2, art. 1.

387. See *id.* at 3, art. 6 (mandating consultation with specified interest groups). The Commission must also consult with representatives from industries, environmental groups, consumer organizations, trade unions, and retailers regarding products to be covered, and criteria for the products. *Id.* at 2-3, arts. 5, 6 (specifying interest groups to be included in process).

388. See *id.* at 2, art. 5 ("Product groups and ecological criteria").

389. See *id.* at 2, art. 5(4) (stating guidelines for establishing product group criteria). The criteria are set to allow up to 30% of the current market share to qualify for the label. See *DETR Ecolabel Webpage*, *supra* note 386 (discussing requirements for product criteria).

390. See *DETR Ecolabel Webpage*, *supra* note 386 (including decision of "How Eco-labeling Works"). The categories include refrigerators, tissue paper, dishwashers, soil improvers, bed mattresses, indoor paints and varnishes, footwear, textile products, personal computers, dishwasher detergents, laundry detergents, copying paper, lightbulbs, portable computers, and washing machines. *Id.*

391. See Bird & Veiga-Pestana, *supra* note 14, at 285 (describing voluntary application process). The labeling scheme is intended to be self-funding — companies that use the Ecolabel on their products pay a fee to the Member States to cover the States' cost of processing the application and administering the program. See *DETR Ecolabel Webpage*, *supra* note 386 (discussing application process). The annual fee is calculated as a percentage of the annual volume of sales of the product. *Id.*

392. See *EU Eco-Label Regulation*, *supra* note 385, at 3-5, arts. 8, 10, 12, 16 (discussing eco-label, applications process, terms of use, and advertising).

prevention, and, therefore, reduce opportunities for pollution to be funneled to low income communities.

### C. Pollution Prevention

Programs and laws that are designed to encourage pollution prevention can save businesses millions of dollars and enable them to operate more efficiently and they also have obvious benefits for environmental justice.<sup>393</sup> Pollution prevention initiatives can reduce the amount of toxic substances in the environment, reduce the potential for accidents and spills in transporting toxics, and reduce the amount of toxic substances in consumer products.<sup>394</sup> To the extent that pollution prevention efforts actually reduce pollution, they reduce the likelihood that low income communities will be disparately impacted by synergistic or cumulative exposure to multiple pollutants.<sup>395</sup> In the United States, the Environmental Protection Agency (EPA) considers pollution prevention to be the most effective tool in the battle for environmental justice.<sup>396</sup>

However, the United States' pollution prevention efforts have, thus far, been modest. When Congress enacted the Pollution Prevention Act in 1990, legislators feared that mandatory requirements would stifle innovation.<sup>397</sup> Accordingly, the law focuses on providing information, grants, and other incentives in order to encourage voluntary pollution prevention.<sup>398</sup> The EPA has launched other voluntary initiatives, and some States have created mandatory pollution prevention planning or reporting programs.<sup>399</sup>

The European Union has taken a similar approach. While the Treaty of Rome establishes pollution prevention and source reduction as general principles of European environmental policy,<sup>400</sup> the pollution prevention requirements fashioned by the European Union are modest and voluntary. The centerpiece of the EU pollution prevention efforts is the EcoManagement and Auditing Scheme (EMAS) that the Council of Ministers created in 1993.<sup>401</sup>

---

393. See Johnson, *supra* note 21, at 143 (discussing relationship between market-based reforms and environment justice).

394. *Id.* at 144.

395. *Id.*

396. *Id.*

397. See *id.* (discussing Congressional concern regarding stifling effects of pollution prevention measures).

398. *Id.*

399. See *id.* at 144-45 (describing voluntary pollution prevention programs).

400. See CONSOLIDATED EU TREATIES, *supra* note 18, at 254, art. 174; see also Brinkhorst, *supra* note 14, at 4-5 (enumerating environmental policy principles of treaty).

401. See Council Regulation (EEC) 1836/93 allowing Voluntary Participation in the industrial sector in a community eco-management and audit scheme, 1993 O.J. (L 168) 1 [hereinafter *EMAS Regulation*] (introducing eco-management and audit scheme regulation).

While the scheme focuses on pollution prevention, information disclosure is also central to the scheme. The EMAS regulation establishes a program in which a company prepares an environmental management system for itself that is based on several principles, including pollution prevention and source reduction.<sup>402</sup> The environmental management system should include: (1) a definition of management responsibilities in the company for the environment; (2) a register that outlines the effects that the company's operations have on the environment;<sup>403</sup> (3) environmental recordkeeping and reporting;<sup>404</sup> (4) a public environmental statement noting significant environmental issues and emissions;<sup>405</sup> and (5) periodic audits of the company's management system, and verification of the audits by an external auditor.<sup>406</sup> Participation in the program is voluntary, but participating companies can register the company with the government of their country<sup>407</sup> and be included in a list of companies that is published in the Official Journal of the European Union.<sup>408</sup> Participating companies also can include a statement in their advertising that indicates that they are participating in the program.<sup>409</sup> A proposed revision to the regulation would enable a broader range of companies to participate in the scheme and would promote technical assistance programs to enable small and medium-sized companies to participate.<sup>410</sup>

---

402. See *id.* at 11, Annex I.D (discussing principles to be considered in setting environmental policy).

403. See *id.* at 9, Annex I.B.3 (requiring compilation of register). In preparing the register, the company should examine "(1) 'controlled and uncontrolled' releases to air and water; (2) solid and hazardous wastes; (3) 'contamination of land'; (4) natural resource use; and (5) 'discharge of thermal energy, noise, odor, dust, vibration and visual impact.'" *Id.* Annex I.B.3 of regulation. The register must also include all legal and policy requirements that are applicable to its activities, products and services. *Id.*

404. See *id.* Annex I.B.5 (discussing documentation requirements).

405. See *id.* at 4, art. 5 (discussing preparation and dissemination of environmental statements). The regulation also requires that the information must be made available to the public. *Id.* at 3, art. 3(h).

406. See Hunter & Muylle, *supra* note 187, at 10300, 10303 (describing requirements for participation in program). Auditors must be accredited and supervised by the Member States under programs established pursuant to guidance in the regulation. See *EMAS Regulation*, *supra* note 397, art. 6.

407. See *EMAS Regulation*, *supra* note 401, at 5, art. 8 ("Registration of Sites").

408. See *id.* at 5, art. 9 ("Publication of the List of Registered Sites").

409. See *id.* at 5, art. 10 ("Statement of Participation"); see also Hunter & Muylle, *supra* note 187, at 10300 (listing entitlements of participation in program).

410. See Amended Proposal for a European Parliament and Council Regulation (EC) Allowing Voluntary Participation By Organisations in a Community Ecomanagement and Auditing Scheme (Doc. 599PC0313), at [http://www.europa.eu.int/eurlex/en/com/dat/1999/en\\_599PC0313.html](http://www.europa.eu.int/eurlex/en/com/dat/1999/en_599PC0313.html) (last visited Feb. 11, 2001) (discussing amendments to regulation).

### *Conclusion*

As the United States and the European Union move towards greater implementation of economic environmental protection measures, they can learn valuable lessons from each other regarding the availability and viability of tools that are available to prevent environmental injustice. Several features of European laws could reduce environmental injustices in the United States and could be incorporated more fully into United States laws and programs. For instance, the United States could expand the polluter pays principle to the broader, and equally just, user pays principle by adopting a wider range of pollution charges, coupled with subsidies and other complementary measures that are designed to minimize regressive impacts. Other strong features of European law that could provide models for the United States include the Ecolabeling program, the constitutional right to a clean environment, and the use of human rights protections to prevent environmental harms. At the same time, European countries could enhance the power of disadvantaged European communities by amending their laws to include some of the protections included in United States' freedom of information, information disclosure, and environmental assessment laws and in the broad public participation and access to justice provisions of various United States environmental laws. As environmental protection programs and environmental justice protections of the European Union and the United States continue to evolve, the countries must be cognizant of, and learn from, their relative successes and failures. Environmental justice, and the efficient functioning of the market for environmental rights, depend on it.