# Where There's a Will There's a Way — A Theoretical Analysis of the Connection Between Social Policy and Environmental Performance

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Fostering international environmental cooperation requires understanding and addressing the influences of national policies on environmental performance. This Article focuses on one potential influence, namely, social policy. Drawing on multiple disciplines, the Article offers an analytic model to explain connections between social policy and environmental performance, with a particular focus on GHG emissions performance. It shows why social policy should improve the environmental performance of nations. The Article also presents theoretical reasoning for potential differences in the effects of social policy on environmental performance, depending on the relevant categorization of the latter as human, ecological, or global. Particularly the effect of social policy on GHG environmental performance is related to its level of global connectedness.

## INTRODUCTION

Why do countries vary in their "environmental performance"?<sup>1</sup> The current study further develops current research, addressing questions regarding

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<sup>1</sup> The definition of countries' environmental performance in this Article relies on the basic logic of the Environmental Performance Index (EPI) developed by the Yale Center of Environmental Law and Policy, Yale University, and the Center of International Earth Science Information Network, Columbia University, in collaboration with the World Economic Forum and the Joint

national differences in environmental performance, and mainly examines two conceptual elements that have been under-investigated: a categorization of environmental performance, and an additional, crucial explanatory factor — social policy.

Understanding why some countries achieve better environmental performance than others is of great importance. Unraveling this puzzle might help in identifying relevant differences between countries. This, in turn, might contribute to improving environmental conditions in several ways: First, the logic of "you manage what you measure" suggests that knowledge of certain conditions that inhibit or support environmental performance may help enhance supporting factors.<sup>2</sup> Similarly, following the logic of "knowledge can make the difference," we can prioritize policy solutions that deal with the most influential factors. In addition, from a global perspective, understanding inhibiting causes might help us find solutions to deal with problematic inner conditions within laggard countries. Furthermore, it might contribute to the development of an approach that accounts for differences between countries, which in turn can be insightful in constructing international solutions.

The extant literature that identifies national differences in environmental performance has contributed significantly to our understanding of some of the influential factors.<sup>3</sup> As a result, we have access to a variety of variables that

- 2 See Neil Gunningham, Environmental Law, Regulation and Governance: Shifting Architectures, 21 J. ENVTL. L. 179, 198 (2009); see also MICHAEL E. KRAFT, MARK STEPHAN & TORY D. ABEL, COMING CLEAN: INFORMATION DISCLOSURE AND ENVIRONMENTAL PERFORMANCES (2011); Bradley C. Karkkainen, Information as Environmental Regulation: TRI and Performance Benchmarking, Precursor to a New Paradigm?, 89 Geo. L.J. 257, 295-305 (2001).
- 3 For an extensive analysis of the factors, see Daniel J. Fiorino, *Explaining National*

Research Center (JRC), European Commission, *see Country Scores*, YALE UNIV., ENVTL. PERFORMANCE INDEX, http://epi.yale.edu/Countries (last visited Apr. 23, 2012) ("The 2010 Environmental Performance Index (EPI) ranks on twentyfive performance indicators tracked across ten policy categories covering both environmental public health and ecosystem vitality. These indicators provide a gauge at a national government scale of how close countries are to established environmental policy goals."). The specific indicators are composed of both policy outcomes (such as hard data regarding the state of the environment in various fields, including, for instance, monitoring data of various pollutants) and policy outputs (such as the resources allocated to specific environmental fields as well as the regulation for addressing particular environmental fields). For specific observations regarding the differences between policy outputs and policy outcomes, see Tomas M. Koontz & Craig W. Thomas, *What Do We Know and Need to Know About the Environmental Outcomes of Collaborative Management*?, 66 PUB. ADMIN. REV. 111 (2006).

explain different countries' environmental performance and policies. The main variables that have been studied in the literature are: structural factors (such as population density,<sup>4</sup> climate,<sup>5</sup> and size of the industrial sector<sup>6</sup>); economic factors (mainly GDP per capita<sup>7</sup>); political and institutional factors (such as democracy — i.e., civil liberties and political freedom, economic freedom, state institutions, government efficiency, and corruption<sup>8</sup>); and structural social

*Environmental Performance: Approaches, Evidence, and Implications*, 44 PoL'Y Sci. 367 (2011).

- 4 See Richard York, Eugene A. Rosa & Thomas Dietz, Footprints on the Earth: The Environmental Consequences of Modernity, 68 AM. Soc. Rev. 279 (2003). Structural capacity follows the "human ecology perspective," Quentin R. Grafton & Stephen Knowles, Social Capital and National Environmental Performance: A Cross-Sectional Analysis, 13 J. ENV'T & DEV. 336 (2004); Detlef Jahn, Environmental Performance and Policy Regimes: Explaining Variations in 18 OECD-Countries, 31 PoL'Y SCI. 107 (1998); Duncan Liefferink, Bas Arts, Jelmer Kamstra & Jeroen Ooijevaar, Leaders and Laggards in Environmental Policy: A Quantitative Analysis of Domestic Policy Outputs, 16 J. EUR. PUB. PoL'Y 677 (2009).
- 5 See York, Rosa & Dietz, supra note 4.
- 6 See Jahn, supra note 4.
- 7 Here two main contradictory approaches are taken. The perspective that suggests that further development and modernization may alleviate environmental problems rather than add to them is often referred to as Modernization Theory. Contrary to modernization theory, "treadmill of production" is considered to be the driving force behind modern economies and, ultimately, the source of negative environmental impacts as well. Continual expansion of production increases environmental impacts by placing greater demands on resources and by producing greater volumes of waste. The World-System Theory also identifies economic production as the primary driving force behind environmental impacts, but also considers importing of resources and exporting of waste to peripheral nations as a nation's environmental impact. For the negative influence of GDP on environmental performance, see York, Rosa & Dietz, supra note 4. For support of positive impact, see Daniel C. Esty & Michael E. Porter, National Environmental Performance: An Empirical Analysis of Policy Results and Determinants, 10 ENV'T & DEV. ECON. 381 (2005); Liefferink et al., supra note 4.
- 8 Theoretically, democracy is an influencing factor, yet evidence from quantitative analysis is mixed and indecisive. The impact of economic freedom on environmental measures varies tremendously between different studies. Corruption is thought to negatively influence environmental performance. However, again, empirical studies are inconsistent, *see* Jayoti Das & Cassandra E. DiRienzo, *Is Ethnic Diversity Good for the Environment? A Cross-Country Analysis*, 19 J. ENV'T & DEV. 91 (2010); Esty & Porter, *supra* note 7; York, Rosa & Dietz, *supra* note 4; *see also* Manus I. Midlarsky, *Democracy and the Environment: An Empirical Assessment*, 35 J. PEACE RES. 341(1998).

factors (such as social capital and ethnic diversity<sup>9</sup>). However, the literature is not unequivocal and incapable of predicting environmental performance.

Given this situation, this Article explores two main aspects of the research with the potential to improve our understanding. First, it addresses a methodological lapse in the definition of the dependent variable "environmental performance," which has been addressed as a homogenous variable, and explains why it should be split conceptually. Second, it raises a substantive shortcoming in considering the ideological factor as influencing differences in environmental performance. This Article claims that one reason for the inconclusive explanations for environmental performance is the lack of attention to a country's social policy and ideological orientation as an explanatory factor. We will demonstrate that the impact of social policy has not received due attention in the literature of environmental performance studies.<sup>10</sup> We argue that differences in social policy may explain variations in environmental performance among countries that are similar in all other explanatory factors. In order to support this presumption, we present an analytic model that can be applied to explain the influence of a country's social-ideological perspective and the policies deriving from it on the country's environmental performance. The analytic model proposes that a chain of links connects, indirectly, social policy with environmental performance.

The analytical model can be outlined as following: Empirical work in the field of comparative politics has found a connection between social policy and the public's social-altruistic value orientation (i.e., welfare attitudes). In addition, empirical research in social psychology has defined the connection between social-altruistic values and environmental behavior. In combining these two bodies of research, we found that social policy and environmental behavior are highly correlated. This prompts us to discuss the connection between individuals' environmental behavior and their governments' environmental performance.

<sup>9</sup> The basic idea is that because the management of collectively owned environmental resources often entails a collective action problem, and because social capital eases collaboration between actors, communities with higher levels of social capital are expected to be more successful in managing collective natural resources such as biodiversity, *see* Das & DiRienzo, *supra* note 8; Andreas Duit, Ola Hall, Grzegorz Mikusinski & Per Angelstam, *Saving the Woodpeckers: Social Capital, Governance, and Policy Performance*, 18 J. ENV'T DEV. 42 (2009); Grafton & Knowles, *supra* note 4.

<sup>10</sup> We did locate some references to this issue; however, they are rare and do not provide us with a theoretical explanation for the correlation. See *infra* Part I for elaboration on this point.

Another explanation for the inconsistencies of explanatory factors follows Daniel Fiorino's observations regarding the variability of the dependent variable — namely, *environmental performance* — among the studies reported.<sup>11</sup> Following Fiorino, we will argue that environmental performance should not be regarded as a homogeneous variable.<sup>12</sup> Indeed, differences in the attributes of components of this variable require different theoretical thinking in order to analyze the variables influencing each component. In particular, we suggest that the influence of social policy on environmental performance varies slightly within three subcategories of environmental performance: first, *human-related* performance (i.e., health); second, *ecological performance*; and third, *global performance* (i.e., climate performance). As a representative of global performance, climate change was selected as the main focus of this Article for two reasons: First, it has "pure" global features, since there is no significance to the location where the GHG was emitted;<sup>13</sup> and second, it currently poses a major challenge to the global community.

The Article is structured as follows: Part I presents the rationale for considering social policy as a prominent explanatory variable of environmental performance. This prompts us to analyze the literature that relates social ideology to environmental performance. We then propose our analytic model in Part II, the heart of this Article, as a way to explain the connection between social policy and the three distinct subcategories of environmental performance mentioned above. The Article's conclusion includes policy recommendations.

# I. INCLUDING SOCIAL POLICY AS AN EXPLANATORY FACTOR BEHIND ENVIRONMENTAL PERFORMANCE

Why would a better social policy regime provide better environmental performance? What is the connection between social policy and environmental

<sup>11</sup> Different studies have used different parameters as indicators for "environmental performance." These studies are referred to and cited extensively throughout the Article.

<sup>12</sup> According to Fiorino, *supra* note 3, environmental indicators used to define the dependent variable in studies of national performance vary widely. He suggests that future studies should further examine the effects of the definition of environmental performance. His review shows, for example, that the effects of income and democracy vary depending on the indicator; health-related indicators differ from those for habitat protection, water quality and GHG; and so on.

<sup>13</sup> There is no significance to the place where the GHG molecule has been emitted, since it distributes equally in the atmosphere, and hence a policy or an action undertaken in one country equally influences the entire global community.

performance? Several studies have focused on three interrelated features of the welfare regime, and pointed to their similarities to the environmental or ecological regime, namely, redistribution, externalities, and interventionist policies. This Part presents a brief review of the literature discussing these similarities. Special attention will be devoted to empirical studies that have investigated this correlation.

Several influential researchers have addressed the similarities between the welfare state and the "ecological state." Andreas Duit discussed similarities between social and environmental externalities.<sup>14</sup> He defined the environmental performance of the state as the extent to which a state is able to produce environmental public goods. Environmental public goods, he claimed, are similar to other services for which no actor in the free market will be willing to pay for (e.g., education, healthcare, a justice system, social security, childcare). Therefore, the state is "taking on the task of providing these services, usually financed through some sort of redistributive taxation scheme."<sup>15</sup> James Meadowcroft focused on the measures taken in order to deal with market failures in both regimes and discussed the similarities in redistribution processes: While the welfare state redistributes wealth between the healthy and the infirm, the employed and the unemployed, the rich and the poor as a solution to a perceived market failure, the "eco-state" is concerned with the redistribution of environmental impact from those who generate it to those who experience it in different regions and across generations.<sup>16</sup> Eric Neumayer emphasized the similarities between social and environmental policies in interventionist policymaking. Both involve an extension of state authority and intervention, and modify the operation of markets (tax rates, company profitability and competitiveness, etc.). Once the state has adopted interventionist policies to correct market failures on social grounds, it seems to be a logical step for social countries to accept similar kinds of interventionist policies on environmental grounds.<sup>17</sup>

In our view, another similarity worth noting between the social and environmental regimes is the high priority given to public education in social regimes. This may be an indication of states' willingness to invest in

- 16 James Meadowcroft, *From Welfare State to Ecostate*, *in* The STATE AND THE GLOBAL ECOLOGICAL CRISIS 3 (John Barry & Robyn Eckersley eds., 2005).
- Eric Neumayer, Are Left-Wing Party Strength and Corporatism Good for the Environment? Evidence from Panel Analysis of Air Pollution in OECD Countries, 45 ECOLOGICAL ECON. 203 (2003).

<sup>14</sup> Andreas Duit, Understanding Environmental Performance of States: An Institution-Centered Approach and Some Difficulties (QOG, Working Paper No. 7, 2005).

<sup>15</sup> *See id.* at 7-8 (claiming that the production of environmental public goods always entails a process of internalizing previously externalized environmental costs).

other future-oriented issues. "Good education for all" requires the current investment of resources in future society, and in that sense it is quite similar to the notion of sustainability.<sup>18</sup> Environmental solutions often require what may be perceived to be a current investment (or profit reduction) in order to reduce pollution and resource depletion for the benefit of future generations. A country willing to "sacrifice" its resources for future benefits might have the moral infrastructure for doing so in other areas, if necessary.

Following the logic of similarities between social and environmental policies, scholars have investigated different aspects of this connection. The following paragraphs will review, briefly, the few empirical studies on the connection between political ideology and environmental performance. Although these studies establish a sound grounding in support of such a connection, they actually employ only a small sample of countries in their analyses. Most importantly, a comprehensive theoretical explanation for this relationship is absent.

Detlef Jhan has suggested that a comprehensive explanation for national differences in environmental pollution and environmental policy must include an ideological element.<sup>19</sup> To demonstrate this claim, Jhan included the welfare state regime among the explanatory variables,<sup>20</sup> following Gøsta Esping-Andersen's typology of the three welfare state regimes.<sup>21</sup> First, a *conservative* regime defined by social policy attached to class and status, with a focus on the family rather than the individual as the basic unit of benefit receipt; the impact of redistribution is negligible in that kind of regime. Second, the market-oriented liberal regime, in which private insurance policies are encouraged by the state and market differentiations are reinforced; and third, the comprehensive welfare state regime, which applies the social-democratic ideology and promotes social equality by overriding the basic rules of the market and redistributing resources. Jhan expected the latter type of welfare state regime to be most strongly concerned with environmental issues, and the liberal welfare state regime to be the least; however, he did not provide a theoretical reasoning. Jhan's analysis provided a primary indication of a potential connection between welfare state regime and national environmental

<sup>18</sup> The Brundtland Report defined sustainability as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." U.N. Secretary-General, Our Common Future: Rep. of the World Commission on Environment and Development, U.N. Doc. A/42/427 (Aug. 4, 1987).

<sup>19</sup> Jahn, supra note 4, at 108.

<sup>20</sup> Id. at 118.

<sup>21</sup> GØSTA ESPING-ANDERSEN, THE THREE WORLDS OF WELFARE CAPITALISM 9-34 (1990).

performance.<sup>22</sup> This Article shares Jhan's assumption regarding the connection between the type of welfare state and environmental performance, but offers a more comprehensive theoretical explanation for such a connection.

Neumayer found that in twenty-one OECD countries the leftist-oriented parliaments are associated with lower pollution levels, but his evidence is inconsistent.<sup>23</sup> For example, percentages of leftist seats were found to be related to SO<sub>2</sub>, CO, and CO<sub>2</sub> emissions but not to NO<sub>2</sub> and VOC.<sup>24</sup> Although Neumayer did not discuss, overtly, the connection between social policy and environmental pollution levels, he related to this connection indirectly in presenting his hypotheses regarding the connection between the strength of leftist parties and environmental pollution. The two main arguments employed by Neumayer support the connection between social policy and environmental pollution. First, he claimed that leftist parties "tend to be more interventionist in their economic policy making" and, therefore, might find it easier to accept the need for governmental regulation to protect the environment.<sup>25</sup> Second, he pointed to the ecological orientation of left-oriented green parties that might place them as supporters of pro-environmental policies.<sup>26</sup>

In summary, these studies have focused on the nature of similarities between social and environmental policies. Internalization of externalities, interventionist policies, and distributive elements are present in both policy regimes. However, these studies do not relate to another important connection between the two regimes' approaches to governing, namely, the core values of the regime or their *moral infrastructural foundations*. In the following Part, we offer an analytic model that accounts for findings in empirical studies

- 22 Although the "social-democratic government" variable was excluded from his regression analysis, in the bivariate analysis Jhan found that "[t]he impact of the Social Democratic welfare states . . . came closest to providing a significant result." He also found that the ideological direction of the government (strength of social-democratic parties indicated by electoral strength) has no significant impact. However, a strong oppositional social-democratic party is significantly and positively correlated with environmental performance. Jahn, *supra* note 4, at 120.
- 23 Neumayer, supra note 17.
- 24 Like Jhan, Neumayer found that it is necessary to distinguish between the strength of leftwing parties in cabinets as opposed to leftwing party strength as a share of legislative seats. According to Neumayer, leftwing parliamentarians are open towards environmental demands, in particular if in opposition to a ruling centrist or rightwing government, but leftwing-dominated governments are no better than other governments. *Id.*
- 25 Id. at 204.

<sup>26</sup> Id.

20131

generated by different theoretical strands that support the connection between social policy and environmental performance.

## **II.** THEORETICAL ANALYSIS

# A. Constructing a Chain of Connections Between Social Policy and **Environmental Performance**

Most of the discussion in the literature regarding the connection between social policy and environmental performance has been based on their structural and conceptual similarities. Since no research presented a comprehensive analytic model, the following Section takes up the challenge of offering such a model for explaining the connection between social policy and environmental performance. Our model is based on well-established empirical evidence that connects different links in the chain. In addition, our model focuses on the more basic and profound reasons for the connection between social policy and environmental performance. It explains the core values of the social regime that might establish the basic grounding for similarities in the structural and conceptual elements of both regimes. The reason for this focus is the need to understand the foundations of the connections if we want to use the model in order to induce a thorough and continuous change.

Given that the differences between the groups in environmental performance are multifold, we contend that different theoretical thinking is required to explain different conceptual categories of environmental performance, as presented in the table below. For example, first, the type of community affected varies: There are local, regional, national, and global communities, as well as human, trans-generational, and biospheric communities. A second important distinction is based on the latency period of the parameter's consequences. Consequences vary from immediate and acute (local air pollution and clean water supply) to long distance and indirect influences (climate change and biodiversity).

	Non-Global		Global
	Human Health	Ecological	
Affected community	Mainly local and current humans	Not only humans but other species and posterity	Global community and posterity
Latency period	Acute, immediate and apparent	Long latency period and indirect effects	Long latency period

<b>Categorization of Environmental Performan</b>
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We therefore suggest that the influence of social policy on environmental performance can be expected to vary within the following three key subcategories of environmental performance: *human-related* performance, *ecological* performance, and *global* performance.

*Human-related* performance (human-health) encompasses the basic links in the model for all other categories as well. In a nutshell, our model enables the integration of empirical evidence that links social policy and the citizenry's social-altruistic values. We can then account for the evidence from socialpsychology literature that indicates there is a strong correlation between social-altruistic values and environmental motivation. Also, we can connect the motivation of citizens and behavior (political actions) with actual policies. In other words, our basic model supports an assumed chain in which the state influences individuals' values and, in turn, these values activate citizens' support for human-related environmental policies evident in the country's actual policy.

*Ecological* performance differs from human-related performance in that it requires an additional link to support the connection between social policy and ecological performance. This additional link stresses that people with socialaltruistic values will also have values regarding the ecological environment, that is, biospheric-altruistic values. Based on the available evidence, our model claims that people will influence policymakers to engage in environmental issues indirectly related to human health.

The case of *global* performance (climate performance) requires an additional condition. The analytic model presented suggests that national social policy will affect global performance only when the country has established adequate global connections (social, political and economic connectedness). Accordingly, a main focus of this Article — climate change — is representative of "global performance."

#### **B. Human-Related Performance**

Human-related performance refers to parameters that have a relatively immediate, visible and acute impact on local human society. In other words, these are the parameters that influence human health directly: indoor and outdoor air pollution, access to water and sanitation, the environmental burden of disease and pesticide regulation, and so on.<sup>27</sup>

<sup>27</sup> These parameters should be taken as an example. They are borrowed from JAY EMERSON ET AL., 2010 ENVIRONMENTAL PERFORMANCE INDEX (2010), available at http://www.epi2010.yale.edu/file\_columns/0000/0157/epi2010\_report.pdf; see Andrea Duwel, Democracy and the Environment: The Visibility Factor (U.C.,

Based on our review of extensive empirical research conducted in various disciplines, we developed an analytic model that supports the existence of a potential connection between social policy and human-related performance, as shown in Figure 1.

## Figure 1: Theoretical Flowchart Linking Social Policy to Human-Related Environmental Performance



\* Motivation to act environmentally for the benefit of the valued object: other human beings (voting and political actions)

#### 1. First Link: Social Welfare Policy and Citizens' Social Solidarity

The correlation between the social policies of the welfare regime and citizens' social attitudes is well-established in the literature.<sup>28</sup> Different scholars have adressed the feedback mechanism between social policies and individuals' values, meaning that inhabitants of welfare regimes are expected to express social behavior that benefits their community; in turn, this further influences support for welfare policy.<sup>29</sup>

In attempting to explain the link between welfare regimes and public support for welfare policy, Christian Albrekt Larsen built upon this feedback mechanism of welfare regimes that produce the unique fabric of social solidarity.<sup>30</sup> Based on comparative analyses, he found that the institutional structure of regimes influences the way the public perceives the poor and unemployed

Davis, Working Paper, 2010), *available at* http://papers.ssrn.com/sol3/papers. cfm?abstract\_id=1582299.

<sup>28</sup> For a literature review, see Christian Albrekt Larsen, *The Institutional Logic of Welfare Attitudes: How Welfare Regimes Influence Public Support*, 41 COMP. Pol. STUD. 145 (2008).

<sup>29</sup> Alberto Bisin & Thierry Verdier, Public Policies and the Dynamics of Cultural Values in the Welfare State, 63-64 ANNALES D'ECONOMIE ET DE STATISTIQUE 215 (2001); Jason Jordan, Institutional Feedback and Support for the Welfare State: The Case of National Health Care, 43 COMP. POL. STUD. 862 (2010); Joakim Kulin, Values and Attitudes Towards Redistribution: The Impact of Basic Human Values on Support for Welfare State Redistribution in Great Britain, Germany and Sweden (Umeå Univ., Working Paper, 2009).

<sup>30</sup> Larsen, supra note 28.

(i.e., their "deservingness"). Thus, in a system that provides universal (as opposed to a selective) benefits service, there will be no discussion whether recipients are in need or are to be blamed for their situation. Such a system also defines recipients as equal citizens who belong to the national "us." More fundamentally, in such a system everybody within the same nation is defined as belonging to one group, hence the boundary between those who give and those who receive is blurred. In addition, providing those with lesser means with decent economic resources enables them to live a way of life similar to the majority. In turn, this enhances the identity criterion of deservingness. Larsen was able to support his theory empirically.<sup>31</sup> Furthermore, it is the institutional arrangement, according to Larsen, that enables a positive feedback of welfare attitudes in welfare regimes. That is to say, citizens in welfare regimes are educated to support welfare policy and express social solidarity.<sup>32</sup>

2. Second Link: Linking Social-Altruistic Values with Environmentalism While the first link of our model supports the connection between social policy and social values of citizens, it does not explain the connection between social policy and environmental values. Hence, this Subsection will present some of the evidence from the social psychology literature that supports the connection between social values and human-related environmentalism (defined as the motivation to act environmentally for the benefit of human beings).

<sup>31</sup> Larsen found that recipients in social-democratic regimes are less likely to think that poverty is caused by "laziness and lack of willpower," even when level of employment and ethnic fractionalization are controlled for. The lower the share answering "laziness and lack of willpower," the higher is the support for welfare policy. Accordingly, support for welfare policy is high in social-democratic regimes, *see id.* at 90

<sup>32</sup> There are other explanations for the connections between social policy and a public's social-altruism orientation, found repeatedly in studies. Other explanations emphasize culture and ethnic homogeneity as responsible for the connection. Possible explanations aside, the connection between social policy and the public's social-altruism orientation is commonly accepted, *see id*. For the ethnic homogeneity explanation, see Alberto Alesina & Edward L. Glaeser, Fighting Poverty in the US and Europe: A World of Difference (2004); Gary P. Freeman, *Migration and the Political Economy of the Welfare State*, 485 Annals Am. Acad. Pol. & Soc. Sci. 51 (1986); Nathan Glazer, *The American Welfare State: Exceptional No Longer?, in* CHALLENGES TO THE WELFARE STATE: INTERNAL AND EXTERNAL DYNAMICS FOR CHANGE 7 (Henry Cavanna ed., 1998); David Goodhart, *Too diverse?*, PROSPECT MAG., Feb. 2004, at 30, 37. For the cultural explanation, see Norden: The Passion For Equality (Stephen R. Graubard ed., 1986).

Paul C. Stern and Thomas Dietz have examined the value basis of environmental concern.<sup>33</sup> Following the social psychology tradition of treating values as criteria that guide actions, they presented a theory that linked values to environmental behavior. According to their explanation, values serve as a filter for information. Thus, values influence beliefs by leading people to accept information selectively when it seems consistent with their values.<sup>34</sup> Beliefs and norms are considered to mediate between values and behavior. The value-belief-norm theory (VBN) emphasizes the indirect links between values and the decision to act. Values influence general beliefs (worldview regarding the environment), which in turn influence beliefs about the consequences of (environmental) change for the valued object and the perception of the ability to influence the consequences. These beliefs then influence norms of pro-environmental action (political activism, voting, consumer choices, etc.).<sup>35</sup>

Based on the literature on environmentalism, Stern and Dietz identified three types of values that might provide a basis for beliefs about environmental justice and thus influence pro-environmental action: First, the egoistic value orientation represents "willingness to protect aspects of the environment that affect a person personally or to oppose protection if the personal costs are high."36 In this case, then, it may be assumed that only outcomes to self are of concern. Applied more widely, this orientation supports economic approaches that value the environment by summing the costs and benefits to individuals across society. Second, the social-altruistic value orientation suggests that individuals experience a sense of moral obligation and decide to act on it when they believe they can prevent an injustice.<sup>37</sup> People who apply social-altruistic values judge phenomena on the basis of costs and benefits to a human group (such as a community, ethnic group, nation-state, the international community or humanity in general). Third, the biospheric value orientation posits that people judge phenomena on the basis of costs and benefits to ecosystems or the biosphere.38

Stern and Dietz demonstrated that motivation to act environmentally (measured by *willingness to pay* and *political behavior*) is activated by *all* 

<sup>33</sup> Paul C. Stern & Thomas Dietz, *The Value Basis of Environmental Concern*, 50 J. Soc. Issues 65 (1994).

<sup>34</sup> Id. at 68.

<sup>35</sup> Thomas Dietz, Amy Fitzgerald & Rachael Shwom, *Environmental Values*, 30 ANN. Rev. ENVTL. Resources 335, 356 (2005).

<sup>36</sup> Stern & Dietz, supra note 33, at 70.

<sup>37</sup> They rely on Schwartz and Bilsky's norm activation model of altruism, Shalom H. Schwartz & Wolfgang Bilsky, *Toward a Universal Psychological Structure* of Human Values, 53 J. PERSONALITY & Soc. PSYCHOL. 550 (1987).

<sup>38</sup> Stern & Dietz, supra note 33, at 70.

*three* value orientations.<sup>39</sup> Accordingly, they proposed the following equation as a way to explain these connections<sup>40</sup>:

$$M = V_{ego}AC_{ego} + V_{soc}AC_{soc} + V_{bio}AC_{bic}$$

M is the motivation to act (or behavioral intention)

V is the value orientation

AC is the associated belief about consequences (i.e., one must believe his action has some impact on the valued object).

In their study, Stern and Dietz reported that awareness of negative consequences of environmental conditions for self, others, and the biosphere, respectively, each predicts willingness to act, when the other beliefs are controlled for statistically. This finding was interpreted as evidence that the three distinct value orientations can be distinguished and that each can have an independent influence on intentions to act politically to preserve the environment.<sup>41</sup>

Stern and colleagues used direct means to measure values in a later study.<sup>42</sup> Here, the dependent variables that indicate willingness (or lack thereof) to take pro-environmental action were defined as investing in a company that pollutes, taking a job with such a company, boycotting its products, and signing a petition for tougher environmental laws. Again, their results showed that, when filtered through beliefs, altruistic value orientations effect environmental behavioral intentions.<sup>43</sup>

According to these findings, a social-altruistic value orientation is an indication of environmentalism. That is, a social-altruistic value orientation activates environmental concern. Following the logic of Stern and Dietz, we

<sup>39</sup> Paul C. Stern, Thomas Dietz & Linda Kalof, Value Orientations, Gender, and Environmental Concern, 25 ENV'T & BEHAV. 322 (1993). The three value bases for environmental concern were discussed in other studies, see, e.g., CAROLYN MERCHANT, RADICAL ECOLOGY: THE SEARCH FOR A LIVEABLE WORLD (1992); Dietz, Fitzgerald & Shwom, supra note 35.

<sup>40</sup> Stern, Dietz & Kalof, *supra* note 39, at 328.

<sup>41</sup> Paul C. Stern et al., *Values, Beliefs, and Proenvironmental Action: Attitude Formation Toward Emergent Attitude Objects*, 25 J. APPLIED Soc. PSYCHOL. 1611, 1616 (1995).

<sup>42</sup> *Id*.

<sup>43</sup> Indirect impact implies that while people with strongly egoistic values will be especially sensitive to information about consequences for themselves, people with strongly social-altruistic or biospheric values will be especially sensitive, respectively, to consequences for other humans and for nonhuman species and the biosphere. This means that values influence beliefs about consequences, which in turn impact behavior, *see id*.

assume that social-altruistic values will activate environmental concern for the *valued object*. Thus, according to our model in a community with high social solidarity (in a welfare regime, following our first link), the valued objects will be other human beings and the community. Hence, inhabitants of welfare regimes are expected to express environmental behavior, especially regarding anthropocentric (human-centered) issues.

## 3. Third Link: Individuals' Values and Behavior and Environmental Policies and Performance

This link relates to the basic question: Do public opinion and voters' behavior influence public policy? In light of our previous discussion, we asserted that as the welfare regime fosters social-altruism, it advances public attitudes and motivation to act environmentally (e.g., acting by voting). What remains is to explain how public opinion affects actual policies and performance. Ample studies have investigated the relationship between public opinion and public policy. This Subsection will present some of the main conclusions obtained via a comprehensive literature review and meta-analysis of these research projects.

Paul Burstein reviewed thirty studies and aggregated their results.<sup>44</sup> He concluded that the only relevant question remaining is not whether, but rather to what extent public opinion influences public policy. He referred to Benjamin I. Page and Robert Y. Shapiro's article as an important starting point for this discussion.<sup>45</sup> Their empirical results demonstrate that changes in opinion are important causes of policy change. Further research has consistently found the same connection.<sup>46</sup> Burstein's meta-analysis concluded that public opinion influenced policy most of the time, often strongly.<sup>47</sup>

One counterargument to the claim that public opinion has a substantial impact could be that other forces influence policy more than it does. For

46 See Berstein, supra note 44, at 30:

<sup>44</sup> Paul Berstein, *The Impact of Public Opinion on Public Policy: A Review and an Agenda*, 56 Pol. Res. Q. 29 (2003).

<sup>45</sup> Benjamin I. Page & Robert Y. Shapiro, *Effects of Public Opinion on Policy*, 77 AM. POL. SCI. REV. 175 (1983).

For example, Wlezien (1996: 81) writes that research "generally corroborates a linkage between public preferences and policy." Page (1994: 25) that evidence shows substantial empirical relationship between opinion and policy. S. Hayes, Esler, and C. Hays (1996: 58) that state environmental regulation is "quite responsive" to public opinion, and Erikson, Wright and McIver (1993: 80) that the relationship between opinion and policy in American states is "awesome."

<sup>47</sup> Id. at 29.

instance, interest organizations and elites (especially economic elites) are forces that have a strong influence on public policy. While Burstein admitted that these organizations do have some influence, he claimed that they were most influential when consistent with public opinion and in fact enhanced the influence public opinion had on public policy.<sup>48</sup> Burstein's empirical results showed that the impact of opinion on policy remained substantial even when interest organizations, political parties and elites were taken into account.

Burstein's conclusions are compatible with the Social License to Operate theory, which claims that corporations do comply with their legal, financial, and *social* obligations.<sup>49</sup> Business enterprises are simultaneously motivated and constrained by a multisided "license to operate." Social pressures affect the environmental behavior of industrial businesses. Hence, it may be assumed that social elites are also affected by public opinion. Thus, Burstein's meta-analysis serves as a sound basis for assuming that public opinion has a substantial influence on public policy.

In summary, we claim that our analytical model, shown in Figure 1 above, has validity based on substantial evidence from previous empirical studies. It explains how social policy correlates with social-altruistic values, which in turn influence the environmental motivation of individuals to act environmentally for the benefit of other human beings. These values and motivations should be represented in the country's environmental policy and performance, at least to some extent. The basic elements of our first analytic model are applicable to the two remaining subcategories of environmental performance: ecological performance and global performance. However, constructing the analytic connection between those categories and social policy requires additional conditions that are discussed in the following Sections.

#### **C. Ecological Performance**

The ecological performance category refers to parameters that impact ecosystem vitality only after a relatively long latency period and have an indirect impact on human society. These parameters are to some extent ecocentric, or at least not entirely anthropocentric. In addition, their human impact applies mainly to future generations. Air pollution that affects ecosystems (so<sub>x</sub> for example), water quality and scarcity (in ecosystems), biodiversity and marine protection,

<sup>48</sup> *Id.* at 31; *see also* Ken Kollman, Outside Lobbying: Public Opinion and Interest Group Strategies (1998).

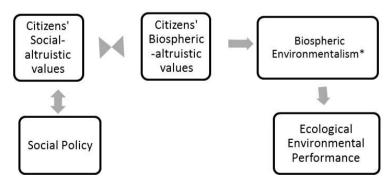
<sup>49</sup> Neil Gunningham, Robert A. Kagan & Dorothy Thornton, Social License and Environment Protection: Why Businesses Go Beyond Compliance, 29 LAW & Soc. INQUIRY 307 (2004).

forest regulation, and fisheries management are the main components of this subcategory.<sup>50</sup>

The basic model supporting the connection between social policy and human-related performance presumed that there is a connection between citizens having social-altruistic values and their environmental behavior. As opposed to human-related performance, social-altruistic values might not be enough to support citizens' attitudes regarding more distant matters that refer to the ecosystem or to future generations. So far, our model has supported the existence of social-altruistic values held by citizens living in advanced social policy regimes. However, we acknowledge that those citizens may not hold values regarding the general state of the ecosystem or the state of future generations — biospheric values.

Figure 2 presents our analytic model for supporting the connection between social policy and ecological performance. The connections between social policy and social-altruistic values and between public opinion and public policy, respectively, are identical to the links presented in Figure 1. The additional element in this model is the connection between social-altruistic values and biospheric values. In order to support this connection, another link should be discussed: the link between caring for other people (social-altruistic values) and caring for the entire environment (biospheric-altruistic values). This Section will discuss the theoretical and empirical potential of such a connection.

## Figure 2: Theoretical Flowchart — Linking Social Policy to Ecological Environmental Performance



\* Motivation to act environmentally for the benefit of the valued object: other species and posterity

<sup>50</sup> These parameters should be taken as an example; they are borrowed from the EPI report, EMERSON ET AL., *supra* note 27; *see also* Duwel, *supra* note 27.

Prior to discussing the evidence in support of the connection between social values and biospheric values, one possible argument that undermines such a correlation should be noted. Since social ideology focuses on human needs, it might contradict the ecocentric ethics that sees humans as equal members of the land community. That is because putting an intrinsic value on nature would reduce a country's ability to redistribute resources to other human beings. Welfare-state regimes and the organized working class in particular may see environmental investments as contradicting their redistributive interests.<sup>51</sup> However, this hypothesis has not gained any empirical support at either the individual or the national level. Contrarily, several theoretical strands support the correlation between social-altruistic values and biospheric values, and some present persuasive empirical evidence.

The hypothesis that there is a connection between social ideology and ecological ideology is supported mainly by a finding of Stern and colleagues that expands our model's second link: that social-altruism and biospheric value orientations might be highly related. Arguably, there is a general altruistic value that includes both social and biospheric altruism.<sup>52</sup> Stern and colleagues measured thirty-four values.<sup>53</sup> They asked respondents to rate these thirty-four value items on a seven-point scale, from opposition to a judgment that the value is extremely important as a guiding principle in the respondent's life.<sup>54</sup>

<sup>51</sup> *See* Neumayer, *supra* note 17, at 204 (claiming that the traditional political objectives of leftwing parties might lead them to be adversaries of environmental protection measures).

<sup>52</sup> Stern et al., *supra* note 41.

<sup>53</sup> Thirty-two of the thirty-four values were borrowed from Schwartz & Bilsky, supra note 37, and the researchers added two values of their own. The Schwartz Value Items are the most common method for measuring cross-cultural universal values and examining the relationship between values. Schwartz's thirty-two values are subsumed under four groups. The two relevant to our matter are the self-enhancement group, which is similar to the egoistic value orientation; and the self-transcendence group, which is a combination of Stern and colleagues' social-altruistic and biospheric value orientation. The self-enhancement group of values includes wealth, authority, influence, etc.; the self-transcendence group includes protecting the environment, unity with nature, respecting the earth (harmony with other species), a world at peace, social justice (correcting injustice and care for the weak), and equal justice for all. See Stern & Dietz, supra note 33, at 74-75.

<sup>54</sup> As mentioned above, the dependent variables indicating willingness or lack thereof to take pro-environmental action were investing in a company that pollutes, taking a job with such a company, boycotting its products, and signing a petition for tougher environmental laws.

The analysis failed to identify a distinct biospheric value orientation they were hoping to find.<sup>55</sup> The factor analysis method they applied identified both biospheric and social-altruism value orientations as a single factor, implying that social and biospheric values are not necessarily distinguishable from each other and might be indicative of a more generalized altruism. *These results suggest that those who value Nature are also concerned more for its effect on human beings and vice versa*.

Later studies acknowledged the correlation between social-altruistic and biospheric values and sought to determine whether it was possible to distinguish between these sets of values. While some studies concluded that it was possible,<sup>56</sup> others concluded that the distinction might exist in theory, but not in the minds of people in the general population, though it was suggested that such a distinction might exist in a population of environmental activists.<sup>57</sup> Finally, other studies concluded that these values were different parts of the same whole.<sup>58</sup> Accordingly, individuals' social-altruism may indicate their biospheric-altruism, which in turn may influence voters' preferences and political actions and thereby the country's ecological performance as well.

The correlation between ecological and social ideology is supported not only in the behavioral literature, but also when we examine the political arena. Examining the social policy of green parties and green NGOs may provide additional support for this correlation. For example, the British Green Party's manifesto states that health is the condition in which individuals and

2013]

<sup>55</sup> Stern & Dietz, supra note 33, at 74.

<sup>56</sup> See Wesley P. Schultz, The Structure of Environmental Concern: Concern for Self, Other People and the Biosphere, 21 J. ENVTL. PSYCHOL. 327 (2001) (reporting that he found strong evidence for the distinction between egoistic, altruistic, and biospheric environmental concerns in the four studies he conducted, and that like Stern and Dietz he found biospheric and altruistic concerns to be correlated).

<sup>57</sup> See, e.g., Katherine V. Kortenkamp & Coleen F. Moore, Ecocentrism and Anthropocentrism: Moral Reasoning About Ecological Commons Dilemmas, 21 J. ENVTL. PSYCHOL. 261 (2001) (exploring the inability to separate proponents of ecocentric and anthropocentric reasoning).

<sup>58</sup> This last conclusion was a result of a study that showed that mere exposure to green products can have a positive societal effect by inducing pro-social and ethical behavior. However, acting upon environmental values establishes "moral credentials" that can subsequently license deviant behavior. When asked to rate themselves, a person who purchases green products rated himself as more cooperative, altruistic, and ethical than a person who purchases conventional products. However, purchasing green products may license indulgence in self-interested and unethical behaviors, *see* Nina Mazar & Chen-Bo Zhong, *Do Green Products Make Us Better People*?, 21 PSYCHOL. Sci. 494 (2010).

communities achieve their full physical, intellectual, social and spiritual potential. A healthy society, according to them, is one that guarantees a safe and clean environment, material security for all its citizens, good work, adequate housing, clean water, appropriate education, a safe transportation system, accessible and humane public services, equal opportunity, a secure present and hope for the future.<sup>59</sup> The inclusion of social values in the description of health is quite typical of declarations of green parties in other countries.<sup>60</sup>

In this description it is apparent that social policies and what we often consider to be environmental policies are inseparable. This view leads green movements to support (and often initiate) regulation that is not connected to issues that are narrowly understood to be environmental. For example, the German Greens promoted the German nationality law; <sup>61</sup> the French Greens initiated the legislation on the thirty-five hour week, and so on.<sup>62</sup> The correlation of biospheric and social-altruistic values can also be observed objectively by looking at the political map. As described above, leftwing and social-democratic parties are identified with the environmental agenda and, even when in opposition, have had a significant impact on environmental performance.<sup>63</sup>

Additional support for the connection between social policy and ecological environmental performance comes from a philosophical perspective and refers to the "communitary" base of concern about future generations. Trying to tackle the issue of future generations, Avner De-Shalit argued that "utilitarian, contractarian and right-based theories fail to provide an adequate answer as to why posterity matters. The reason is their individualistic bases."<sup>64</sup> Hence, he developed the theory of "communitarism" and extended the notion of community to the "trans-generational community." According to De-Shalit, "contrary to the conservative concept of community, which looks backwards . . . I advance a concept of the trans-generational community that extends into the future and so may appeal to Social Democrats, Greens, Socialists and progressives in general. My argument may not appeal to those *denying any sense of community*."<sup>65</sup> According to De-Shalit's theory, taking future generations

60 Id.

65 Id. at 15 (emphasis added).

<sup>59</sup> John Barry & Brian Doherty, *The Greens and Social Policy: Movements, Politics and Practice*?, 35 Soc. Pol'y & ADMIN. 587, 596 (2001).

<sup>61</sup> The German nationality law makes German citizenship (traditionally based on ethnicity) more easily available for non-Germans born in Germany, *id.* at 595.

<sup>62</sup> Id.

<sup>63</sup> Jahn, *supra* note 4; Neumayer, *supra* note 17.

<sup>64</sup> AVNER DE-SHALIT, WHY POSTERITY MATTERS: ENVIRONMENTAL POLICIES AND FUTURE GENERATIONS 11 (1995).

into consideration requires a "less individualistic" ideology. In other words, social ideology and recognition of community is a *necessary* approach and perhaps a *precondition* for thinking of the environment in a sustainable way that takes posterity into consideration. The aforementioned studies support the connection between social and biospheric altruistic orientations empirically (through the high correlation between social and biospheric values), through observation of the political map (the actual implementation of social goals by green parties), and philosophically (through the communitarism theory). Therefore, combining these studies with the basic links of our model, we find support for the connection between social policy and ecological performance.

However, social policy may have a weaker effect on ecological performance relative to human performance due to their different traits. Applying the behavioral model, we expect that the belief about consequences regarding ecological performance will be lower, as ecological performance is generally characterized by a long latency period, a lower visibility level, and a higher level of uncertainty.

#### **D. Global Performance**

This subcategory refers to parameters with "pure" global features; that is, parameters with global impact whose solutions require international cooperation. Climate change (due to GHG emissions, for instance) is obviously an appropriate example since it has pure global features and is now of increasing interest as a challenge for the global community. Other parameters, such as biodiversity or crossborders pollution, also have global implications; however, while some solutions require international cooperation, their global implications are not "pure." For instance, the additive effect of biodiversity degradation is global, but the struggle and importance of specific species is rather local, whereas a  $CO_2$  molecule emitted anywhere around the globe distributes equally.

The main attribute of global performance relevant to our discussion is the community affected by the local policy efforts. Local policy efforts to combat  $CO_2$  emissions may not directly influence the conditions of the local society. Therefore, even if people care about the wellbeing of their local community, they may not care for the wellbeing of another nation. Likewise, caring for the natural environment surrounding oneself does not guarantee that one cares for the general environment of the planet. Stern and Dietz suggested that social-altruistic values activate environmental behavior that is perceived as beneficial to the *valued object*. Hence, in order to fit the discussion regarding global performance, our basic model (shown in Figure 1) requires a link referring to the values of the community regarding global issues. Social orientation should have an impact on global environmental performance *if* the global

community is perceived as part of society. In other words, global performance will be better if a country has a *global-social orientation*.

What does it take for a person to consider the global community as part of society? To answer this question, we borrow insights from the vast literature on social capital. Social capital refers to the norms and *networks* that enable people to act collectively.<sup>66</sup> For example, as social capital lowers the transaction costs of working together, it facilitates cooperation. People with social capital have the confidence to invest in collective activities, knowing that others will do so as well. They are also less likely to engage in unfettered private actions with negative outcomes, such as resource degradation.

References to "bridging social capital," in the sense of describing connectedness between *different groups* (states), are relevant to our discussion.<sup>67</sup> Bridging ties provide access to external resources of various kinds and are often needed to help actors initiate or support collective action. Explicitly stated, bridging ties help put heterogeneous actors in contact with one another. In practice, bridging social capital is the extent of a community's heterogeneous, external ties. The greater the community's formal and informal ties to outside communities, the greater the likelihood that community members will be exposed to new ideas and new ways of doing things.<sup>68</sup> Accordingly, the measure for the bridging social capital of a country should be the *extent of external ties it has with other countries*.

The extent of external ties with other countries may be represented by a country's globalization rank. By globalization, we mean three complementary elements.<sup>69</sup> First, and most obviously, "social globalization" refers to informal

<sup>66</sup> Michael Woolcock & Deepa Narayan, Social Capital: Implications for Development Theory, Research, and Policy, 15 WORLD BANK Res. OBSERVER 225 (2000).

<sup>67</sup> The literature is quite inconsistent in defining and categorizing different types of social capital, see Örjan Bodin & Beatrice I. Crona, *The Role of Social Networks* in Natural Resource Governance: What Relational Patterns Make a Difference, 19 GLOBAL ENVTL. CHANGE 366 (2009); Michael Woolcock, *The place of Social* Capital in Understanding Social and Economic Outcomes, 2 CAN. J. POL'Y RES. 11 (2001).

<sup>68</sup> See Woolcock & Narayan, supra note 66; see also Ross J. GITTELL & AVIS VIDAL, COMMUNITY ORGANIZING: BUILDING SOCIAL CAPITAL AS A DEVELOPMENT STRATEGY (1998); Mark R. Warren, J. Phillip Thompson & Susan Saegert, The Role of Social Capital in Combating Poverty, in SOCIAL CAPITAL AND POOR COMMUNITIES (Susan Saegert, J. Phillip Thompson & Mark R. Warren eds., 2001) (cited in Kerry Agnitsch, Jan Flora & Vern Ryan, Bonding and Bridging Social Capital: The Interactive Effects on Community Action, 37 COMMUNITY DEV. 36 (2006)).

<sup>69</sup> As described by the KOF index of globalization, *see* Axel Dreher, Noel Gaston & Pim Martens, Measuring Globalisation: Gauging Its Consequence (2008).

ties, such as personal cross-country contact (telephone traffic, international letters, international tourism, etc.). Second, "political globalization" refers to formal ties of state connectedness to other states as a group<sup>70</sup> (e.g., embassies in countries, membership in international organizations, international treaties, etc.). Finally, a country's "economic globalization" indicates interdependency and trade ties, which are semiformal.

Theoretically, globalization should have a *direct* effect on global environmental performance since "bridging social capital" facilitates cooperation. However, here again the literature is indecisive when it comes to empirical findings regarding globalization's impact on environmental performance. For instance, Pim Martens and Mohsin Raza found that more globalized countries have a significantly higher Human Development Index, and thus perform better on the Environmental Performance Index and in efforts to promote responsible business practices.<sup>71</sup> However, Martens and Raza did not control for all indicators known to affect sustainability. When they controlled for GDP, for example, globalization was found to be not as significant for predicting environmental performance (Environmental Performance Index). Lauren Hansen, on the other hand, found a statistical positive correlation between the political globalization index and the numbers of threatened species in a country.<sup>72</sup>

What, then, are the conditions for globalization to have a "good influence"? In adapting the basic model shown in Figure 3, we surmise that globalization should most affect global environmental performance when it *interacts* with social orientation. If so, global performance will improve only when countries that have high levels of connections with other countries (globalization) *care* for the global community. If the country considers the global community to be part of society (i.e., meaning that the social-value orientation's valued object is the global community), then global environmental performance should be better. *If so, globalization is a precondition for the positive effect of social policy on global environmental performance*.

Since global environmental performance is ultimately represented by GHG emissions, individuals in society with a global-social-orientation will act environmentally through their voting and by protesting in favor of climate policies and so seek to influence the country's performance indirectly (as in previous categories). In addition, they may have a direct influence by personal

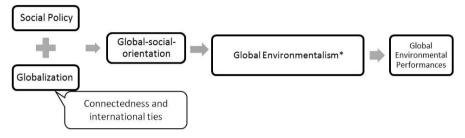
<sup>70</sup> Social capital is attributed both to individuals and to groups.

<sup>71</sup> Pim Martens & Mohsin Raza, *Is Globalization Sustainable?*, 2 SUSTAINABILITY 280 (2010).

<sup>72</sup> Lauren Hansen, Linking Globalization and Extinction Rates: A Statistical Analysis of the Effects of Globalization on Biodiversity, 11 HINCKLEY J. POL. 25 (2010).

actions such as purchasing "climate-friendly" products (cars, etc.) and turning off lights when possible. Thus, total GHG emissions will be reduced and the "global environmental performance" will improve.

## Figure 3: Theoretical Flowchart — Linking Social Policy to Global Performance



\* Motivation to act environmentally for the benefit of the valued object: the global community (voting and political actions as well as individual activities)

From a philosophical perspective, De-Shalit also discussed the question concerning the relationship between the communitarian theory of intergenerational justice and measures that have to be taken internationally in order to guarantee the fulfillment of our obligation to posterity.<sup>73</sup> According to De-Shalit, the dominant community is the nation and therefore international cooperation is difficult. However, it might be the case that once we adopt a moral posture that considers future generations in the process of distribution, we will be able to do so for the international community. In other words, on the basis of community of different *nations* and different *generations*. If that is a possibility, then nations that consider their people as a community and not as individuals are more likely to cooperate and deliver better global environmental performance.

## **III. CONCLUDING THOUGHTS AND POLICY IMPLICATIONS**

Why do some countries achieve better environmental performance than others? This question has been widely researched, yet no comprehensive conclusion has been reached. This Article has sought to explore additional reasons for

<sup>73</sup> DE-SHALIT, supra note 64, at 131.

differences between countries in environmental policies and performance. More specifically, it focused on two aspects that require further research. First, it explained the need to separately analyze different subcategories of environmental performance. We claimed that differences in the attributes of different subcategories of environmental performance affect the path of influence of different variables. Particularly, we referred to three subcategories: performance directly linked to human health, performance more distant from human health that affects the entire ecosystem, and performance that mainly affects the global community.

In addition, we focused on the need for further study of one potentially important variable that might help explain differences between countries in their environmental performance: the influence of a country's social policy on its environmental performance — a matter that has yet to receive much attention in the research literature. The few studies that have examined this connection, and were discussed above, have failed to provide us with a comprehensive theory. In consideration of the different attributes of the subcategories of environmental performance, this Article proposed an analytical model that explains this connection based on a psychological behavioral model.

According to this analytical model, there is support for the hypothesis that social policy should positively influence all three subcategories of environmental performance. Empirical evidence supporting the connection between social policy and the social orientation of citizens was discussed. Social altruism was found to be related to environmental motivation and behavior. This public motivation (i.e., public opinion) was expected to influence environmental policies and performance (certainly those for the benefit of the valued object: human beings).

We also discussed why two other components of environmental performance require additional elucidation: ecological parameters should be influenced by social policy, since social altruism was found to be closely related to biospheric orientation, which in turn should activate political behavior in support of ecological policies. However, the impact of social policy on this category may be relatively low, since such influence is subject to beliefs about consequences. For example, since some ecological parameters are characterized by a long latency period, belief concerning their consequences might be affected. Finally, it was suggested that global environmental performance should be influenced by a country's social policy only after it has acquired certain global ties.

The analysis presented in this Article should open up a new debate about environmental performance. It asserts that environmental performance should no longer be viewed only through the conceptual framing of financial, infrastructural, and structural capabilities, but rather should also be seen as ideologically driven. Neither should the capacity of countries to confront environmental problems be measured only by economic indicators. Rather, capacity is also influenced by the ideological values of a society. Ignoring these differences between countries might inhibit the implementation of international solutions.

Our analysis has policy implications that might improve attempts to achieve global cooperation in the fight against climate change. This Article suggests the need for a deeper and broader understanding of the basis for countries' actions. Such an understanding might improve conventional approaches towards solving international problems by offering new perspectives regarding the nature of the problem. For instance, it is customary to view the differences between countries regarding their willingness to participate in a climate agreement via a dichotomous categorization, such as developing versus developed countries. However, as Lavanya Rajamani claims,<sup>74</sup> although the differentiation approach has been adopted in the Kyoto Protocol, it has been eroded ever since. Rajamani also indicates that the greater symmetry among countries' responsibilities in post-Kyoto agreements, come at the expense of an ambitious prescriptive regime. Arguably, the perspective offered in this Article suggests that it is necessary to re-conceptualize such categorizations.

The differences between levels of social policy also have the potential to affect the approach taken by different countries regarding their willingness to participate in global environmental protection efforts. Countries featuring a high level of *global social orientation* perceive international environmental efforts as beneficial and acknowledge their importance. Conversely, countries featuring a low level of *global social orientation* are unlikely to participate in efforts to combat global climate change without any additional incentives. Therefore, efforts should also be made to deal with the particular constraints of countries featuring low levels of social policy, regardless of their developmental level. A solution that requires more resources from a country with the ideological capacity might be justified, as with the commonly proposed solutions that require more from countries with greater economic capacity.

The longer-term policy implications of our study point to the importance of education for social solidarity and its influence on environmental performance. More specifically, focusing on global issues, globalization and international connectedness has been shown to be an important factor, and hence should also be encouraged. However, the focus on international connectedness should come hand in hand with the enhancement of social solidarity, thus contributing to "global social solidarity."

<sup>74</sup> Lavanya Rajamani, *Differentiation in the Emerging Climate Regime*, 14 THEORETICAL INQUIRIES L. 151 (2013).

In addition to the model presented in this Article, other explanations for the connection between social policy and environmental performance should be explored further. For instance, the role of different policy tools across different welfare regimes may provide important insights as to the differences in environmental performance. Welfare regimes, for example, may implement more interventionist policies and thus use more subsidies and substantive requirements to protect the environment. Similarly, welfare regimes may focus less on the role of the private market, economic tools, and self-regulation. Such differences in policy tools may very well affect the environmental performance of the states.

Furthermore, this Article has offered an analytic approach and produced hypotheses that should be tested empirically. It is essential to conduct comprehensive and rigorous empirical research to validate the correlation between social policy and the different kinds of environmental performance.

Finally, although this Article has referred to the potential of social policy to improve environmental performance, it may be justified to devote some attention to the other side of the coin. In light of the current global environmental crisis facing humanity, the potential influence of environmental degradation on welfare policy (for example, the challenge of environmental refugees) is well worth further consideration.<sup>75</sup>

See Ian Gough et al., JESP Symposium: Climate Change and Social Policy, 18
J. EUR. SOC. POL'Y 325 (2008).