

CONFLICTS AND LAUDATO SI': TEN PRINCIPLES FOR ENVIRONMENTAL DISPUTE RESOLUTION

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I.	INTRODUCTION TO THE PROBLEM	61
II.	LAUDATO SI' AND ENVIRONMENTAL DISPUTE RESOLUTION	67
	A. <i>Principle One: Stakeholder Involvement Should Be Expansive</i>	68
	B. <i>Principle Two: "Environmental" Issues Should Be Defined Broadly</i>	71
	C. <i>Principle Three: Intergenerational Obligations Are Sacred and Need Protection</i>	73
	D. <i>Principle Four: The Rule of Law Is Critically Important</i>	75
	E. <i>Principle Five: Honesty Is a Critical Virtue for Dispute Resolution</i>	77
	F. <i>Principle Six: The Precautionary Principle Must Be Respected As Far As Feasible</i>	79
	G. <i>Principle Seven: Science in All Fields Warrants Respect</i>	81
	H. <i>Principle Eight: Problems Rather Than Symptoms Must Be Addressed</i>	83
	I. <i>Principle Nine: Moral Transformation Is Critically Important</i>	84
	J. <i>Principle Ten: Holy Love Is an Indispensable Motivation</i>	85
III.	CONCLUSION	86

I. INTRODUCTION TO THE PROBLEM

Unfortunately, conflicts are all too familiar in the modern world. Global conflicts claim and threaten the lives of many. Personal conflicts strike at the heart of families and friendships. Courts, workplaces, communities, the political process, mediating institutions, businesses, and media all seem fraught with conflicts that can unnecessarily divide rather than unite.

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Without a doubt, there is a certain amount of conflict that is helpful, and even vitally necessary, to any society. Without it, there is no healthy debate about things that matter, a diminished ability to reach compromises that may represent the best of competing ideas, and less opportunity to fight for those values that are held most dear. Many people accomplish some of the things about which they are most proud when a conflict of some kind moves them out of complacency and toward action on that which they believe to be good or important. However, when it comes to addressing and resolving conflicts, there are, quite simply, good ways and bad ways to do so.

The particular context of environmental law and policy making is one that is rife with conflict in the boardroom, in the courtroom, and in legislative chambers. The existence of conflicts—and the intractable nature of many of those conflicts—is particularly virulent and rampant in environmental law for many reasons:¹

When environmental issues arise, they often cannot be limited to a single geo-political arena because, as is obvious, pollution travels. As a result, “global environmental problems require multi-faceted legal approaches that combine local, regional, national, and international public law.”² Finding a single voice of authority to resolve a conflict does not happen easily.³

It is very frequently the case that environmental benefits and environmental burdens exist or arise far away from each other. Thus, attempting to solve environmental conflicts in anything

1. For further discussion of the particular difficulties inherent in environmental disputes, see generally, Gail Bingham et al., *Effective Representation of Clients in Environmental Dispute Resolution*, 27 PACE ENVTL. L. REV. 61, 62–65 (2009).

2. Sarah E. Light & Eric W. Orts, *Parallels in Public and Private Environmental Governance*, 5 MICH. J. ENVTL. & ADMIN. L. 1, 4 (2015). For a case study dramatically illustrating this geopolitical complexity in the specific context of the Nile River, see Edna Udobong, *The Rising Conflict on the Nile Waters: Understanding its Legal, Environmental and Public Health Consequences*, 10 LIBERTY U. L. REV. 467 (2016). This is true in the domestic context as well as in the international context. See e.g., Jack Tuholske & Mark Foster, *Solving Transboundary Pollution Disputes Locally: Success in the Crown of the Continent*, 92 OR. L. REV. 649, 663 (2014) (“The patchwork of federal, state, tribal, and county jurisdictions make ecosystem-based resource planning and protection a daunting task in the United States; each jurisdiction has a separate management plan, sometimes with conflicting goals and standards. While there are efforts to coordinate, different government agencies are subject to wide-ranging political influences and bureaucratic agendas.”).

3. See generally, Light & Orts, *supra* note 2, at 4. Many of today’s most challenging environmental problems—such as climate change, biodiversity loss, deforestation, loss of available land, nitrogen over-fertilization, destruction of the ocean’s fisheries, and fresh water shortages—have defied easy governmental regulatory solutions. In our view, these kinds of global environmental problems require multi-faceted legal approaches that combine local, regional, national, and international public law.

more than a superficial way is a challenging proposition, as recent attempts at international negotiations have illustrated.⁴

Environmental conflicts nearly always involve balancing interests among multiple generations.⁵ This requires weighing the interests of those who obtained advantages in the past, those who live with the consequences of the past today, and those to whom the world will be bequeathed in the future.

Environmental conflicts involve a level of expertise in science, technology, economics, and law that is often rare among those charged with resolving them.⁶ Expertise in one of these areas may be common, but the ability to understand all of them and the ways in which they intersect is hard to come by.

Environmental disputes often involve a degree of both scientific uncertainty and differing viewpoints on the appropriate, moral, and efficient balance between reckless risk and paralyzing precaution in the face of such uncertainty.⁷ This makes peaceful resolutions even harder to obtain.

Environmental problems can arise from multiple sources and the (often valuable or unavoidable) activity of multiple actors.⁸

4. See Alessandra Lehmen, *The Case for the Creation of an International Environmental Court: Non-State Actors and International Environmental Dispute Resolution*, 26 COLO. NAT. RESOURCES, ENERGY & ENVTL. L. REV. 179, 183 (2015) ("In a world of political, economic, legal, geographic, and cultural interdependences, no individual state, as competent as it may be, is able to effectively deal with transnational problems, such as those associated with international environmental protection.").

5. See Edith Brown Weiss, *Our Rights and Obligations to Future Generations for Environment*, 84 AM. J. INT'L L. 198, 199 (1990) ("As members of the present generation, we hold the earth in trust for future generations. At the same time, we are beneficiaries entitled to use and benefit from it.").

6. See, e.g., George Pring & Catherine Pring, *Twenty-first Century Environmental Dispute Resolution—Is There an "ECT" in Your Future?*, 33 J. ENERGY & NAT. RESOURCES L. 1, 17 (2015). The Prings argue in favor of specialized environmental courts and tribunals since "general court judges are, by their nature, legal generalists—not trained in environmental law let alone relevant environmental science and technology." *Id.* Furthermore, "even the basic concepts that arise in environmental cases—such as causation, damages, future impacts, sustainable development, the prevention principle, the precautionary principle, the polluter-pays principle, the no-harm rule and standards—require expertise that law-trained judges and decision-makers simply do not have." *Id.* at 23.

7. See Bingham et al., *supra* note 1, at 63 ("Environmental disputes also tend to involve complex technical issues and scientific uncertainty. There are typically gaps in scientific information, different models or assumptions for interpreting existing data, and multiple disciplines each with their own terminology and all of which complicate the dispute."). For a comprehensive analysis of the problem of uncertainty in environmental conflict and the role of perception, see generally, Michael Traynor, *Communicating Scientific Uncertainty: A Lawyer's Perspective*, 45 ENVTL. L. REP. NEWS & ANALYSIS 10159 (2015); John William Draper, *Human Survival, Risk, and Law: Considering Risk Filters to Replace Cost-Benefit Analysis*, 27 FORDHAM ENVTL. L. REV. 301, 393 (2016); Robert R. M. Verchick, *Culture, Cognition and Climate*, 2016 U. ILL. L. REV. 969, 1024 (2016).

8. See Thalia González & Giovanni Saarman, *Regulating Pollutants, Good Neighbor Agreements and Negative Externalities: Who Bears the Burden of Protecting Communities?*, 41 ECOLOGY L.Q. 37, 51 ("[E]xternalities are often concealed due to an inability to discern the exact source or responsible party to prove causation.").

Environmental conflicts create problems that need solutions—but the solutions themselves often create new problems.⁹ Thus, while in some contexts environmental problems can involve conflicts between the good and the bad, sometimes they involve more intractable and ambiguous conflicts between the *possibly* good and the *possibly* bad.

Environmental conflicts involve high stakes because “they often involve actions that have irreversible impacts on the physical environment.”¹⁰ When a problem is both serious and irreversible, it is a conflict less amenable to compromise than a conflict with lower, more malleable costs.

Environmental conflicts involve many parties.¹¹ Both directly and indirectly, “[m]any diverse stakeholders are often involved in environmental disputes. These stakeholders may include members of the public, various levels of government, private industry, environmental and advocacy organizations, and nearby property owners. Resource and power disparities may arise between and among the stakeholders.”¹² This is far more difficult to negotiate than a straightforward, bilateral dispute. Yet, “a crucial threshold issue is determining who should be at the table for negotiation.”¹³

9. See, e.g., *id.* at 49 (“Striking this balance between specific and effective regulation to address social and environmental harms and the corresponding economic benefits of polluting activity is precisely the goal of successful environmental regulation. This socially desirable level of pollution, stemming from an efficient allocation of resources, is achieved when polluters are held for the associated costs of their activity, costs that are often imposed on third parties as negative externalities.”). See also *id.* at 52 (noting that “avoiding the impact of pollution entails inconvenience and substantial cost.”).

10. Bingham et al., *supra* note 1, at 63. See also Roni Elias, *Using ADR in Superfund Cases*, 63 FED. LAW. 54, 57 (2016) (“[C]ompromise and collaboration can be harder when negotiating outcomes that could be irreversible.”); Michelle Ryan, *Alternative Dispute Resolution in Environmental Cases: Friend or Foe?*, 10 TUL. ENVTL. L.J. 397, 397 (1997) (“Because environmental disputes concern conflicts over the quality of life itself, the way in which we resolve these disputes will determine the future of our planet.”); *id.* at 413 (“One of the most important features of environmental disputes is the fact that they typically involve “irreversible decisions” and implicate major alterations to the physical environment. Such decisions often involve fundamental questions of values.”).

11. See generally, Elias, *supra* note 10, at 57 (“[E]nvironmental disputes involve multiple parties, and multilateral negotiation is necessarily more complicated than its bilateral counterpart. These complications are even more pronounced when some of the parties are trying to vindicate interests, such as clean water or environmental integrity, which are not easily translated into quantifiable values.”). See also Janet Martinez et al., *Upstream, Midstream, and Downstream: Dispute System Design for Sustainable Groundwater Management*, 13 U. ST. THOMAS L.J. 297, 301–02 (2017) (describing myriad stakeholders involved in groundwater disputes).

12. Allison Rose, *Mending the Fracture: Bringing Parties Together on High Volume Hydraulic Fracturing Through Alternative Dispute Resolution*, 5 KY. J. EQUINE, AGRIC. & NAT. RESOURCES L. 33, 60 (2012).

13. Michael Baram, *A New Social Contract for Governing Industrial Risk in the Community*, 56 JURIMETRICS J. 223, 233 (2016).

Environmental conflicts can be “complex and expensive.”¹⁴ They have been described, aptly, by one mediator/arbitrator as “some of the most interesting, challenging, complicated and daunting issues that a mediator may confront.”¹⁵ The costs of both environmental harm and environmental remediation are high and unpredictable. In this highly-charged context, conflicts escalate rapidly, and arguments can become extremely contentious extremely quickly.¹⁶

Environmental conflicts can also involve competition with other values that are also compelling—the need for economic development and opportunity; the desire for fuel and the benefits of comfort; and the desire to increase the production of and availability of essential or desired goods and services. Since these other values are not—and often should not be—easily compromised, resolving environmental disputes in a reasonable way is much more difficult than it would be if there were merely two competing values at stake.

Thus, into this world came *Laudato Si'*.¹⁷ Pope Francis released this eagerly anticipated encyclical on June 18, 2015.¹⁸ Indeed,

14. Bingham *et al.*, *supra* note 1, at 62; Pring & Pring, *supra* note 6, at 21 (“The costs of a general court action can be daunting – potentially tens of thousands or even millions in U.S. dollars – to engage counsel, hire expert witnesses, perform discovery, conduct investigations and testing, spend days or weeks in trial, and then appeal an adverse decision. This results in many legitimate complaints going unfilled, unheard and unresolved.”).

15. John Bickerman, *Using the Right Strategy to Mediate Environmental Disputes*, 67 DISP. RESOL. J. 9 (2012).

16. See *id.* at 9 (observing that conflicts over natural resources “have often simmered for decades, they tend to involve parties who are highly emotional about the issues and whose perspectives and cultural differences often polarize them from each other.”); Michele Straub, *Report Card on Environmental Dispute Resolution in Utah-Grade: Incomplete but Showing Promise*, 28 J. ENVTL. L. & LITIG. 227, 248 (2013) (noting that environmental dispute resolutions “that engage potentially opposing views in dialogue can be time consuming, as strongly-held opinions and distrust of other stakeholders do not generally change overnight. It is particularly difficult to break down age-old barriers and build trust between historic opponents . . .”).

17. Pope Francis, Encyclical Letter, *Laudato Si': On Care for Our Common Home* (May 24, 2015), http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_encyclica-laudato-si.html [hereinafter *Laudato Si'*]. Pope Francis, while the first Pope to issue an encyclical directed toward environmental matters, is by no means the first or only Pope to have spoken of the moral issues linked to care for creation. His immediate predecessors spoke extensively on these issues. For example, Pope Paul VI sent a 1972 message to the United Nations Conference on the Environment in Stockholm. See Pope Paul VI, *Message of His Holiness Paul VI to Mr. Maurice F. Strong, Secretary General of the Conference on the Environment* (June 1, 1972), https://w2.vatican.va/content/paul-vi/en/messages/pont-messages/documents/hf_p-vi_mess_19720605_conferenza-ambiente.html [hereinafter *Paul VI Message*]. Both Pope John Paul II and Benedict XVI used the occasion of the January 1 World Day of Peace to deliver powerful messages on environmental matters. See Pope John Paul II, *Peace With God the Creator, Peace With All Of Creation* (Jan. 1, 1990), https://w2.vatican.va/content/john-paul-ii/en/messages/peace/documents/hf_jp-ii_mes_19891208_xxiii-world-day-for-peace.html [hereinafter *Peace With God the Creator*] and Pope Benedict XVI, *If You Want to Cultivate Peace, Protect Creation* (Jan. 1, 2010), <https://w2.vatican.va/content/benedict->

“[t]he media coverage of this document has been unprecedented, including coverage in all the major newspapers and media outlets in the United States.”¹⁹ Much discussion of *Laudato Si’* in the popular press speaks of it narrowly as a “climate change” encyclical or, slightly more broadly, as an “environmental” encyclical.²⁰ Certainly, it is both of those things. But, in its pages lies a much broader analysis of the world’s political, social, economic, physical, and spiritual state.²¹ As one commentator

xvi/en/messages/peace/documents/hf_ben-xvi_mes_20091208_xliii-world-day-peace.html [hereinafter *Protect Creation*]. For further background in the earlier roots of *Laudato Si’*, see generally, Lucia A. Silecchia, *Dialogue: The Morality of Market Mechanisms*, 46 ELR 10005, 10006-07 (2016) [hereinafter *Dialogue*]; Peter H. Raven, *Four Commentaries on the Pope’s Message on Climate Change and Income Inequality*, 91 Q. REV. BIO. 247, 253, 255.

18. In the time since it was released, *Laudato Si’* has already generated much commentary. See generally Daniel Bodansky, *The Pope’s Encyclical and Climate Change Policy: Should We Care What the Pope Says About Climate Change?*, 109 AJIL UNBOUND 127 (2015); Rachel Nadelman, *Let Us Care For Everyone’s Home’: The Catholic Church’s Role in Keeping Gold Mining Out of El Salvador* (CLALS Working Paper Series 9, Dec. 2015); John Nagle, *Pope Francis, Environmental Anthropologist*, 28 REGENT U. L. REV. 7 (2015); *Dialogue*, *supra* note 17; Andrea Tilche & Antonello Nociti, *Laudato Si’: The Beauty of Pope Francis’ Vision*, 8 REV. OF ENVTL. ENERGY & ECONOMICS 1 (2015); Alessandro Spina, *Reflections on Science, Technology and Risk Regulation in Pope Francis’ Encyclical Letter Laudato Si’*, 6 EJRR 579 (2015); Eduardo M. Peñalver, *Carbon Trading and the Morality of Laudato Si’*, (Cornell Legal S. Research Paper No. 17-3 (2017)); Lucia A. Silecchia, “Social Love” as a Vision for Environmental Law: *Laudato Si’* and the Rule of Law, 10 LIBERTY U. L. REV. 371 (2016); Dale Jamieson, *The Pope’s Encyclical and Climate Change Policy: Theology and Politics in Laudato Si’*, 109 AJIL UNBOUND 122 (2015); Christopher Hrynkow, *The Pope, the Planet, and Politics: A Mapping of How Francis is Calling for More Than the Paris Agreement*, 59 J. CHURCH & STATE 1 (2016); Jonas J. Monast et al., *On Morals, Markets, and Climate Change: Exploring Pope Francis’ Challenge*, 80 LAW & CONTEMP. PROBS. 135 (2017); W. David Montgomery, *The Flawed Economics of Laudato Si’*, 50 THE NEW ATLANTIS 31 (2016); Jeffrey Mazo, *The Pope’s Divisions*, 57 SURVIVAL 203 (2015); Anna Rowlands, *Laudato Si’: Rethinking Politics*, 16 POLITICAL THEOLOGY 418 (2015); Christiana Z. Peppard, *Pope Francis and the Fourth Era of the Catholic Church’s Engagement with Science*, 71 BULLETIN OF THE ATOMIC SCIENTISTS 31 (2015); Edward Maibach et al., *The Francis Effect: How Pope Francis Changed the Conversation About Global Warming*, GEORGE MASON UNIVERSITY CENTER FOR CLIMATE CHANGE COMMUNICATION & YALE PROGRAM ON CLIMATE CHANGE COMMUNICATION (Nov. 2015), http://climatecommunication.yale.edu/wp-content/uploads/2015/11/The_Francis_Effect.pdf; Stephen Schneck, *Review of Pope Francis Laudato Si’: On Care for Our Common Home*, 37 ENERGY L. J. 79 (2016); Gerardo Ceballo, *Pope Francis’ Encyclical Letter Laudato Si’: Global Environmental Risks and the Future of Humanity*, 91 Q. REV. OF BIOLOGY 285 (2016); Raven, *supra* note 17; Mary Evelyn Tucker & John Grim, *Integrating Ecology and Justice: The Papal Encyclical*, 91 Q. REV. OF BIOLOGY 261 (Sept. 2016); Calvin B. DeWitt, *Earth Stewardship and Laudato Si’*, 91 Q. REV. OF BIOLOGY 271 (Sept. 2016); Emma Green, *The Pope’s Moral Case for Taking on Climate Change*, THE ATLANTIC (June 18, 2015), <https://www.theatlantic.com/international/archive/2015/06/pope-francis-encyclical-moral-climate-change/396200/>.

19. Tucker & Grim, *supra* note 18, at 261.

20. See generally, *supra* note 18. As is obvious from the titles of these media reports, the climate change issue in *Laudato Si’* captured popular attention.

21. This is certainly not the first time in which a broad view of environmental matters has been proposed. This has been done repeatedly in the secular context as well. Domestically, the National Environmental Policy Act of 1969, 42 U.S.C. § 4321 (1970) [hereinafter NEPA] articulated a comprehensive vision for the future of the human race and environment. Internationally, the landmark Declaration of the United Nations Conference

noted, "it is an encyclical about humanity."²² As part of this discourse on the state of humanity, the question of conflicts naturally arises, as conflicts often define important aspects of human life. However, a careful reading of *Laudato Si'* also reveals a roadmap for the ways in which contemporary conflicts and disputes over environmental issues can best be managed and resolved.

II. LAUDATO SI' AND ENVIRONMENTAL DISPUTE RESOLUTIONS

Laudato Si' is, frankly, not an optimistic account of the world.²³ Indeed, Pope Francis himself described his reflections in *Laudato Si'* as "both joyful and troubling."²⁴ Indeed, it was, since its "analysis of our moral shortcomings as creation's caretakers [was] unsparing."²⁵ It is safe to assume that Pope Francis was and is fully aware of the contentious, pessimistic nature of environmental

on the Human Environment, see U.N. Conference on the Human Environment, *Report of the U.N. Conference on the Human Environment*, U.N. Doc. A/CONF.48/14/Rev.1 (June 5–16, 1972) [hereinafter *Stockholm Declaration*]; and the Rio Declaration on Environment and Development, see U.N. Conference on Environment and Development, *Rio Declaration on Environment and Development*, U.N. Doc. A/CONF.151/26/Rev.1 (Vol.1), (Aug. 12, 1992) [hereinafter *Rio Declaration*] also articulate broad principles for environmental and sustainability questions. These issues were explored even more fully in the World Commission on Environment and Development's *Toward Our Common Future* report, see World Comm'n on Env't and Dev., *Toward Our Common Future*, U.N. Doc. A/42/427 (1987) (available at <http://www.un-documents.net/wced-ocf.htm>) [hereinafter *Brundtland Report*], and the more recent the 2030 Agenda for Sustainable Development resolution, see G.A. Res. 70/1 (September 25, 2015) (available at http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E) [hereinafter *2030 Agenda*].

22. Nagle, *supra* note 18, at 10. See also Green, *supra* note 18 (describing *Laudato Si'* as focused more on humans than nature).

23. See, e.g., Nagle, *supra* note 18, at 8 ("The rhetoric often takes an apocalyptic turn, suggesting that the world on which we depend is in such dire straits that we must take fundamental, immediate action to avert an ecological catastrophe.¹⁴ Such warnings are typically accompanied by evidence of how bygone civilizations collapsed because of their abuse of the environment. Francis adopts such an approach in his encyclical." (citation omitted)). See also Green, *supra* note 18 (observing that Pope Francis "rattles off fact after fact about the pitiful state of the earth"). For a different perspective, however, see Ceballo, *supra* note 18, at 285 ("We need hope. And that is what Pope Francis gave us when he published his most inspiring and unexpected Encyclical Letter."); *id.* at 293 (describing *Laudato Si'* as "a call to action and breath of fresh air and hope in times of darkness"); and Todd Edwards & Matt Russell, *Earth Friendly Agriculture for Soil, Water and Climate: A Multijurisdictional Cooperative Approach*, 21 DRAKE J. AGRI. L. 325, 342 (2016) ("*Laudato Si'* provides hopefulness for humanity in the face of an ecological crisis. The call to action is urgent and the identifying of accountability is razor sharp. Yet, the encyclical celebrates the possibilities for humanity to solve the problems. The Pope suggests people are capable of finding the technical solutions so long as they are moved by the moral argument for action.").

24. *Laudato Si'*, *supra* note 17, ¶ 246.

25. Schneck, *supra* note 18, at 80.

debates²⁶ and the compelling need for effective, ethical and, even, holy ways to resolve conflicts in this arena.

Laudato Si' is not a reference work, a legal analysis, or a detailed blueprint for environmental dispute resolution. However, a framework for effective and ethical dispute resolution can be gleaned in its pages. There are at least ten key principles embedded in it that define Pope Francis' view on conflict resolution in the environmental context. These are principles that are applicable—albeit in different practical ways—whether those conflicts are resolved in the courtroom by adversaries embroiled in a bitter dispute; in a corporate board room where competing interests are hotly contested; in a legislative chamber where complex compromises are being sought; at a negotiating table where parties who may or may not be equals try to hammer out agreements on issues of great import; in the international arena where nations in vastly different circumstances seek common ground; or in the political arena where rhetoric runs hot and delicate, and nuanced negotiations seem rare.

*A. Principle One: Stakeholder Involvement Should Be
Expansive*

First, *Laudato Si'* stresses the critical importance of having all stakeholders actively involved in the process of conflict resolution. Pope Francis himself says in the opening pages of *Laudato Si'*, “I wish to address every person living on this planet. . . . I would like to enter into dialogue with all people about our common home.”²⁷ He also expresses a desire to “bring the whole human family together to seek a sustainable and integral development,”²⁸ believing that “[w]e need a conversation which includes everyone, since the environmental challenge we are undergoing, and its human roots, concern and affect us all.”²⁹

Obviously, in the literal sense, dispute resolution cannot include dialogue with all seven billion people on the planet. In fact, some environmental disputes will appear to involve discrete parties with well-known and clearly articulated interests. In this context, “lawyers generally seek to keep as many people out of the legal proceeding as possible, e.g., by contesting disputants’ legal

26. See *Laudato Si'*, *supra* note 17, ¶ 113. (“There is also the fact that people no longer seem to believe in a happy future; they no longer have blind trust in a better tomorrow based on the present state of the world and our technical abilities.”).

27. *Laudato Si'*, *supra* note 17, ¶ 3.

28. *Id.* ¶ 13.

29. *Id.* ¶ 14.

rights to bring claims against their client.”³⁰ Yet, Pope Francis believes that there are often parties deeply affected by environmental disputes whose voices are never heard, whose insights are never sought, and who are often spoken *of* or *about* and not *with*. He fears that the poor and excluded “are mentioned in international political and economic discussions but ... [with] the impression that their problems are brought up as an afterthought, a question which gets added almost out of duty or in a tangential way, if not treated merely as collateral damage.”³¹

This can certainly be inadvertent, but it can also be intentional. It can be caused by a well-intended paternalism, by simple carelessness, or by a more sinister desire to dominate those who are weaker. In any of these scenarios, the interests of those who can be deeply affected are not fully addressed in a meaningful way. Alternatively, their interests may not be addressed until it is too late to do anything meaningful to respond to them. Or, those who purport to represent their interest may not truly understand their needs, values and concerns, and may, even with the best of intentions, create new problems as intractable as the ones they are endeavoring to resolve.

This most directly harms those who cannot weigh in on the issues that may directly and detrimentally impact them. Moreover, it harms the decision-making process itself, because it may mean that critically important facets of a problem are overlooked since “people closer to an environmental problem possess information that the government might not have.”³² Pope Francis attempts to diagnose the reasons for this:

[M]any professionals, opinion makers, communications media and centers of power, being located in affluent urban areas, are far removed from the poor, with little direct contact with their problems. They live and reason from the comfortable position of a high level of development and a quality of life well beyond the reach of the majority of the world’s population. This lack of physical contact and encounter, encouraged at times by the disintegration of our cities, can lead to a numbing of conscience and to

30. Bingham et al., *supra* note 1, at 76.

31. *Laudato Si'*, *supra* note 17, ¶ 49. See also Gonzalez & Saarman, *supra* note 8 at 39 (“[C]ommunities that have traditionally experienced pollution disproportionately are often the same communities that have been excluded from environmental decision-making processes.”).

32. Jeff Todd, *Trade Treaties, Citizen Submissions and Environmental Justice*, 44 *ECOLOGY L. Q.* 89, 94 (2017).

tendentious analyses which neglect parts of reality. At times, this attitude exists side by side with a “green” rhetoric.³³

This critique is, unfortunately, one that is frequently directed toward environmental advocates.³⁴ Like all generalizations, it is overbroad. Yet, there is a certain truth to the critique. Paradoxically, at the same time that modern life brings more facts, information, and data about the perspectives of other stakeholders in environmental disputes,³⁵ it can simultaneously “shield us from direct contact with the pain, the fears and the joys of others and the complexity of their personal experiences.”³⁶ Thus, as a primary mandate, *Laudato Si’* urges that disputes be resolved with all interested parties participating or being represented in meaningful ways.³⁷

33. *Laudato Si’*, *supra* note 17, ¶ 49. Pope Francis reiterates this theme more fully when he offers a concrete example. *Id.* ¶ 142 (“What takes place in any one area can have a direct or indirect influence on other areas. Thus . . . drug use in affluent societies creates a continual and growing demand for products imported from poorer regions where behavior is corrupted, lives are destroyed, and the environment continues to deteriorate.”). Pope Paul VI recognized this over four decades ago, warning the United Nations that “[a]n abuse, a deterioration in one part of the world has repercussions in other places and can spoil the quality of other people’s lives, often unbeknownst to them and through no fault of their own.” *Paul VI Message*, *supra* note 17. See also *Protect Creation*, *supra* note 17, ¶ 11 (“We cannot remain indifferent to what is happening around us for the deterioration of any one part of the planet affects us all.”); *id.* ¶ 12 (“The book of nature is one and indivisible. It includes not only the environment but also individual, family and social ethics.”).

34. See Michael Foard Heagerty, Comment, *Crime and the Environment – Expanding the Boundaries of Environmental Justice*, 23 TUL. ENVTL. L.J. 517, 523 (2009) (“Public awareness and academic study are steps in the right direction, but the movement must affect an end to injustice on the ground-level if it is to be judged a true success. . . . [M]any of the communities most severely affected by the hazards of toxic exposure are not able to socially or politically organize to the extent necessary to bring about meaningful change.”).

35. See, e.g., Todd, *supra* note 32, at 120 (“The internet is a popular tool for justice advocates because websites are inexpensive and easy to maintain, plus they have a worldwide reach that allows for information about foreign struggles to reach U.S. audiences.”).

36. *Laudato Si’*, *supra* note 17, ¶ 47. But see Bingham et al., *supra* note 1, at 96 (outlining various ways in which the internet and other modern technology may provide “numerous benefits, not the least of which is its ability to involve more participants in the process and lower the costs of participation . . . [it] may create new opportunities for enhanced interactivity, draw more people into the process, and help stakeholders to conceptualize competing interests in a more tangible manner”).

37. Obviously, this is not the only place in which the need for such broad participation has been urged. See, e.g., *Rio Declaration*, *supra* note 21, Principle 10 (“Environmental issues are best handled with the participation of all concerned citizens, at the relevant level.”).

B. Principle Two: "Environmental" Issues Should Be Defined Broadly

Second, Pope Francis is concerned that environmental disputes are viewed far too narrowly. He urges constant consideration of the many inter-related issues that are affected by environmental problems.

Certainly, a narrow view of decision-making is tempting as this is an era of increased, and often beneficial, specialization. Indeed, "[e]nvironmental issues span a vast range of topics, including natural resources, land use, ocean uses and pollution energy, air and water pollution and climate change."³⁸ When an environmental dispute arises, it is tempting to seek solutions to the specific problem by addressing solely those pressing environmental concerns that need to be resolved at that very moment in time.³⁹ This may involve defining a problem narrowly and consulting those who can explore that narrow problem in impressive depth.

Pope Francis adds a new and significant challenge to the scope of environmental dispute resolution. He repeatedly emphasizes that environmental issues are intimately connected with so many other issues, which must no longer be seen as tangents but as integral to resolving environmental disputes.⁴⁰ This is a tall order! He says, since "everything in the world is connected,"⁴¹ our "world cannot be analyzed by isolating only one of its aspects."⁴² Rather,

38. Kayla Kelly-Slatten, *UNCITRAL Transparency: An Examination of the 2014 International Arbitration Transparency Rules and Their Effect on Investor-State Environmental Disputes and Economic Fairness*, 8 U.B. ON ARB. & MEDIATION 94, 102 (2016). In *Laudato Si'*, Pope Francis certainly takes on this "entire litany of environmental problems." Bodansky, *supra* note 18, at 127.

39. Pope Benedict XVI also recognized that environmental problems often involve a wide array of issues. He asked, "Can we remain indifferent before the problems associated with such realities as climate change, desertification, the deterioration and loss of productivity in vast agricultural areas, the pollution of rivers and aquifers, the loss of biodiversity, the increase of natural catastrophes and the deforestation of equatorial and tropical regions?" *Protect Creation*, *supra* note 17, ¶ 4.

40. In this, he echoes the insight of Pope John Paul II who warned, "An adequate solution cannot be found merely in a better management or a more rational use of the earth's resources, as important as these may be. Rather, we must go to the source of the problem and face in its entirety that profound moral crisis of which the destruction of the environment is only one troubling aspect. *Peace With God the Creator*, *supra* note 17, ¶ 5. See also *Protect Creation*, *supra* note 17, ¶ 5. ("[T]he ecological crisis cannot be viewed in isolation from other related questions, since it is closely linked to the notion of development itself and our understanding of man in his relationship to others and to the rest of creation.").

41. *Laudato Si'*, *supra* note 17, ¶ 16.

42. *Id.* ¶ 7.

in a deeply profound way, he says that “the bond is between concern for nature, justice for the poor, commitment to society and interior peace.”⁴³

In light of this, any environmental dispute must, according to *Laudato Si'*, address such intangibles as justice, commitment, and peace. As most scientists and ecologists already know, and as Pope Francis recognizes, there is a “mysterious network of relations between things and so [we] sometimes solve[] one problem only to create others.”⁴⁴ He observes that “[w]e cannot adequately combat environmental degradation unless we attend to causes related to human and social degradation.”⁴⁵ This is because “the analysis of environmental problems cannot be separated from the analysis of human, family, work-related and urban contexts, nor from how individuals relate to themselves, which leads in turn to how they relate to others and to the environment.”⁴⁶ This exponentially increases the work for the environmental problem-solver! However, it is a challenge in environmental dispute resolution to view the task of problem-solving in the broadest possible way.

In one sense, this is inspiring. It situates what can be an otherwise cold, technical, scientific, or legal dispute squarely at the heart of the common good and all the moral, economic, social, and political dimensions that this entails. It truly “aims at presenting a holistic approach”⁴⁷ to solving environmental problems and disputes. Yet, it exponentially increases the complexity of environmental problems because it places them at the heart of a more profound and comprehensive inquiry into all aspects of life in this world, as Pope Francis’ view would “make it increasingly untenable to separate social, political, and ecological action.”⁴⁸

43. *Id.* ¶ 10. In a similar vein, Pope John Paul II argued that “proper ecological balance will not be found without directly addressing the structural forms of poverty that exist throughout the world.” *Peace With God the Creator*, *supra* note 17, ¶ 11.

44. *Laudato Si'*, *supra* note 17, ¶ 20.

45. *Id.* ¶ 48. Pope Francis returns to this theme frequently in *Laudato Si'*. *See id.* ¶ 89 (“[A]ll of us are linked by unseen bonds and together form a kind of universal family, a sublime communion which fills us with a sacred, affectionate and humble respect.”); *id.* ¶ 142 (“If everything is related, then the health of a society’s institutions has consequences for the environment and the quality of human life.”); *id.* ¶ 139 (“Recognizing the reasons why a given area is polluted requires a study of the workings of society, its economy, its behavior patterns, and the ways it grasps reality. . . . [I]t is no longer possible to find a specific, discrete answer for each part of the problem. It is essential to seek comprehensive solutions which consider the interactions within natural systems themselves and with social systems.”).

46. *Id.* ¶ 141.

47. Spina, *supra* note 18, at 5. *See also* Mazo, *supra* note 18, at 204 (noting the broad, interdisciplinary approach to ecology featured in *Laudato Si'* and observing that “[c]hallenges such as pollution, water security and biodiversity are given equal (or greater) space, and collectively they are coupled with social problems such as the declining quality of life, global inequality and weak international policy making”).

48. Hrynkow, *supra* note 18, at 381.

*C. Principle Three: Intergenerational Obligations Are Sacred
and Need Protection*

Third, in *Laudato Si'*, Pope Francis stresses the intergenerational character of our responsibilities, and warns that, “[w]e can be silent witnesses to terrible injustices if we think that we can obtain significant benefits by making the rest of humanity, present and future, pay the extremely high costs of environmental deterioration.”⁴⁹ Often, in different contexts, the pursuit of the intragenerational “common good” is invoked with respect to obligations that flow to contemporaries.⁵⁰ However, in the environmental context, Pope Francis warns that:

The notion of common good also extends to future generations. . . . Once we start to think about the kind of world we are leaving to future generations, we look at things differently; we realize that the world is a gift which we have freely received and must share with others. Since the world has been given to us, we can no longer view reality in a purely utilitarian way.⁵¹

The intergenerational character of environmental matters is not a new reflection.⁵² Indeed, what makes the case for environmental protection so compelling is the fact that the consequences of environmental abuses are often felt far into the future. Likewise, and in a positive way, some of the most valuable benefits of present prudence will be enjoyed by those born far in the future. Scientists and secular commentators alike share Pope Francis’ view that there is a moral imperative for considering the

49. *Laudato Si'*, *supra* note 17, ¶ 36.

50. See *Paul VI Message*, *supra* note 17 (“Interdependence must now be met by joint responsibility; common destiny by solidarity”); *Protect Creation*, *supra* note 17, ¶ 2 (“The environment must be seen as God’s gift to all people, and the use we make of it entails a shared responsibility for all humanity, especially the poor and future generations.”).

51. *Laudato Si'*, *supra* note 17, ¶ 159.

52. Prior popes emphasized this as well. See *Paul VI Message*, *supra* note 17, ¶ 4 (“[O]ur generation must energetically accept the challenge of going beyond partial and immediate goals in order to prepare a hospitable earth for future generations.”); *Peace With God the Creator*, *supra* note 17, ¶ 6 (“[W]e cannot interfere in one area of the ecosystem without paying due attention both to the consequences of such interferences in other areas and to the well-being of future generations.”); *Peace With God the Creator*, *supra* note 17, ¶ 15 (noting the “grave responsibility to preserve this order for the well-being of future generations”); *Protect Creation*, *supra* note 17, ¶ 7 (warning that ecological exploration “is seriously endangering the supply of certain natural resources not only for the present generation, but above all, for generations yet to come”); *Protect Creation*, *supra* note 17, ¶ 8 (“[I]ntergenerational solidarity is urgently needed. Future generations cannot be saddled with the cost of our use of common environmental resources.”).

consequences of environmental harm to those who will come afterwards.⁵³ However, the challenge that *Laudato Si'* poses for those interested in dispute resolution is a practical one: How are intergenerational concerns properly made part of dispute resolution? Who represents future generations? How should predictive models be assessed? How optimistic or pessimistic should we be about the ability of technology to resolve problems for future generations in ways unimaginable today? How does intergenerational well-being conflict with intragenerational well-being?⁵⁴ Whose interests should prevail in a situation in which the harm to currently living people is known and the potential harm to those in the future is less certain to take place? *Laudato Si'* offers no easy answers to these questions. Yet, it teaches that ignoring these issues imperils both current and future generations.⁵⁵

Certainly, intergenerational responsibility is not solely a religious concept. Both the Stockholm Declaration⁵⁶ and the Rio Declaration⁵⁷ refer to it in their own ways on an international scale

53. See e.g., J. Michael Angstadt, *Securing Access to Justice Through Environmental Courts and Tribunals: A Case in Diversity*, 17 VT. J. ENVTL L. 345, 369 (2016) (noting that “intergenerational equity [is] something that environmental policy makers have long identified as crucial to durable sustainability”).

54. This tension also concerned Pope Benedict XVI who warned, “[T]here is . . . an urgent moral need for a renewed sense of intergenerational solidarity, especially in relationships between developing countries and highly industrialized countries.” *Protect Creation*, *supra* note 17, ¶ 8.

55. Obviously, this is not a matter of concern only within the environmental movement. Indeed, the concept of intergenerational solidarity has become such an important part of Catholic social thought that it has been the recent topic of intense study by the Pontifical Academy of Social Sciences, which has, in recent years, devoted several of its plenary sessions to discussion of this topic. See MARY ANN GLENDON, ED., INTERGENERATIONAL SOLIDARITY, WELFARE AND HUMAN ECOLOGY: THE PROCEEDINGS OF THE TENTH PLENARY SESSION OF THE PONTIFICAL ACADEMY OF SOCIAL SCIENCES, April 29–May 3, 2003.

56. *Stockholm Declaration*, *supra* note 21, at 6 (speaking of the need to “defend and improve the human environment for present and future generations.”); *id.* Principle 1 (articulating the “solemn responsibility to protect and improve the environment for present and future generations.”). The Stockholm Declaration was adopted by the United Nations Conference on the Human Environment in 1972. See David A. Wirth, *The Rio Declaration on Environment and Development: Two Steps Forward and One Back, or Vice Versa?*, 29 GA. L. REV. 599, 602 (1995). “The conference declaration contains 26 principles and an action plan including 109 recommendations for future implementation” Specifically, “Principle 1 declares a solemn responsibility to protect and improve the environment for present and future generations . . . Principle 2 asserts that natural resources, including air, water, land, flora, and fauna, must be safeguarded for the benefit of present and future generations.” *Id.* In fact, without explicitly mentioning “future generations,” Stockholm Principle 5 warns against “future exhaustion of nonrenewable resources.” *Id.*

57. *Rio Declaration*, *supra* note 21, Principle 3 (“The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.”). The Rio Declaration was adopted by the United Nations Conference on Environment and Development in 1992. See Susan L. Smith, *Ecologically Sustainable Development: Integrating Economics, Ecology, and Law*, 31 WILLAMETTE L. REV. 261, 265 (1995). (“The Rio Declaration declares the principles that humanity is at the focus of environmentally sustainable development and that, although each nation is the sovereign holder of its own resources, international cooperation is needed to ensure that the

while, domestically, the eloquent National Environmental Policy Act does so, as well.⁵⁸ It is a moral demand for a selflessness in dispute resolution that will extend environmental protections to those who will live far in the future and never be known by those who respect their interests by planning wisely and well.

D. Principle Four: The Rule of Law Is Critically Important

Fourth, *Laudato Si'* speaks of the importance of a sound set of laws, calling for the “establishment of a legal framework which can set clear boundaries and ensure the protection of ecosystems[.] . . . otherwise, the new power structures based on the techno-economic paradigm may overwhelm not only our politics but also freedom and justice.”⁵⁹ Pope Francis worries that “lack of respect for the law is becoming more common. Laws may be well framed yet remain a dead letter. Can we hope, then, that in such cases, legislation and regulations dealing with the environment will really prove effective?”⁶⁰

Those considering dispute resolution in the environmental context have had to grapple with the proper role of a legal framework. On the one hand, there seems to be no legal framework capable of resolving all disputes—and it is also doubtful that there should be one. The need to respond strategically and effectively to unforeseen problems and rapidly changing conditions seems to warrant a more flexible legal framework. Likewise, there are limits to what law can realistically accomplish, and it can be short-sighted to place too much confidence in law, while ignoring other necessary ingredients in forming solutions to the world's most intractable problems.⁶¹

Yet, as Pope Francis noted—although for perhaps different reasons—those interested in dispute resolution must recognize that a sound set of legal principles with clear rights and responsibilities is necessary. If for no other reason, negotiations and compromises must take place in the light of respected principles. Otherwise, the strongest will always win, and those parties who are weaker and more fragile will have no legal

development of those resources equitably meets the needs of both the present and future generations.”).

58. NEPA, *supra* note 21.

59. *Laudato Si'*, *supra* note 17, at 53.

60. *Id.* ¶ 142.

61. At a fundamental level, “[a] long-running tension in legal matters has always been to determine the appropriate line between what can be achieved by individual morality and when the coercive force of law is required to supplement and incentivize individual moral decisions.” Silecchia, *supra* note 18, at 394.

safety-net to secure their claims.⁶² It is often the case that “[p]ublic rules embody a degree of accountability and transparency that private environmental governance cannot always achieve.”⁶³ Indeed, this has been cited as the reason why “[l]itigation is – the better option for those looking to establish or confirm a legal entitlement or principle.”⁶⁴ Yet, *Laudato Si’* recognizes that “[a]ttempts to resolve all problems through uniform regulations or technical interventions can lead to overlooking the complexities of local problems which demand the active participation of all members of the community.”⁶⁵

Finding the balance between a rule of law that stifles and a rule of law that sustains is no easy task. Nevertheless, both Pope Francis and those engaged in resolving disputes understand that without clear rules, there is no pathway forward in fairness. These rules may be cumbersome to create, enact, and interpret. They also involve the commitment of many levels of authority from the global to the local.⁶⁶ But without rules and guidelines as a stable starting point,⁶⁷ dispute resolution of any type rests on a weak foundation that leaves the vulnerable at greater risk.⁶⁸

62. See *id.* at 376 (“Pope Francis views law as, perhaps, the only force strong enough and comprehensive enough to serve as a bulwark against an economic system that he believes has been destructive of human and natural ecology.”).

63. Light & Orts, *supra* note 2 at 63.

64. Bingham et al., *supra* note 1, at 67. See also Joseph A. Siegel, *Alternative Dispute Resolution in Environmental Cases: A Call for Enhanced Assessment and Greater Use*, 24 PACE ENVTL. L. REV. 187, 204 (2007) (“[T]here may be cases in which it is in a party’s interest to litigate in order to establish legal precedents.”).

65. *Laudato Si’*, *supra* note 17, ¶ 144.

66. See *Protects Creation*, *supra* note 17, ¶ 8 (noting that “the duty of gradually adopting effective environmental measures and policies is incumbent upon all”). This is derived from the classic principle of subsidiarity in which “the necessity of spaces allow[s] the smallest possible political units to make decisions supportive of peace, social justice and the common good.” Hrynkow, *supra* note 18, at 12 (recognizing that national and international laws play a vital back-up role). See also Silecchia, *supra* note 18, at 382 (“While it is certainly true that environmental harms travel and that there is a place for broad initiatives . . . various locations – due to their typography, geology, level of industrialization, degree of economic development, and the presence, *vel non*, of particularly fragile resources – have needs that differ greatly.”); Nagle, *supra* note 18, at 40 (“The claim of subsidiarity is that laws should be made by the government that is closest to the people that can successfully address the problem at hand.”); Tuholske & Foster, *supra* note 2, at 684 (describing subsidiarity as a guide that “embraces the concept that problems should be solved and action should be taken at the lowest level of governance appropriate to the situation”).

67. See, e.g. *Rio Declaration*, *supra* note 21, Principle 11 (“States shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply.”).

68. Although often maligned, an adversarial litigation process is, at times, an essential supplement to the more collegial rule-making process. For discussion of this in the domestic context, see Carol E. Dinkins, *Shall We Fight or Will We Finish: Environmental Dispute Resolution in a Litigious Society*, 14 ELR 10398, 10399 (1984) (“Although litigation is often cumbersome, divisive and costly, it does serve an essential function in the dispute resolution process. Congress at best is often imprecise. Congress creates its laws in a climate of competing interests where conflict is ultimately forged into compromise. The resulting

E. Principle Five: Honesty Is a Critical Virtue for Dispute Resolution

Fifth, *Laudato Si'* points to the importance of honesty in problem solving, saying that “[h]onest debate must be encouraged among experts, while respecting divergent views.”⁶⁹ This would seem to be self-evident as a basic principle of dispute resolution in any field. However, Pope Francis expands upon it in his discussions.

When Pope Francis speaks of honesty, he alludes to two important, intertwined types of honesty. The first is the obvious one: negotiations may not be built on or supported by claims of fact, law, science, or economics that are not true. Very few would argue this point—respecting it, at least in theory, if not in practice. However, there is a different type of honesty that *Laudato Si'* demands—and it is much harder to achieve. It is an honesty that insists that the motives behind arguments and recommendations be assessed thoroughly and thoughtfully, and that political and economic biases not enter into the calculations when assessing accuracy.⁷⁰

products often contain ambiguities, apparently irreconcilable provisions and indefinite standards. Litigation is an important tool to sharpen and hone legal requirements and to define more clearly the respective rights and responsibilities of parties under law.”). See also *id.* (“[L]itigation is often necessary to define the roles, rights, and responsibilities of the various institutions and branches of government regulating environmental matters.”). A similar point was raised in Aileen Carlos, *Perspectives from Practitioners: An Inside Look at Dispute Resolution*, 28 J. ENVTL. L. & LITIG. 287, 289 (2013) (quoting an observation of Elena Gonzalez that “[a]nything that needs a precedent for key parties and stakeholders should go through the adversarial process”(citation omitted)); James Diskint, Note, *Safe and Sound: How ADR Can Protect Aquatic Life and National Security*, 16 CARD. J. CONFLICT RES. 965, 994–95 (2015) (“As a result, a party desirous of establishing a legal precedent for future similar disputes is well advised to litigate the matter.”); Elias, *supra* note 10, at 58 (“Some argue that traditional litigation is preferable to ADR because it generates judicial decisions that involve clear legal rules with precedential effect. . . . If too many cases are settled without any litigation or judicial decisions, it will be difficult for the parties in subsequent cases to accurately determine the relative strength and weakness of their positions and, therefore, to negotiate effectively for a non-judicial solution.”). See also Ryan, *supra* note 10, at 413 (“Many of the courtroom procedures involved in traditional litigation developed as a means of ensuring due process and the protection of parties.”); Todd, *supra* note 32, at 100 (“Litigation has rhetorical purposes, such as bolstering the community campaign by providing a key data point to articulate a message, identify shared interests, and build a coalition, as well as indirectly attacking the agent of harm by engaging additional stakeholders such as regulators. Litigation also gives plaintiffs the opportunity to negotiate and perhaps force a settlement, which can go beyond compensation to include abatement or reduction of the harmful activity and remediation of polluted sites.”).

69. *Laudato Si'*, *supra* note 17, ¶ 61.

70. This can easily become problematic in the environmental context where “[c]ommunications about scientific uncertainty can become polarized and political, with zealous protestations and apocalyptic warnings on one side and self-serving justifications and denials on the other. Both are barriers not only to effective communication and

He says, "Honesty and truth are needed in scientific and political discussions; these should not be limited to the issue of whether or not a particular project is permitted by law."⁷¹ This means that:

[B]road, responsible scientific and social debate needs to take place, one capable of considering all the available information and of *calling things by their name*. It sometimes happens that complete information is not put on the table; a selection is made on the basis of particular interests, be they politico-economic or ideological. This makes it difficult to reach a balanced and prudent judgment on different questions, one which takes into account all the pertinent variables. Discussions are needed in which all those directly or indirectly affected ... can make known their problems and concerns, and have access to adequate and reliable information in order to make decisions for the common good, present and future.⁷²

He begs for "reflection and debate about the conditions required for the life and survival of society, and the honesty needed to question certain models of development, production and consumption."⁷³ Absent this, "[t]he culture of consumerism, which prioritizes short-term gain and private interest, can make it easy to rubber-stamp authorizations or to conceal information."⁷⁴ Many may not necessarily view this as fitting the common definition of dishonesty. Yet, *Laudato Si'* demands this broader view that ensures not only that what is said is scrupulously accurate, but that it is not misleading; that it is not based on willful ignorance or neglect of facts; and that it is honestly updated to reflect newly acquired knowledge, even when inconvenient to one's political or economic interest.

Laudato Si''s warnings about dishonesty in dispute resolution are dire ones. Yet, they are also realistic. Those who are involved in dispute resolution may pride themselves on being beyond reproach when it comes to the honesty of the statements they make. But, it is in the more subtle dishonesty—choosing what to emphasize and what to downplay, deciding who to consult and who

understanding, but also to reasoned discussion and possible intermediate approaches." Traynor, *supra* note 7, at 10163.

71. *Laudato Si'*, *supra* note 17, ¶ 183. See also *Id.* ¶ 91. ("[I]n view of the common good, there is urgent need for politics and economics to enter into a frank dialogue in the service of life, especially human life.").

72. *Id.* ¶ 135 (emphasis added).

73. *Id.* ¶ 138.

74. *Id.* ¶ 184.

to ignore, discerning which sources to cite and which to neglect—that the integrity of dispute resolution can be called into doubt.

F. Principle Six: The Precautionary Principle Must Be Respected as Far As Feasible

Sixth, *Laudato Si'* urges that the precautionary principle be applied in resolving disputes. Disputes must frequently be resolved in a context of great urgency, deep uncertainty, or both. In the environmental arena, in particular:

We do not always know enough about a problem, its causes, and the effects of various solutions to produce the result that we seek. Even if we are able to design and implement a law that achieves our goals, that law may also produce unintended consequences that create distinct (and sometimes worse) problems than we sought to solve.⁷⁵

Pope Francis describes the precautionary principle in a way that should be familiar because he articulates it as lawyers and diplomats do: “If objective information suggests that serious and irreversible damage may result, a project should be halted or modified, even in the absence of indisputable proof.”⁷⁶

This echoes the precautionary principle as stated in the Stockholm Declaration,⁷⁷ the Rio Declaration,⁷⁸ the National Environmental Policy Act, and other legal frameworks as well.⁷⁹

75. Nagle, *supra* note 18, at 45.

76. *Laudato Si'*, *supra* note 17, ¶ 186. Pope Benedict speaks of the related virtue of “prudence, the virtue which tells us what needs to be done today in view of what might happen tomorrow.” *Protect Creation*, *supra* note 17, ¶ 9.

77. See Stockholm Declaration, *supra* note 21, Principle 6; See also Catherine Tinker, *Is a United Nations Convention The Most Appropriate Means to Pursue the Goal of Biological Diversity?: Responsibility for Biological Diversity Conservation Under International Law*, 28 VAND. J. TRANSNAT'L L. 777, 797 (1995) (suggesting that Principle 21 of the Stockholm Declaration may be achieved through observation of the precautionary principle since the Principle provides that “all nations have a responsibility to ensure that activities under their jurisdiction or control do not cause damage to the environment of other states or to areas beyond national jurisdiction[.]” exemplifying opportunity for nations to act with caution before hurrying to possibilities of irreversible damage).

78. See *Rio Declaration*, *supra* note 21, Principle 15 (“[T]he precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.”). See also Robert V. Percival, *The North American Symposium on the Judiciary and Environmental Law: Who's Afraid of the Precautionary Principle?*, 23 PACE ENVTL. L. REV. 21 (2006). Professor Percival explains that:

[T]he most widely embraced statement of the [precautionary principle] is that contained in the Rio Declaration, which was endorsed by nearly every country in the world. Principle 15 of the Rio Declaration states that “where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a

Pope Francis advocates this as a principle to guide decision making when lack of information or confidence can paralyze decision making. *Laudato Si'* calls for comprehensive risk management made at the time before harm is done:

Environmental impact assessment should not come after the drawing up of a business proposition or the proposal of a particular policy, plan, or programme. It should be part of the process from the beginning, and be carried out in a way which is interdisciplinary, transparent and free of all economic or political pressure. It should be linked to a study of working conditions and possible effects on people's physical and mental health, on the local economy and on public safety. Economic returns can thus be forecast more realistically, taking into account potential scenarios and the eventual need for further investment to correct possible undesired effects.⁸⁰

This emphasizes not only the importance of the precautionary principle, but also the importance of its application at a meaningful point in time.

As a corollary to the precautionary principle, *Laudato Si'* also teaches that "when significant new information comes to light, a reassessment should be made, with the involvement of all interested parties."⁸¹ It is easy to see how recklessness can characterize dispute resolution, because it can be easy to discount possible harms that are not guaranteed to take place. It is also easy to see how fear can paralyze decision-making and the resolution of disputes can be delayed. The precautionary principle keeps the focus on serious and irreversible damage, and demands that objective information, which is consistently and honestly updated drive decision-making.

reason for postponing cost-effective measures to prevent environmental degradation." *Id.* at 28. (quoting *Rio Declaration*). Thus, "if there are threats of significant harm, scientific uncertainty should not serve as an obstacle to taking cost-effective preventive measures." *Id.*

79. See, e.g., Tuholske & Foster, *supra* note 2, at 677 ("[T]he precautionary principle is thoroughly embedded in European Union environmental law, and while not uniformly part of U.S. environmental law, it influences international environmental decisions in a myriad of ways.").

80. *Laudato Si'*, *supra* note 17, ¶ 183. Similarly, Pope Francis continues:

In any discussion about a proposed venture, a number of questions need to be asked in order to discern whether or not it will contribute to genuine integral development. What will it accomplish? Why? Where? When? How? For whom? What are the risks? What are the costs? Who will pay these costs and how?

Id. ¶ 185.

81. *Id.* ¶ 187.

The uncertainty in the environmental law arena is a factor that has both objective and subjective elements to it that may complicate application of the precautionary principle:

[T]here are human considerations and frailties. . . . [W]e use shortcuts to make decisions. We are not good judges of probability. We are not rational utility maximizers. We may not perceive or appreciate probability distributions. We routinely overestimate some outcomes We routinely underestimate some outcomes We may be more likely to misjudge probability if we are far removed from risk or when our individual behavior (as distinguished from collective behavior) may have only an infinitesimal effect. In addition, we have cultural biases that may tilt our views in one direction or another.⁸²

In spite of these biases, which can so often influence the ways in which uncertainties are addressed, Pope Francis urges reasonable and respectful caution in such moments of doubt.

G. Principle Seven: Science in All Fields Warrants Respect

Seventh, *Laudato Si'* expresses a great deal of respect for the role of science, properly and broadly understood, in environmental dispute resolution. It is a sad commentary on dispute resolution today that lawyers, scientists, economists, and ethicists all seem, at times, to speak different languages. Without care and respect, this can lead to discounting the scientific expertise of those outside one's own narrow sphere.

By definition, any expert who evaluates an environmental problem has an understanding of the situation that is limited by his or her training and relatively narrow area of expertise. It is wise, well and good to tread very carefully in any area outside one's own expertise. Nevertheless, this does not mean that experts in diverse fields should be so siloed from each other. *Laudato Si'* pleads for the integration of scientific inquiry of all types, urging a broad view of such scientific inquiry that embraces the social sciences as well:

[F]ragmentation of knowledge proves helpful for concrete applications, and yet it often leads to a loss of appreciation for the whole, for the relationships between things, and for the broader horizon, which then becomes irrelevant. This

82. Traynor, *supra* note 7, at 10161–62.

very fact makes it hard to find adequate ways of solving the more complex problems of today's world . . . ; these problems cannot be dealt with from a single perspective or from a single set of interests. A science which would offer solutions to the great issues would necessarily have to take into account the data generated by other fields of knowledge, including philosophy and social ethics; but this is a difficult habit to acquire today.⁸³

He warns as well that "fragmentation of knowledge and the isolation of bits of information can actually become a form of ignorance, unless they are integrated into a broader vision of reality."⁸⁴ This principle is closely linked to Pope Francis' plea that environmental issues be defined very broadly.

One of the dangers that an encyclical like *Laudato Si'* may face is the critique that it displaces scientific inquiry with theology. However, what Pope Francis hopes to make clear throughout this encyclical is that there is a role for all of the sciences to play in addressing the most significant disputes, conflicts and challenges of modern life. Conflict resolution will require scientific expertise of all types.⁸⁵ This is not efficient, quick or inexpensive to obtain. Yet, without it, the decisions reached will be ideological, political and incapable of resolving disputes in a way that accurately frames the priorities to be advanced.

83. *Laudato Si'*, *supra* note 17, ¶ 110. Pope Francis also warns about the harms of having too much data at our disposal:

[W]hen media and the digital world become omnipresent, their influence can stop people from learning how to live wisely, to think deeply and to love generously. In this context, the great sages of the past run the risk of going unheard amid the noise and distractions of an information overload. . . . True wisdom, as the fruit of self-examination, dialogue and generous encounter between persons, is not acquired by a mere accumulation of data which eventually leads to overload and confusion, a sort of mental pollution.

Id.

84. *Id.* ¶ 138. For reflection on the limitations of science, see *id.* ¶ 164 ("[T]he same ingenuity which has brought about enormous technological progress has so far proved incapable of finding effective ways of dealing with grave environmental and social problems worldwide.").

85. Forty-five years prior to *Laudato Si'*, a similar plea for the embrace of a broad scientific inquiry was made in the National Environmental Policy Act which urged that federal agencies "utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision-making which may have an impact on man's environment[.]" NEPA, *supra* note 21, § 4332 (A).

H. Principle Eight: Problems Rather Than Symptoms Must Be Addressed

Eighth, *Laudato Si'* hopes that the focus of environmental dispute resolution will remain on solving problems and not merely addressing symptoms of those problems. Very often, and by necessity, dispute resolution focuses on symptoms. Parties enter into disputes and rights must be adjudicated because there is a specific problem in the regulatory regime, in the allocation of rights, or in the justice of burden allocation.

Pope Francis says, “[W]e look for solutions not only in technology but in a change of humanity; otherwise we would be dealing merely with symptoms”⁸⁶ because “[m]erely technical solutions run the risk of addressing symptoms and not the more serious underlying problems.”⁸⁷ Indeed, “[t]o seek only a technical remedy to each environmental problem which comes up is to separate what is in reality interconnected and to mask the true and deepest problems of the global system.”⁸⁸

In some ways, this can be discouraging. There is a lot that is good to be said for alleviation of symptoms. Often, that is necessary and good in a world in which disputes must be resolved quickly, efficiently and fairly. However, *Laudato Si'* does inject a bit of uneasiness into this equation by suggesting that, perhaps, goals should be set higher. Otherwise, the same symptoms will continually recur without any hope of a permanent resolution of the underlying problem.

Laudato Si' offers some hope that this can happen. For example, in the context of investments in sustainability, Pope Francis opines that “[e]fforts to promote a sustainable use of natural resources are not a waste of money, but rather an investment capable of providing other economic benefits in the medium term.”⁸⁹ This suggests that solutions to specific problems should be addressed with an eye to the long- and medium-term so that they do not merely resolve or mitigate the immediate crisis, but can lay the groundwork for a more systematic resolution of the underlying problem. In practical terms, this can be difficult to navigate—particularly, when it may delay results for those currently embroiled in an active dispute or suffering present

86. *Laudato Si'*, *supra* note 17, ¶ 9.

87. *Id.* ¶ 144.

88. *Id.* ¶ 111. *See also id.* ¶ 54 (“Consequently, the most one can expect is superficial rhetoric, sporadic acts of philanthropy and perfunctory expressions of concern for the environment, whereas any genuine attempt by groups within society to introduce change is viewed as a nuisance based on romantic illusions or an obstacle to be circumvented.”).

89. *Id.* ¶ 191.

harms. Yet, it is also the case that short-term symptom solving can make long-term solutions more elusive. It can also mask long-term problems, making them appear less noticeable and more tolerable than they, in fact, are.

I. Principle Nine: Moral Transformation Is Critically Important

Ninth, *Laudato Si'* proposes that environmental dispute resolution requires a fundamental moral transformation⁹⁰ or personal conversion.⁹¹ This should hardly be surprising in an encyclical that comes from a religious leader. Pope Francis believes that there are moral guides that must direct the resolution of disputes, since the root of much evil and discord is, as he puts it, “the notion that there are no indisputable truths to guide our lives, and hence human freedom is limitless.”⁹² The contours of this moral transformation are complex, and *Laudato Si'* presents some of the guideposts for it, as does the wealth of tradition in moral formation. However, just as law proposes some fundamental minimums that should guide dispute resolution, moral transformation points to something, perhaps, more ambitious and binding. It does not satisfy itself with merely setting minimums but calls all to a higher and more comprehensive sense of what is right, just and good.

As Pope Francis warns, “[E]ven the best mechanisms can break down when there are no worthy goals and values, or a genuine and profound humanism to serve as the basis of a noble and generous society.”⁹³ This is a call to a more modest and sober lifestyle, lived with generosity.⁹⁴ Moral transformation gets little attention in

90. As with other principles, this reference to the moral transformation needed is not unique to Pope Francis. It builds on the observations of his immediate predecessors. See, e.g., *Paul VI Message*, *supra* note 17, ¶ 6 (“[A]ll technical measures would remain ineffectual if they were not accompanied by an awareness of the necessity for a radical change in mentality.”).

91. See e.g., Silecchia, *supra* note 18, at 372 (“*Laudato Si'* also includes a profound, nearly desperate plea for personal conversion, arguing that this is the only way to foster enduring and proper relationships between God, each other, and creation . . .”); Raven, *supra* note 17, at 250 (“[M]any of us have come to believe that a moral or spiritual revolution will be necessary if we are to keep our civilization intact.”); Green, *supra* note 19, ¶ 5 (observing that in *Laudato Si'*, Pope Francis “is offering the world a moral vocabulary for talking about climate change, shifting global attention from the macro solutions of public policy summits to the personal ethics of environmental stewardship”).

92. *Laudato Si'*, *supra* note 17, ¶ 6.

93. *Id.* ¶ 181.

94. See also *Peace With God the Creator*, *supra* note 17, ¶ 8 (“Today, the dramatic threat of ecological breakdown is teaching us the extent to which greed and selfishness – both individual and collective – are contrary to the order of creation, an order which is characterized by mutual interdependence.”). As Pope John Paul II explains:

Modern society will find no solution to the ecological problem *unless it takes a serious look at its lifestyle*. . . . [T]he seriousness of the ecological issue lays bare the depth of man’s moral crises. If an appreciation of the value of the human

discussions of legal transformation as it is hard to mandate and harder to achieve consensus about. Yet, in the context of resolving disputes as to how to exercise responsible stewardship and care for creation, Pope Francis argues that this is essential.⁹⁵

J. Principle Ten: Holy Love Is an Indispensable Motivation

Tenth, and finally, *Laudato Si'* expresses the hope that a holy love of God and others will motivate our dispute resolution.⁹⁶ Pope Francis warns that “communion with the rest of nature cannot be real if our hearts lack tenderness, compassion and concern for our fellow human beings.”⁹⁷ In spite of a pessimistic analysis in *Laudato Si'*, Pope Francis holds out hope that “[f]or all our limitations, gestures of generosity, solidarity and care cannot but well up within us, since we were made for love.”⁹⁸

Love is not frequently discussed—at least not openly—in legal analysis. It is hard to quantify, identify, or generate in a meaningful way. Even the best of legal regimes cannot mandate it. Yet, *Laudato Si'* is not primarily a legal document. In the end, it is “primarily a work of moral theology focusing on the human relationships to God and nature. Its politics flow from its ethics”⁹⁹ *Laudato Si'* urges pursuit of holy love because all

person and of human life is lacking, we will also lose interest in others and in the earth itself. Simplicity, moderation and discipline, as well as a spirit of sacrifice, must become a part of everyday life, lest all suffer the negative consequences of the careless habits of a few.

Id. ¶ 13 (emphasis added). See also *Protect Creation*, *supra* note 17, ¶ 5 (“Humanity needs a profound cultural renewal; it needs to rediscover those values which can serve as the solid basis for building a brighter future for all. Our present crises—be they economic, food-related, environmental or social – are ultimately also moral crises, and all of them are interrelated. . . . [T]hey call for a lifestyle marked by sobriety and solidarity” (emphasis added)).

95. See also Montgomery, *supra* note 18 (describing Pope Francis’ emphasis on “spiritual transformation”); Jamieson, *supra* note 18, at 125 (“The sharp distinction often drawn between public policy and private morality is a false one. Values inform our policy goals”); Monast et al., *supra* note 18, at 142 (“Pope Francis emphasizes the importance of individual responsibility and rejects overreliance on technology and markets as solutions to the world’s ills. . . . Numerous provisions [reject technocratic decision-making and overreliance on technological advancements in place of taking personal responsibility for one’s actions.”); Edwards & Russell, *supra* note 23, at 342 (“The Pope frames the debate not in terms of a technical problem, but in terms of a moral challenge.”).

96. Pope Benedict XVI suggested that this love could be a powerful motivation. See *Protect Creation*, *supra* note 17, ¶ 2 (“[S]eeing creation as God’s gift to humanity helps us understand our vocation and worth as human beings.”).

97. *Laudato Si'*, *supra* note 17, ¶ 91.

98. *Id.* ¶ 58. See also *id.* ¶ 66 (“[H]uman life is grounded in three fundamental and closely intertwined relationships: with God, with our neighbor and with the earth itself. According to the Bible, these three vital relationships have been broken, both outwardly and within us. This rupture is sin.”); Bodansaky, *supra* note 18, at 130 (commenting that “the encyclical is ultimately concerned not just with the environment but with the human soul”).

99. Jamieson, *supra* note 18, at 122.

“need to be encouraged to be ever open to God’s grace and to draw constantly from their deepest convictions about love, justice and peace.”¹⁰⁰ With this love—for Creator, creation, and those who share “our common home” today and tomorrow—just and peaceful dispute resolution is still not easy. Without it, *Laudato Si’* proposes, it is impossible.

III. CONCLUSION

Lest this seem like an overly ambitious and frighteningly impossible set of goals for environmental dispute resolution, Pope Francis does hold out hope that “[h]uman beings, while capable of the worst, are also capable of rising above themselves, choosing again what is good, and making a new start, despite their mental and social conditioning.”¹⁰¹ This suggests, then, that in all environmental disputes being waged today, and in the days to come, there is hope for choosing the good. Too often, the scope of global disputes, the complexity of technically ambitious problems, and the seemingly intractable nature of environmental disputes can lead to discouragement. However, the final challenge from *Laudato Si’* is one full of hope and promise. Pope Francis says, “All it takes is one good person to restore hope!”¹⁰² When the challenge of dispute resolution seems to be too great, the call to be that “one person” is even more compelling.

100. *Laudato Si’*, *supra* note 17, ¶ 200. See also Raven, *supra* note 17, at 249 (“In our hope for world sustainability is a shared sense of hope and a love for one another that would result in equality and mutual respect.”).

101. *Laudato Si’*, *supra* note 17, ¶ 205.

102. *Id.* ¶ 71.