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UNDERSTANDING COMPLIANCE WITH INTERNATIONAL ENVIRONMENTAL AGREEMENTS: THE BAKER'S DOZEN MYTHS

*Edith Brown Weiss*

Until recently, little attention has been given to whether states and other actors comply with the agreements they negotiate. The assumption has been that most states comply with most international law most of the time. There is, however, strong reason to question this assumption. As was apparent in the *Breard* case,¹ which involved implementation and compliance with the consular convention, states do not necessarily comply with the international agreements they join, particularly when they involve implementation at the provincial/state and local levels.

Since 1972, the number of international legal instruments concerning the environment has risen dramatically. As of December 1998, there were more than 1000 legal instruments focusing on the environment or having one or more important provisions concerned with environmental issues; most of these instruments have been negotiated since 1972.² There has also been a sharp increase in the number of nonbinding legal instruments (or soft law) concerned with the environment.


² These include multilateral, bilateral, and important nonbinding legal instruments. See EDITH BROWN WEISS ET AL., INTERNATIONAL ENVIRONMENTAL LAW: BASIC INSTRUMENTS AND REFERENCES 8-144, 160-66 (1992) [hereinafter BASIC VOLUME]; EDITH BROWN WEISS, ET AL., II INTERNATIONAL ENVIRONMENTAL LAW: BASIC INSTRUMENTS AND REFERENCES (SUPP. 1999) [hereinafter 1999 SUPPLEMENT].
International environmental agreements are viewed as an important means for influencing the behavior of countries and other actors such as subnational governmental units, international organizations, multinational corporations and national industries, nongovernmental organizations, transnational coalitions, and individuals. Negotiating and implementing the international agreements is time-consuming and costly. While the international community has become more efficient at negotiating the agreements, it still often requires more time to put them into effect than to negotiate them. Some agreements that are negotiated never go into effect.

Compliance with international agreements has long been neglected as an important issue in international law, except for compliance with agreements curtailing the use of force. In international environmental law, this occurs in part because political capital comes from negotiating new agreements, not from complying with those agreements already negotiated. This also occurs for other reasons: it is often hard to measure compliance; effectiveness of the agreement does not necessarily correlate with compliance of the agreement; and resources to promote compliance have often been minimal.

This article presents the Baker's Dozen Myths about compliance. It is based on a large international, multidisciplinary research program that studied national compliance by eight

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6. See generally ENGAGING COUNTRIES, supra note 5.
countries and the European Union with five agreements over the lifetime of the agreements.\(^7\)

The myths are set in an international legal system that is in a process of transition from a state-centered, hierarchical, and static structure to one that consists of networks of actors and is non-hierarchical and dynamic. Moreover, the framework for compliance has changed from one that is hierarchical and “top down” to one that involves dynamic interactions between states and non-state actors and international and domestic constituencies across state lines. These points are developed below.

I. THE INTERNATIONAL LEGAL SYSTEM

The Peace of Westphalia in 1648 established a new legal order based on sovereign, independent, territorially defined states, each striving to maintain political independence and territorial integrity.\(^8\) The order was hierarchical since states controlled everything within their jurisdiction, and it was based on equality among sovereign states. The resulting system was European and reflected the prevailing laissez faire philosophy in which all states were equally free to pursue their own interests, whatever their underlying economic or political differences. As sovereign states emerged across the world, the system of international law based thereon also spread. International law was aptly defined as the “body of rules and principles of action” binding upon states in their relations with each other.\(^9\)

The classical view of international law focused exclusively on states and binding legal instruments to provide solutions to problems that were clearly defined. It assumed that states complied with their international obligations. There was a

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7. See id. (assessing compliance of eight countries, Brazil, Cameroon, China, Hungary, India, Japan, the Soviet Union/Russian Federation, the United States, and the European Union, with five agreements: the World Heritage Convention; the Convention on International Trade in Endangered Species of Wild Fauna and Flora; the 1983 International Tropical Timber Agreement; the London Convention of 1972; and the Montreal Protocol on Substances that Deplete the Ozone Layer).


sharp line between international and domestic law, and between public and private international law. Change took place slowly. But the international legal system that has been emerging for the new millennium is markedly different. While states continue as important actors, many other actors contribute to developing, interpreting, implementing, and complying with international law. This applies to all areas of international law, not only environmental law. The system is non-hierarchical in that there are transnational networks of actors, including states that interact with each other. The sharp lines between public and private international law have blurred. The divide between international and domestic international law is fading, and the preference for binding instruments over voluntary or legally nonbinding norms is receding. The system is changing rapidly. Major developments such as private sector environmental codes and ISO 14000 standards have emerged since 1992.

II. UNDERSTANDING COMPLIANCE

The traditional framework for understanding compliance is stylized, hierarchical, and static. It assumes that states accept international agreements only when their governments regard them to be in their interest. Because of this, states generally comply with their obligations. If they do not, dispute resolution is available and sanctions will be used to deter violations and to punish offenders.


11. Trade associations, such as the Chemical Manufacturers Association, have developed environmental codes to guide members' management practices. For a discussion, see Michael S. Baram, Multinational Corporations, Private Codes, and Technology Transfer for Sustainable Development, 24 ENVTL. L. 33 (1994). In addition to industry specific codes, a series of voluntary standards for environmental management systems has been promulgated by the International Standards Organization. See, e.g., TOM TIBOR & IRA FELDMAN, ISO 14000: A GUIDE TO THE NEW ENVIRONMENTAL MANagements STANDARDS (1996).

The reality of compliance differs markedly. States join agreements out of self interest for many reasons. These reasons affect their intention and capacity to comply. States may join to exercise leadership in addressing a problem. They may join because others are doing so, because states with leverage over them are pressing them to do join, or because other states offer blandishments to induce them. Sometimes states join because the agreements do not require changes in their present actions, or they may join with no intention of complying or lacking the capacity to comply.

The traditional view assumes that national governments negotiate international agreements, which are made effective through implementing legislation or regulations nationally, and if necessary, locally. This view is hierarchical because it moves from the international agreement to national regulations to local regulations and does not account for the nongovernmental actors, industry associations, and individuals that operate across national lines and among different levels of government. This approach is also static because it assumes that a snapshot at a given point in time accurately captures compliance with the agreement.

A realistic framework for understanding compliance is non-hierarchical, includes many actors other than states, and regards compliance as a process that changes over time. International agreements evolve over time, as do the national implementing measures. States are the primary actors, but other actors are also essential, including intergovernmental organizations, secretariats to the agreements, nongovernmental organizations, private industrial and commercial organizations, and individuals. All of these actors interact dynamically in complex ways that change over time and that vary among agreements and within countries.

III. THE BAKER'S DOZEN MYTHS ABOUT COMPLIANCE

Conventional wisdom, at least among legal scholars, has been that most countries comply with most international law most of the time, although to be sure, those in the Realist School

13. See, e.g., Louis Henkin, How Nations Behave: Law and Foreign Policy 47-
question the relevance of international law at all. The conventional wisdom comprises thirteen assumptions, which upon closer examination, turn out either to be myths or to apply only in certain carefully prescribed conditions. These assumptions are labeled the Baker's Dozen Myths. They reflect the empirical evidence from the study of five agreements and eight countries plus the European Union referenced earlier, as well as other learning in international environmental law and more generally in public international law.

Myth Number One: All countries comply fully with their international commitments, or, countries never comply with their international commitments.

This myth assumes that countries comply fully, or at least substantially, with the international agreements they join. They would not join the agreements were it otherwise. But the reality is that no country complies fully with all its international legal obligations. At best, countries substantially comply with their international commitments. They may comply fully with certain obligations in a treaty, such as reporting on activities by a certain date or reducing emissions of ozone depleting substances by a given date, but they may not comply fully with other obligations, such as providing financial assistance in the amount agreed upon or on a timely basis. Certain developing countries may not comply with a particular agreement because the relevant ministry may not even be aware that the country is a party to the agreement. Moreover, a country may lack the capacity to comply with particular provisions, even if it wants to do so.

50 (2d ed. 1979); see also Kal Raustiala & David G. Victor, Conclusions, in THE IMPLEMENTATION AND EFFECTIVENESS OF INTERNATIONAL ENVIRONMENTAL COMMITMENTS: THEORY AND PRACTICE 659, 661 (David G. Victor et al., eds., 1998) (arguing that the studies on international environmental law in the book confirm that almost all countries comply with almost all their binding international commitments all the time).


15. See supra note 7 and accompanying text.


17. Capacity to comply with international obligations depends on available fund-
The parallel myth to full compliance is that states do not comply at all with their international obligations. Because there is no international court or international police to enforce international obligations, people should not expect states to comply. However, empirical evidence refutes this myth. The international empirical study of national compliance found that for the eight countries and the European Union, each country had taken some steps toward compliance with each of the five agreements, although the extent of compliance varied significantly among countries and among the agreements for the same country. Moreover, the study indicated that there is a general trend toward increased compliance by states the longer the agreement is in effect.

This should not be surprising, for many rules that affect people's daily lives are complied with locally even when there is no realistic expectation that police enforcement or court action will result from a violation. Consider the individual who approaches a red light or a stop sign late at night and sees no car coming in any direction. Some people will nonetheless stop at the intersection before proceeding. Many reasons may press for compliance: the desire for similar actions by others; the need for predictable behavior at stop signs or red lights no matter what the hour; the fear that there may be a car that cannot be seen; or of course, the fear that police may be monitoring the intersection.

The myth that states fully comply with international agreements may have its root in the analogy to compliance in domestic law. People assume that citizens and most private actors such as companies, banks, corporations, and nongovernmental organizations generally comply with domestic law. If they do not, courts are available to enforce compliance with the law. But the reality is that citizens and other private actors do not necessarily comply fully with national, state (province), or local

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18. See generally Jacobson & Brown Weiss, supra note 16.
laws. Studies of national compliance with environmental laws in the United States and in the United Kingdom indicate that compliance is often less than desired, indeed, compliance is even weak. By analogy, states can be expected to have problems in fully complying with their international commitments, most of which rely on domestic legislation and regulations to make them enforceable within countries.

Myth Number Two: Implementation, compliance, enforcement, and effectiveness are interchangeable terms that have the same meaning.

The terms implementation, compliance, enforcement, and effectiveness are frequently used interchangeably in discourse. It is assumed that they refer to similar behavior or produce similar effects. For example, one may speak of complying with an international agreement and mean both that the agreement is enforced and that the agreement is effective.

In reality the terms incorporate different concepts and have different meanings. "Implementation" of international agreements refers to the actions taken to give effect to the domestic obligations of the agreement: the adoption of legislation or regulations, judicial decrees, or other actions. Most treaties, particularly in the environmental field, are not self-implementing agreements, and require domestic legislation or executive regulations to become effective law domestically.

International legal studies have sometimes tried to assess enforcement of international agreements solely by (1) focusing on whether domestic implementing legislation or regulations are in place, and (2) scrutinizing whether these domestic measures conform to the obligatory language in the agreement. 


The concept of compliance includes implementation but is generally broader. Compliance focuses not only on whether implementing measures are in effect, but also on whether there is compliance with the implementing actions. Compliance also measures the degree to which the actors whose behavior is targeted by the agreement, whether they be local governmental units, corporations, organizations, or individuals, conform to the implementing measures and obligations. The concept is much broader than solely that of enforcement, because it draws attention to ways of bringing countries into compliance with their obligations, not just on how to handle violations after they occur. In this sense, compliance strategies are intended to prevent noncompliance and address specific instances of noncompliance.

In evaluating compliance, it is useful to distinguish between procedural compliance, substantive compliance, and compliance with the spirit of the agreement. Procedural compliance refers to whether states have filed reports, established particular governmental authorities, or otherwise followed the procedural obligations in the agreement. Substantive compliance refers to compliance with obligations such as those contained in targets and timetables for limiting emissions of particular pollutants, obligations to conserve particular sites, and obligations to provide technical and financial assistance. A country may be in compliance with its procedural obligations but not with its substantive obligations or vice versa. Countries may comply with substantive obligations because the required actions were in place before they even entered into the agreement, they may not take the necessary additional steps to comply with procedural duties, such as filing timely annual reports on performance under the international agreement.

Countries may be in compliance with the specific obligations in the agreement but not with the spirit of the agreement. For example, the former Soviet Union's military dumping of high-level radioactive waste into the oceans technically may not have


22. See Jacobson & Brown Weiss, supra note 20, at 83.
violated the provision of the London Convention of 1972\textsuperscript{23} on marine dumping, but it violated the spirit of the agreement.\textsuperscript{24} If an industrialized country significantly increases emission of greenhouse gases after becoming a party to the Kyoto Protocol but before the stated period for achieving the targeted reductions, it may not have technically violated the Protocol, but it would arguably have violated its spirit.\textsuperscript{25}

"Enforcement" refers to the actions taken once violations occur. It is customarily associated with the availability of formal dispute settlement procedures and with penalties, sanctions, or other coercive measures to induce compliance with obligations. Enforcement is part of the compliance process.

"Effectiveness" refers to whether the purposes of the agreement are being achieved, and more generally, whether the agreement as designed is effective in addressing the problem for which it was negotiated. Effectiveness is not necessarily correlated with compliance.

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) may be evaluated as to whether it is effective in controlling international trade in en-


This Convention shall not apply to those vessels and aircraft entitled to sovereign immunity under international law. However, each Party shall ensure by the adoption of appropriate measures that such vessels and aircraft owned or operated by it act in a manner consistent with the object and purpose of this Convention, and shall inform the Organization accordingly.

London Convention of 1972, supra note 23, 26 U.S.T. at 2410, 1046 U.N.T.S. at 142. The first sentence of this provision allows for technical exceptions while the second sentence seeks compliance with the spirit of the Convention.

dangered species.\textsuperscript{25} This evaluation involves asking whether those who export and import endangered species obtain the required permits, whether the permits provide the required information and are free from fraud, whether parties have designated scientific authorities to manage international trade, whether parties file timely and complete reports of their trade to facilitate monitoring, and related questions.\textsuperscript{27} The CITES has been criticized for its effectiveness in controlling international trade in endangered species.\textsuperscript{28}

A second level of query addresses whether the CITES, even if fully complied with, is effective in conserving biological diversity, which is the underlying purpose of the agreement. This inquiry evaluates the effectiveness of controlling international trade in identified species as a measure to protect the species. Under the CITES, for example, a species can be consumed domestically and even eliminated domestically without violating the agreement. This has led some critics to focus on the Convention on Biological Diversity\textsuperscript{29} and agreements that conserve habitats as potentially more effective instruments for conserving species diversity.\textsuperscript{30}

While compliance is presumed to promote effectiveness and empirical data suggests this linkage, the two can also be detached. For example, a country could limit the destruction of endangered plant species by land use controls and provide inducements to its people to protect the species by developing tourism or marketable products from the species, but not be in compliance with the CITES controlling trade across national borders. As noted above, the converse can also exist: a country could be in compliance with trade controls under the CITES but

\textsuperscript{25} See CITES, supra note 21, 27 U.S.T. at 1087, 993 U.N.T.S. at 243; Brown Weiss, supra note 24, at 105-16 (discussing the evolution of CITES).

\textsuperscript{27} See generally ENGAGING COUNTRIES, supra note 5.


\textsuperscript{29} Convention on Biological Diversity, adopted May 22, 1992, 31 I.L.M. 818.

promote the elimination of the species by actions within the country.

**Myth Number Three: Binding agreements are always preferable to nonbinding ones because countries comply with binding agreements better than they comply with nonbinding agreements.**

ments have emerged; in the last, countries have opted thus far for nonbinding measures.

Nonbinding instruments are now prominent in many fields of international law such as those addressing the environment, human rights, labor, finance, and to a lesser extent, arms control and trade. The United Nations Environment Program (UNEP) London Guidelines for the Exchange of Information on Chemicals in International Trade, the Food and Agriculture Organization of the United Nations (FAO) International Code of Conduct on the Distribution and Use of Pesticides (the Pesticides Code), or the many guidelines, principles and recommended practices of UNEP or the Organization for Economic Cooperation and Development (OECD) are important or nonbinding or incompletely binding sources of law.

Nonbinding legal instruments set forth norms that states and other actors may observe even though they are not strictly required to do so. They create expectations that may shape behavior and avoid disputes. Soft law takes many forms such as declarations, charters, guidelines, resolutions, codes of conduct, and decisions of international bodies (both general and


38. The International Labor Organization, the European Union, the Organization for Economic Cooperation and Development (OECD), and private companies have adopted a number of important nonbinding labor agreements. The International Labor Organization, in particular, has an elaborate system of nonbinding agreements including Formal Declarations of Principles, Recommendations, and Codes of Practice and Guidelines. See, e.g., Virginia Leary, Nonbinding Accords in the Field of Labor, in INTERNATIONAL COMPLIANCE WITH NONBINDING ACCORDS 247 (Edith Brown Weiss ed., 1997).


specific). The term "soft law" is also used to refer to provisions in binding agreements that are hortatory rather than obligato-
ry.\footnote{41}

States negotiate soft law instruments for many reasons. Of-
ten, they are a first step towards the negotiation of binding
agreements. For example, the London Guidelines and the Pesti-
cides Code led to the successful negotiation of a binding agree-
ment on prior informed consent to address the same issues as
the nonbinding instruments.\footnote{42} The Convention for the
Application of Prior Informed Consent Procedure for Certain
Hazardous Chemicals and Pesticides in International Trade
(PIC Convention) reflects experience with the voluntary require-
ments.\footnote{43} In other cases, the soft law instrument is a means of
gathering consensus on an issue before embarking on formal
treaty negotiations. For example, the United Nations Resolution
on the seabed as the "Common Heritage of Mankind" was
adopted before the Law of the Sea negotiations began.\footnote{44}

Nonbinding instruments provide flexibility to adapt to chang-
ing conditions. States may prefer nonbinding instruments be-
cause they do not have to ensure that domestic legislation fully
complies, particularly where necessary legislative changes might
not pass Congress or Parliament. In some cases, states may be
reluctant to commit the resources needed to implement a bind-
ing agreement. Soft law is particularly useful when it is diffi-
cult to reach an agreement on precise, binding legal obligations.
Agreement on a soft law instrument is usually easier to
achieve, the transaction costs are lower, and the opportunity to
set forth detailed strategies that can be altered easily is great-
er. Particularly with the rise of new environmental problems,

\footnote{41. See Paul C. Szasz, \textit{International Norm-Making, in Environmental Change and International Law} 41, 70 (Edith Brown Weiss ed., 1993).}


\footnote{43. See PIC Convention, supra note 42.}

many of which involve thousands of actors globally, soft law instruments that send important signals about how countries are expected to behave will continue to be useful.  

There is a disciplinary difference about assumptions regarding compliance with nonbinding instruments. Lawyers generally assume that compliance will be better with a binding instrument, while political scientists are not convinced that the binding nature of the obligation necessarily affects whether countries comply with it. The binding nature of the obligation, however, may reflect other factors so that the patterns of compliance with binding and nonbinding instruments may differ.  

Lawyers frequently point to the remedies available to enforce binding agreements, such as judicial and other methods of adjudication, as an important distinguishing characteristic of binding agreements that affects compliance. But, there are other strategies available to encourage compliance that could apply to binding as well as nonbinding instruments. These strategies include various financial, diplomatic, and other incentives or blandishments, as well as coercive measures. Moreover, the institutional structure available to assist countries and nongovernmental actors in monitoring compliance may be as important as whether the instruments are binding. For example, the success in securing compliance with the human rights provisions of the nonbinding Helsinki Final Act was due in good part to the lengthy review conference among Conference on Security and Cooperation in Europe (CSCE) members. The members examined compliance with the provisions in detail and evaluated the pressures exerted by governments and by nongovernmental organizations. Binding agreements, however, may provide for

45. For a discussion of the value of soft law instruments, see Edith Brown Weiss, Introduction, in INTERNATIONAL COMPLIANCE WITH NONBINDING ACCORDS, supra note 37, at 1.


formal dispute settlement and may require the parties to engage in other procedures intended to enhance accountability. This, in turn, may increase compliance.

The research on domestic compliance with informal social norms and with private agreements is relevant. In *Order Without Law*, Robert Ellickson details how cattle ranchers developed and enforced norms of behavior among themselves without relying upon the state. In contract law, scholars in the law and society movement in the United States note that the relational setting and the desire to maintain an ongoing relationship are more conducive to securing compliance than the existence of contract law. The research on informal social norms and on contract law suggests that under some circumstances nonbinding instruments may be complied with as well as binding ones. Judicial remedies associated with binding agreements sometimes may be marginal to compliance, at least for some agreements and some countries.

*Myth Number Four: Secretariats for international agreements are like puppets on strings that governments control. They have little influence; their activities are minimal.*

After treaties are concluded, secretariats usually need to be designated to handle administrative arrangements related to treaty implementation. Sometimes a unit in an existing international institution is designated. For example, officials in the International Maritime Organization serve as the secretariat for the London Convention of 1972. Until 1992, officials in the United Nations Educational Scientific, and Cultural Organization (UNESCO) served as the secretariat for the World Heritage Centre; there was no separate secretariat unit. For most international environmental agreements, separate secretariats are

50. See id. at 1-4.
52. See London Convention of 1972, supra note 23; Brown Weiss, supra note 24, at 130.
established to help administer the treaty. Many of these separate secretariats are under the auspices of UNEP and are relatively small organizations. Secretariats range in size from those having several personnel to those having a staff of about twenty. Their budgets range from less than a million U.S. dollars to three million U.S. dollars, the latter figure representing the 1996 annual budget of the International Tropical Timber Agreement secretariat in Yokohama, Japan.54

The perception is that governments control the secretariats and keep them on a tight leash, and that secretariats thus have little independent influence in shaping the development and implementation of the treaty. The size of most secretariats and their resources reinforces this perception. Government secondment of personnel to secretariats also reinforces the impression of governmental control. In international law, the secretariats are responsible to the parties for the administration of the agreement. The meetings of the parties and subcommittee meetings govern the secretariats' activities.

The reality, however, is that secretariats can be influential bodies in treaty management. They carry on a wide range of activities and maintain contacts with all the actors in the international system including party states, non-party states, nongovernmental organizations, industry, individuals, and other international organizations. Secretariat personnel are often the only officials with a broad overview of states' implementation or violation of the agreement. They serve as the modal point for interactions with the other actors in the international system. Sometimes they advise governments on compliance, as in the responses of the CITES secretariat to queries concerning the legitimacy of export or import permits.55 At other times, they may advise private parties on compliance, as in the Montreal Protocol.56 They may develop proposals for methods to encourage compliance that are then introduced by states, or states may funnel their ideas through the secretariats for exploration with other parties.

54. See International Tropical Timber Agreement, Nov. 18, 1983, reprinted in BASIC VOLUME, supra note 2, at 508; see Brown Weiss, supra note 24, at 122.
55. See Brown Weiss, supra note 24, at 109-10.
56. See id. at 148.
Secretariats have been quite effective at trying to jawbone parties into compliance with some agreements. They investigate instances of noncompliance, conduct on-site monitoring missions, review reports filed by parties, conduct technical training programs that assist governments and nongovernmental actors in attaining compliance, and otherwise build local capacity to comply. Over time, the secretariats for the five agreements studied in Engaging Countries increased the time and funding spent on monitoring, technical assistance and training, and on other compliance related activities.57

To be sure, the power of the secretariats can be constrained. In many cases, their funding comes directly from the parties. The parties retain the power to revoke authority that the secretariats assumed de facto. But for most agreements, strong, effective secretariats have been important in advancing the provisions of the agreements. One notable exception, thus far, is the Alpine Convention, in which the parties have yet to establish a secretariat.58

Myth Number Five: The more precise the obligation, the better the compliance by parties.

In international negotiations, countries frequently have pressed for precisely defined obligations, in part, because it is assumed that countries will be forced to comply better with precise commitments than with vague ones. The reality is that if the obligations are precisely stated, it is much easier to determine whether states have complied with them. It does not necessarily follow that states will comply with precise obligations better than with those that are more generally stated.

The Montreal Protocol provides precise targets and timetables for phasing out specific chemicals that deplete the ozone layer.59 Countries must provide annual reports indicating their consumption and production of the controlled chemicals.60 By

57. See id. at 168-71.
60. See id. at 1556.
reviewing the reports and considering other available information from both governments and the private sector, it is possible to determine whether parties are complying with their obligations under the Protocol. If the obligations were more general, assessing compliance would be more difficult and the obligations would surely not be as effective. In this sense, the myth is a correct statement.

For some obligations, however, it is not appropriate to be precise. For example, the World Heritage Convention provides that each state party “undertakes not to take any deliberate measures which might damage directly or indirectly the cultural and natural heritage . . . situated on the territory of other States Parties to the Convention.” In article 4, the Convention recognizes that each state party has the primary “duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage . . . situated on its territory.” While the Convention sets forth several categories of activities in which parties should engage, it never mandates precise targets and timetables or comparable provisions. These would not be appropriate. Compliance with the more generally stated obligations does not necessarily suffer because of the wording. Research into compliance with the Convention indicates that some countries have substantially, if not fully, complied with the agreement.

Myth Number Six: Regular country reports are critical for monitoring compliance. Full compliance by all states party to the agreement is essential.

Monitoring is essential for increasing compliance with international agreements. It may take many forms such as reports by governments and/or nongovernmental organizations and industries; on-site monitoring by parties, secretariats or consultants; off-site monitoring through advanced technologies; or review of materials submitted by parties or by other sources. Many international environmental agreements provide for moni-

62. Id. 27 U.S.T. at 41, 11 I.L.M., at 1359.
monitoring through regular national reports that countries file with the treaty secretariat. In the 1990s, it has become customary to include a reporting requirement in nearly all new international environmental agreements.

National reporting is useful because it engages countries in implementing the agreement. One or more officials within the national government must become involved in compiling the information for the report. Reporting is useful as a tool for educating governments and other actors concerning the actions necessary to comply with international obligations. The process of preparing the reports may build local capacity to comply with the substantive obligations in the treaty.

But reporting is seen primarily by states as a critical monitoring tool. This use raises important problems that need to be addressed. Foremost is the problem that countries may be unwilling to report their own shortcomings. For example, the brief efforts by the World Heritage Convention parties in the 1980s to obtain national reports failed for this reason. The reports were uneven, and at least one country applying for assistance to preserve an endangered site reportedly filed a report indicating successful conservation of its sites. Reports submitted for other international agreements have sometimes been incomplete, inaccurate, or late. Some national reports filed under the Montreal Protocol, for example, have been late or inaccurate, although reporting has been generally better than for other agreements. This suggests that independent review of the reports by the secretariat and parties is essential for the reports to have value as monitors of national compliance. Depending upon the issue area, on-site monitoring or off-site monitoring with advanced technologies may be essential for uncovering unstated compliance problems.

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65. See Brown Weiss, supra note 24, at 104.
66. See id.
68. See Brown Weiss, supra note 24, at 152-53.
National reports as a monitoring tool also suffer from the problem of "report congestion." National officials who must file regular reports under the growing number of international environmental agreements may find that their time is largely spent preparing reports rather than taking the actions called for in the agreements or in addressing other environmental concerns. Particularly in countries with scarce professional staff, the national government may need to devote much of its time to complying with reporting requirements.

A problem of "reporting congestion" also appears at the international level. Different secretariats receive separate national reports for each of the agreements. Information required by one treaty may overlap with that required by another. Unless there are standardized protocols for reporting, the data may be difficult to compare and evaluate. Moreover, inconsistencies in information from the same country for different agreements may exist, and the content of reports from different countries may vary significantly. Secretariats, parties, or designated nongovernmental bodies may need to devote considerable time to reviewing and verifying the national reports.

For national reports to be effective in monitoring compliance, it has been assumed that all countries must comply with the reporting requirement. Empirical research, however, indicates that this is not essential. Rather, the states who are major actors in a specific agreement must comply and file timely and complete reports. This is perhaps best illustrated by reporting under the London Convention of 1972, where it is more important that the member states who are major contributors to marine pollution report than that all states, some of whom have little marine activity, report. Thus, the relevant question is: what percentage of the major polluting states comply with the reporting requirement? Focusing on the total percentage of parties complying with the annual reporting requirement may be misleading. In agreements such as the World Heritage Convention, however, it is arguably important that all countries

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69. See Bothe, supra note 67, at 23.
70. See Jacobson & Brown Weiss, supra note 16, at 545.
71. See id.
72. See id.
report because the Convention focuses on the national sites on the World Heritage List; every country is in this sense a major player. Moreover, compliance by all states with reporting obligations may be important to building the long-term capacity of states to comply with the agreement and to forging a culture of compliance among the parties to the agreement.  

Myth Number Seven: Decentralizing implementation of the agreement and making local communities responsible improves compliance.

National governments enter into international agreements with other countries, but the authority of national governments may not reach effectively into local areas. While local communities may be essential to implementing the agreement, they may be unaware of the international commitments or have no interest in complying with them. This is sometimes described as a core-periphery problem, in which the core government has difficulty ensuring compliance by actors who are geographically on the periphery.  

Evidence for this abounds. The national government in India cannot effectively control events in Manas National Park in order to protect the park and be in compliance with the World Heritage Convention.  
Brazil has found it difficult to control trade in endangered species across its borders in the Amazon region or to ensure sustainable management of its forests. China's national government in Beijing has had difficulty con-

73. See id.
75. See Ronald J. Herring & Erach Bharucha, Embedded Capacities: India's Compliance with International Environmental Accords, in ENGAGING COUNTRIES, supra note 5, at 405-08.
76. See Murillo de Aragao & Stephen Bunker, Brazil: Regional Inequalities and Ecological Diversity in a Federal System, in ENGAGING COUNTRIES, supra note 5, at 489-500.
trolling activities in southern and western China to ensure compliance with several international environmental agreements.  

Federalism contributes to compliance difficulties. Countries such as Australia, Brazil, Canada, China, Germany, India, and the United States have several levels of political authority. When the activities that are the subject of the agreement are widely dispersed, such as world heritage sites, trade across borders, and sustainable management of forests, the various levels of authority may not coordinate their activities or work together to effect treaty compliance.

These considerations might be thought to lead to the conclusion that decentralizing implementation of the agreement and involving local communities will improve a country's compliance with their international commitments. Engaging local people will create a culture of compliance with the agreement. However, decentralization does not always promote compliance, at least in the near term. As part of its political reform, for example, the Russian Federation decentralized authority so that control over local communities weakened. This led, at least in the short term, to significantly lower compliance by the Russian Federation with the CITES. Indeed in all countries, local communities and their officials may have priorities other than those of the national government. They may lack the resources and the administrative or other capacity to comply with the international commitments. Local officials may be more likely to engage in rent-seeking behavior.

77. See Michael Oksenberg & Elizabeth Economy, China: Implementation Under Economic Growth and Market Reform, in ENGAGING COUNTRIES, supra note 5, at 353-94.

78. In some cases, local efforts are more successful than national efforts at implementation. See, e.g., Kyle W. Danish, International Environmental Law and the "Bottom-Up" Approach: A Review of the Desertification Convention, 3 IND. J. GLOBAL LEGAL STUD. 133 (1995) (arguing that the "bottom-up" approach of the Convention to Combat Desertification in Those Countries Experiencing Drought and/or Desertification, particularly in Africa, will be more successful than the "top-down" approach of the failed 1977 United Nations Conference on Desertification).

79. See William Zimmerman et. al., The Soviet Union and the Russian Federation: A Natural Experiment in Environmental Compliance, in ENGAGING COUNTRIES, supra note 5, at 319.

80. In southern Africa, for example, game wardens have an incentive to participate in the tusk market. Whereas the salary for a warden is very low, the profits
Over time, engaging local communities should, in principle, lead to greater compliance. They should become part of a culture of compliance with the agreement. But this likely means educating the communities to their obligations, providing financial and technical incentives to comply, and building the capacity of local authorities to comply. Moreover, for obligations that involve controlling trade across borders, it is important that countries on both sides of the border be party to the relevant agreements.

**Myth Number Eight. Democracy always promotes compliance. Democratic countries always comply better than nondemocratic countries.**

Democratic countries are assumed to do a better job of complying with their international commitments than nondemocratic countries. Frequently the assumption is rephrased to indicate that democratic countries with market economies comply better than other countries. The assumption is that democracy leads to an informed civil society, which operates under the rule of law; this in turn provides a hospitable climate for countries to implement and comply with international legal obligations.

As *Engaging Countries* notes:

There are many features of democratic governments that contribute to improved implementation and compliance. Democratic governments are normally more transparent than authoritarian governments, so interested citizens can more easily monitor what their governments are doing to implement and comply with accords. In democratic governments it is possible for citizens to bring pressure to bear for improved implementation and compliance. Also, nongovernmental organizations generally have more freedom to operate under democratic governments. In addition, fully independent courts can be used by nongovernmental organizations and citizens to force governmental action.81

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The country studies in Engaging Countries generally document this improved implementation and compliance. For example, better compliance by the Russian Federation with the London Convention of 1972 on marine dumping than by the former Soviet Union can be "attributed to the greater transparency in governmental processes that started with the reforms under Gorbachev and were continued after the collapse of the Soviet Union."^82

It is not clear, however, that democracy automatically or necessarily leads to greater compliance with international commitments. While democracy is more responsive to public opinion, the public opinion may not be supportive of the international concerns. Also, particular special interest groups may devote very substantial resources to influencing public opinion and law-makers to behave in ways that do not promote compliance. The failure of the United States to pay its legally obligated dues to the United Nations poignantly illustrates this point. Moreover, nongovernmental organizations interests are not necessarily consistent with those articulated in the international agreements.

In a democratic culture, there are more opportunities for diverse interests to influence behavior, and there is greater access to information and increased transparency. But, this also means that governance can become increasingly difficult and that efforts to ensure compliance with international obligations may be more complicated.

**Myth Number Nine: The influence of nongovernmental organizations always leads to better state compliance.**

Nongovernmental organizations (NGOs) have played a crucial role in promoting implementation and compliance with international environmental agreements.\(^83\) Greenpeace, for example,

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82. Id.

with more than 4.1 million members has effectively promoted compliance by member states with the London Convention of 1972 controlling marine dumping. TRAFFIC and the World Wildlife Fund have helped to promote compliance with the CITES and with the International Tropical Timber Agreement, in part by exposing illegal practices. The IUCN has monitored World Heritage sites for their conservation status.

Sometimes the NGOs are international with offices in two or more countries. Others are national and link across borders with other NGOs. Still others are local. Some NGOs are organized around a cluster of issues; others are issue specific and may disappear when the issue has been resolved.

NGOs monitor behavior of governments and of private actors, participate in meetings of the parties for some international agreements, mobilize political opinion, set political agendas, and gather and make information available to governments and to the public. NGOs may be the vehicle for providing access to funds in poor countries, which in turn may build local capacity and promote compliance.

However, NGOs do not uniformly assist compliance with particular international agreements. Some NGOs are created to advance interests that run counter to the agreement. Some may be creatures of a government that has little interest in compliance. In some cases, as in climate change, there are NGOs and industrial associations pressing opposing points of view. Lobbyists may press interests that undermine compli-

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85. See Brown Weiss, supra note 24, at 111, 123.
86. See id. at 102.
87. See Spiro, supra note 84, at 45-46.
88. See THOMAS G. WEISS & LEON GORDENKER, NGOs, THE UN, & GLOBAL GOVERNANCE 219 (1996) (noting that NGO leaders may push their own political agendas rather than that of constituents).
89. In particular, environmentalists have criticized the Global Climate Coalition (GCC), an organization of business trade associations and private companies, for attempting to thwart international climate change negotiations. See Summary of Global Climate Coalition Activities: 1996-1997 (visited Feb. 18, 1999) <http://www.ozone.org/page16.html> (summarizing 1996-1997 GCC activities from the perspective of a nonprofit environment group, Ozone Action). The GCC sponsors studies and advertising on the adequacy of scientific evidence for climate change and the economic impact of
Or NGO activities intended to advance the purposes of an agreement may have unintended negative effects on compliance.90

The international community has yet to develop procedures for holding nongovernmental organizations accountable for their actions. Frequently, it is difficult to identify the funding sources for an NGO or to evaluate the information presented (information that is often presented as advocacy for particular positions). The public may find it difficult to evaluate the credibility of an NGO’s position, as may local or national authorities. Thus, while particular NGOs have been important in promoting implementation and compliance with specific agreements, other NGOs could well undermine compliance.

Myth Number Ten: Formal dispute resolution procedures are essential to achieving compliance with an international environmental agreement.

Many international environmental agreements provide for formal dispute settlement procedures.91 The assumption is that when disputes arise over the interpretation of the agreement or
over a violation of its provisions, parties must be able to resort to formal procedures such as mediation, conciliation, arbitration, or international adjudication to resolve the dispute. This, in turn, promotes effective enforcement of the agreement.

The reality is that the parties have never invoked the formal dispute settlement procedures contained in most international environmental agreements. The U.S.-Canada Boundary Waters Agreement of 1909 offers perhaps an exception. While neither Canada nor the United States have invoked the formal dispute settlement provisions of Article X that provide for arbitration and ultimately international judicial resolution, they have invoked Article IX which provides for a Reference. Under this procedure, the International Joint Commission appoints experts to form an investigatory body to determine the facts at issue in the dispute and to issue a report to the parties. On the basis of the report, the countries are expected, but not required, to take actions resolving the problem. As of 1997, there had been 52 References. The procedure is similar to that of commissions of inquiry provided for in The Hague Convention for the Pacific Settlement of Disputes of 1907.

Rather than relying on formal dispute settlement, states that are parties to international environmental agreements have resolved disputes through meetings of the parties (or meetings of subcommittees of parties) or by developing procedures for implementation and noncompliance within the framework of the agreement. For example, parties to the Montreal Protocol established an Implementation Committee and developed noncompliance procedures. While initially parties addressed only issues

92. See U.S.-Canada Boundary Waters Agreement of 1909, supra note 91, 36 Stat. at 2453.
93. See id.
94. See Edith Brown Weiss, Managing International Water Conflicts: The Great Lakes (USA-Canada) (Feb. 1997) (report to the Alfred Wedener Institute, Germany, on file with the author).
related to noncompliance with procedural requirements such as annual reporting, they subsequently dealt with important issues of noncompliance with substantive commitments to reduce and phase out ozone depleting chemicals. The 1996 Protocol to the London Convention of 1972 provides for the parties to develop noncompliance procedures. A 1997 decision of the Executive Body of the Economic Commission of Europe's 1979 Convention on Long-Range Transboundary Air Pollution sets forth noncompliance procedures that apply to the more recently concluded protocols to the convention. These procedures enable parties to use a variety of strategies in inducing countries to comply with the agreement's obligations.

In other fields, such as trade law and human rights, settling disputes has become increasingly judicialized. The World Trade Organization has established an appellate body to hear disputes appealed from a panel's decision. The European Court of Human Rights has been reorganized as of November 1, 1998, to provide for panels and the submission of claims of violation directly to the court rather than through the former European Commission on Human Rights. Yet, curiously in the environmental area, there has not been a parallel movement toward adjudication of disputes. In part, this may be because the environment is a commonly shared resource, a situation that encourages multi-party consideration of noncompliance. In the bilateral U.S.-Canada agreement on boundary waters, reference procedures have been invoked frequently. Moreover, when

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102. See U.S.-Canada Boundary Waters Agreement of 1909, supra note 91, and
noncompliance involves illegal trades across national borders, national enforcement mechanisms and judicial resolution have applied, as in violations of the CITES and illegal smuggling of chlorofluorcarbons (CFCs) into the United States. To the extent that the international environmental agreements involve trade-related disputes, countries may resort to formal dispute resolution procedures.

While it would be easy to infer from the above discussion that dispute resolution procedures are marginal to compliance with international environmental agreements, this would be a premature conclusion. The existence of the procedures may have the effect of encouraging the parties to resolve their disputes in more flexible ways. While this is difficult to prove, it is consistent with scholarship about the effect of courts in encouraging out-of-court negotiated settlements.

*Myth Number Eleven: Coercive measures in cases of noncompliance are essential to securing compliance with international environmental agreements.*

Traditionally, international law relies on coercive measures to enforce compliance with its mandates. These coercive measures may be defined as "[a]ny threatened action or combination of actions that . . . will operate to offset the net benefit that a potential violator could gain from noncompliance." These include sanctions (military or economic), penalties, and measures such as withdrawing membership privileges under the agreement. The coercive measures are commonly associated with international rules related to the use of force or to obligations in trade agreements. By contrast, coercive measures are rarely used in international environmental law. Some scholars have suggested that they are mostly irrelevant and ineffective for addressing international environmental problems.

The coercive measures found in international environmental agreements are of three kinds: those that provide for trade

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sanctions, those that withdraw certain privileges of membership, and those that provide for publication of infractions in official publications accessible to the public. The last may be more appropriately characterized as a "sunshine" method of inducing compliance for it relies upon exposure of the infraction to trigger pressures from other parties, nongovernmental organizations, and even individuals to comply.

The use of trade sanctions raises the question of consistency with the General Agreement on Tariffs and Trade (GATT 1994), which provides for national treatment for imported and domestic "like" products, prohibits import quotas, and requires most-favored-nation treatment among parties (i.e., the most favorable treatment offered to one exporting country must be accorded to all). Critics of trade sanctions could argue that such sanctions impose import quotas and require countries to discriminate in their trade on the basis of whether a state is in compliance with an international agreement, and further, that

105. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) provides that parties may "penalize trade in, or possession of, such specimens, or both" and that parties may adopt stricter domestic measures restricting trade. CITES, supra note 21, 27 U.S.T. at 1101, 993 U.N.T.S. at 250. The parties to the CITES considered imposing trade sanctions on China and Taiwan in response to violations of the CITES in connection with their trade in rhinoceros horns and tiger parts. In response to CITES Standing Committee recommendations, the United States unilaterally imposed import sanctions against Taiwan, which is not a party to the agreement, under the Pelly Amendment in 1994. See Christine Crawford, Conflicts Between the Convention on International Trade in Endangered Species and the GATT in Light of Actions to Halt the Rhinoceros and Tiger Trade, 7 GEO. INT'L ENVTL. L. REV. 555 (1995).

106. If developing country parties to the Montreal Protocol have not filed baseline data reports within one year after approval of their country reports, they will no longer be eligible for delayed compliance deadlines and special assistance under Article V of the Protocol. See Montreal Protocol, supra note 59, 26 I.L.M. at 1555; see also Brown Weiss, supra note 24, at 150. While the World Heritage Convention provides only for the listing of sites on the World Heritage List, the Operational Guidelines provide that parties may delist a site if a country fails to protect it. See World Heritage Convention, supra note 53, 27 U.S.T. at 43, 11 I.L.M. at 1359; World Heritage Committee, 20th Sess., Operational Guidelines for the Implementation of the World Heritage Convention (visited Dec. 2, 1998) <http://www.unesco.org/wsc/nwhc/pages/doc/main.htm>. The World Heritage Committee can revise the Operational Guidelines at any time.

107. In 1991, parties to the CITES decided that failure to file annual reports would be considered an infraction of the agreement. The parties compiled and circulated a list of countries that had committed infractions. See Brown Weiss, supra note 24, at 112.

the Article XX(b) and (g) exceptions in the GATT 1994 do not apply. Thus, trade sanctions may be of limited utility as a means of enforcing international environmental agreements.

While the historical record indicates that states have not relied upon coercive measures to secure compliance with international environmental agreements, this does not mean that such measures are irrelevant. George Downs and other political scientists have argued that enforcement is relevant to all international agreements in which a state has an incentive to defect from the cooperative arrangements in the agreement. The threat of coercive measures can induce conforming behavior even though the coercion is never invoked. In Engaging Countries, coercive measures were retained in the mix of strategies that should be available to parties to induce countries to comply. They are particularly useful for countries whose intention to comply is weak or who face strong domestic pressures to lapse into noncompliance.

Myth Number Twelve: Markets create incentives for countries not to comply with agreements, or, free markets always promote compliance.

While some would argue that markets hinder compliance and others would argue that markets are the essential key to securing compliance, experience indicates that the effect of markets on compliance is, at any given time, mixed. Markets both help and hinder compliance, even within the same agreement. On one hand, for example, the existence of markets for the substitute chemicals that were developed to replace the chemicals phased out under the Montreal Protocol has enabled producer countries to comply with the Protocol. Moreover, the large producers of the CFCs and other controlled substances under the Montreal Protocol have been effective monitors of the behavior of other companies to ensure that the playing field remains level among competitors. On the other hand, the continuing markets for original CFCs has led to extensive cross-border smuggling and has undercut compliance with the Protocol.

109. See Downs, supra note 103, at 322; see also George W. Downs et al., Is the Good News About Compliance Good News About Cooperation?, 50 INT'L ORG. 379 (1996).

response, the parties to the Montreal Protocol adopted an amendment in 1997 requiring states to establish a national export and import licensing system for new, used, recycled, and reclaimed ozone depleting substances subject to control under the Protocol.

Similarly, under the CITES, the market has both helped and hindered compliance. A decline in the market demand for an endangered species in which trade is prohibited helps to enforce the treaty. Continued demand for a species or its parts, such as rhinoceros horns, undercuts the treaty.

Because markets can assist or hinder national efforts at compliance, it is essential to consider how to structure international environmental agreements so as to use markets to assist with compliance. Article 17 of the Kyoto Protocol envisions tradeable emissions among Annex I industrialized countries as a way to invoke market mechanisms to facilitate economically efficient compliance. The 1991 Acid Rain Agreement between Canada and the United States 111 was implemented in the United States through a tradeable emissions program for sulfur dioxide. It may be feasible to develop a transnational tradeable emissions program for emission sources close to the border.

Markets permit efficient trade in private goods. They do not address equity questions. Compliance research indicates that the perceived equity of the obligation is an important factor in inducing compliance. To the extent that markets are seen as undercutting the equity of particular obligations, they could discourage compliance by particular countries with certain obligations. For example, developing countries have expressed concern about the equitable effects of joint implementation and tradeable emissions schemes authorized in the Kyoto Protocol.

Myth Number Thirteen: Compliance strategies can apply uniformly to states party to an international environmental agreement to secure compliance.

Compliance is sometimes seen as a goal that can be achieved only by applying a common strategy to all countries to induce them their behavior the obligations in the agreement. The em-

111. See Agreement on Air Quality, supra note 91, T.I.A.S. 11,783, 30 LL.M. at 676.
pirical research in *Engaging Countries* suggests otherwise. When a country joins an agreement, its intent and capacity to comply are critical factors. These factors vary both among countries and within countries for different agreements. A state may intend to comply or be desirous of complying but have other more compelling priorities; conversely, it may have no intention to comply. Similarly, it may have the capacity to comply, or may lack any effective capacity to comply. Thus, states can be profiled according to whether they have strong or weak intention to comply and strong or weak capacity to comply.

At least three different compliance strategies are in use. These include coercive measures, incentives, and “sunshine” measures. Coercive measures were discussed previously. Incentives include financial support (from a special fund attached to the agreement, the Global Environmental Fund (GEF) or other multilateral or bilateral fund), technical cooperation, training and capacity building programs, and incentives that may be provided by the private sector. Sunshine methods include reporting, on-site monitoring, NGO participation, public access to information, transparency in decision making, public information measures such as newsletters, local community involvement, industry monitoring, and persuasion by parties and secretariats. International environmental agreements rely primarily on sunshine methods and incentives.

The particular mix of compliance strategies needed to induce compliance with a specific agreement will vary according to the profile of a state’s intent and capacity to comply with the agreement. Moreover, a state’s intent and its capacity will change over time. A dramatic change in economic wealth or a sharp change in political leadership, for example, could significantly affect a country’s intent or its capacity to comply with its agreements. Thus, a mix of compliance strategies needs to be available for each agreement. This argues for including a range of strategies for inducing compliance in the international environmental agreement.

By understanding the myths associated with compliance, states should be able to design more effective compliance strategies for international agreements. The realities of compliance indicate the need to have available compliance strategies that can be tailored to each country and to each agreement. Problems involving several large actors within states require different compliance strategies than those that involve hundreds or thousands of actors engaged in trade across national borders.

The myths suggest that there may be quick and easy fixes for states to problems of compliance with their international obligations. Understanding the myths reveals this is not the case. Rather, compliance with international obligations requires nuanced measures which can be adapted to different conditions and changing circumstances.

Many, if not all, of the observations in this article apply, with some particularized exceptions, to other areas of international law, such as arms control, human rights, labor, and trade. There is a need for empirical research that looks systematically at the record of national compliance with particular agreements. Such research on international environmental agreements has already unmasked perhaps the largest myth regarding compliance: that a snapshot at any given time captures the status of compliance with an agreement. To the contrary, compliance with international obligations changes over time. Dispelling the myths may help to understand the complicated and ever-changing process of national compliance with international environmental law and enable countries to design and carry out more effective compliance strategies.