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Policy Brief

S U M M A R Y

The decision by the Bush administration to abandon the Kyoto Protocol and go its own way on climate change is not necessarily the disaster for climate policy often portrayed by environmentalists. Because Kyoto's success is far from assured, having alternative approaches is a prudent hedging strategy. The real disappointment has been the failure of the United States to develop a credible climate change policy of its own.

In contrast to Kyoto—which tries to construct a comprehensive global architecture all at once—the United States should proceed step by step, starting with domestic action and then moving outward, beginning with like-minded states. It should initially address fewer greenhouse gases and use relatively simple procedures. And it should employ a safety valve that caps costs to provide economic predictability and prevent unexpectedly high costs that would tempt countries not to comply. In the long run, the race to combat climate change will go to the most durable policy, not the speediest. ■

U.S. Climate Policy After Kyoto: Elements for Success

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With the U.S. withdrawal from the Kyoto Protocol and the agreement's likely entry into force, it appears that the United States and the rest of the world will go their separate ways on climate change. The United States now faces a stark choice: Do nothing, join Kyoto, or come up with a policy of its own. The first option would be unwise, environmentally and politically. The second would require an embarrassing flip-flop by the Bush administration. This leaves the third option: proposing a credible U.S. approach separate from Kyoto.

Arguably, this could be the preferable outcome. If the United States and Kyoto proceed along separate tracks, the international community will not have put all its eggs in a single basket. Kyoto may not be "fatally flawed," as the Bush administration claims, but whether it will actually work remains uncertain. And just as uncertainties in climate science and economics justify a hedging strategy with regard to response measures, uncertainties about legal and institutional matters suggest the desirability of an institutional hedging strategy.

This could be the silver lining in President Bush's decision to reject Kyoto. Yes,

the decision was preemptory and uninformed. And thus far Bush has proposed only a weak, toothless alternative. But if the U.S. rejection of Kyoto helps to create a more diversified, robust portfolio of international climate change policies in the long term, it may prove to be a blessing. The challenge is to design compatible approaches that will allow future reintegration into a single global regime.

Kyoto: The Good, the Bad, and the Ugly

Like a Rorschach test, reactions to the Kyoto Protocol generally reveal more about the speaker than about the protocol. Supporters and opponents both tend to portray the protocol in Manichean terms, as a battle between good and evil, lightness and dark. But in fact the truth lies somewhere in between. Kyoto contains both positive and negative elements, reasons to think it may succeed or fail (see box, next page).

Perhaps Kyoto's leading virtue is that it exists. Whatever its flaws, it represents a serious effort to address a serious problem. Given the enormity of the climate change issue, that is no small achievement. If Kyoto



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The Endowment's Global Policy Program addresses the challenges arising from the globalizing processes of economic, political, and technological change. It seeks to integrate the emerging global policy agenda with traditional security concerns and to advance new responses to specific transnational issues.

were to fail, we have no assurance that a replacement would emerge in a reasonable time.

Kyoto sets forth both a long-term policy architecture to address climate change and short-term emissions commitments. The architecture presumes a sequence of targets to progressively limit greenhouse gas emissions; the emissions targets apply to a five-year commitment period that runs from 2008 to 2012.

Kyoto's design largely reflects U.S. thinking. It attempts to address the climate change problem comprehensively by covering emissions of six greenhouse gases, not just carbon dioxide, and by including biological "sinks" such as forests and farmlands, which remove carbon from the atmosphere. It allows countries to average their reductions over five years, and to smooth out fluctuations due to unusual weather or economic conditions. And it contains several innovative mechanisms intended to reduce the costs of combating climate change. Industrial countries are allowed to trade their emissions allowances, allowing the market to determine where greenhouse gas emissions can be reduced most cheaply. In addition, they can receive credit for emissions reduction projects in developing countries through the newly established Clean Development Mechanism.

Critics of Kyoto tend to focus on its targets for the first commitment period, arguing that they lack a scientific basis and fail to encompass developing countries, whose emissions will exceed those of industrial countries in the next decade or two. But it is well to remember that Kyoto's short-term targets represent only a first step. They reflect the reasonable view—held by virtually all countries except the United States—that industrial countries should take the lead in combating climate change, given their responsibility for creating the problem as well as their greater capacity to respond.

The more telling criticisms of Kyoto relate to its architecture, which reflects a mismatch between institutional needs and institutional capacity. Kyoto will place heavy demands on international institutions. To flesh out its often skeletal provisions and modify them in the

light of experience, the parties will need to engage in ongoing rule making. The compliance procedure will depend on the new compliance committee's capacity to review whether countries are meeting their obligations. And the Clean Development Mechanism will require a complex institutional apparatus to determine whether particular climate change projects reduce emissions relative to what would have happened otherwise.

Little in the history of the climate change regime to date—or of the United Nations more generally—provides great confidence that the regime will be up to handling these extremely challenging tasks. In general, the negotiations have been plagued by ideological differences between North and South and between Europeans and Americans. The prevailing atmosphere is one of mistrust. Indeed, seven years after the entry into force of the Framework Convention on Climate Change, the parties still have been unable to agree on rules of procedure for their meetings, due to differences about the appropriate voting rule (such as a two-thirds majority, three-fourths majority, or consensus). Rather than establish a cooperative working atmosphere, the parties have engaged again and again in brinkmanship, refusing to budge until the eleventh hour, when there is time only for hastily thrown together political compromises.

Why has the regime been so dysfunctional? The decisive factor was the decision to undertake the negotiations through the United Nations rather than in a smaller, more "like-minded" forum. U.N. negotiations come with considerable baggage. The global, universal nature of the United Nations inhibits the development of smaller, more cohesive negotiating groups, making the negotiations unwieldy. Developing countries operate through their traditional U.N. negotiating bloc, the Group of 77, giving the negotiations a pronounced North-South flavor, despite the very different interests among developing countries (for example, between oil-producing states that fear combating climate change will depress oil prices, and small island states that risk inundation from sea-level rise). Negotiations are domi-

nated by old U.N. hands more familiar with using the United Nations to score ideological points than to solve problems. And the composition of new institutions must conform to the traditional U.N. practice of divvying up seats among the various regional groups, rather than a more functional approach that reflects an institution's particular tasks.

The result is a significant institutional deficit. A large, unwieldy, ideologically laden institution such as the United Nations can oversee relatively simple tasks of the kind required under the U.N. Framework Convention on Climate Change—for example, reporting on greenhouse gas emissions. But whether it can carry out the complex, innovative, and demanding legislative, administrative, and judicial functions that the Kyoto Protocol will require—functions that would tax the capacity of even well-established national institutions—remains a huge question mark.

Kyoto's other significant flaw is that we do not know how much it will cost. The agreement requires industrial countries to meet their emissions targets come what may. Whether that will prove cheap or expensive depends on a series of unknowns, including future rates of economic and population growth and technological innovation, substitution elasticities away from carbon-emitting activities, and the efficiency of policy instruments. Before the United States withdrew, cost estimates for implementing Kyoto varied by more than an order of magnitude, from the equivalent of an increase in the price of gasoline of a few cents a gallon at the low end, to an economic shock comparable to the 1973 Arab oil embargo at the high end. With the United States out, meeting Kyoto's targets for the 2008–2012 period is more likely to prove painless, because Russia may have enough excess credits due to its economic collapse to satisfy European and Japanese demand. But as soon as Kyoto does begin to bite, the cost problem will resurface.

This issue has a legal as well as an economic dimension. If Kyoto proves more expensive than anticipated, countries will be tempted to exceed their targets rather than damage their

economies. Kyoto's compliance system—although unusually strong by international standards—is unlikely to deter a state from dropping out if the going gets tough. Its

Kyoto: Myth and Reality

MYTH Kyoto would sacrifice the United States's sovereignty, forfeiting control of the U.S. economy to international bureaucrats.

REALITY Although Kyoto requires countries to reduce their greenhouse gas emissions by specified amounts, it gives countries wide discretion as to how they will achieve those reductions. Countries can choose which policy instruments to employ (efficiency standards, emissions trading, taxes, and so on), which greenhouse gases to focus on, and how much to do at home versus abroad.

MYTH Kyoto would ruin the U.S. economy.

REALITY The costs of achieving the Kyoto targets remain highly uncertain, with estimates varying from about 0.1 to 2 percent of gross domestic product. Most of the high estimates focus on reducing carbon emissions domestically, and they do not take account of the potential savings resulting from international emissions trading and from Kyoto's six-gas approach. Conversely, the low estimates unrealistically assume perfect efficiency.

MYTH Kyoto would be ineffective and inequitable because it leaves out more than half the world.

REALITY Kyoto requires industrial countries to go first because they created the climate change problem and have the greatest capacity to respond. But its objective implies developing-country emissions targets in the future.

MYTH The Kyoto targets are arbitrary, not scientifically based.

REALITY Although it is true that the Kyoto targets were chosen on the basis of politics and not science, this criticism sets an impossible bar. Science cannot tell us what costs are acceptable or what risks we want to bear. So target setting always reflects political as well as scientific judgments.

primary penalty requires states to make up for excess emissions in one commitment period through additional reductions in the subsequent period. But the only real deterrent against exit is the general embarrassment and criticism that would result from violating such a high-profile agreement. Whether this rather diffuse pressure would be enough to induce a country to incur significant economic damage is at best questionable. More likely, other states would bail the country out by giving it an easier target in the next commitment period. And once the agreement was violated by one state with impunity, the whole system could easily crumble. By basing itself on absolute targets that must be achieved regardless of cost, the Kyoto Protocol risks overtaxing a relatively weak compliance system and thereby setting itself up for failure.

Toward a New U.S. Climate Policy

U.S. policy makers face the unusual challenge of developing a policy that can coexist with the Kyoto Protocol while avoiding some of its mistakes. Three elements will be crucial over the long term. The first is *political credibility*. A credible climate policy must begin to change emissions trajectories now—particularly of carbon dioxide, the principal greenhouse gas. The climate change plan announced by President Bush in February fails this basic test, by calling for little more than business-as-usual improvements in carbon efficiency and by relying solely on voluntary measures, which have proved ineffective in the past.

Acting now is important not so much for environmental as for political and economic reasons. From a purely environmental standpoint, governments could conceivably decide to wait, because what matters are cumulative emissions, not emissions in any given year—sharper reductions in the future would have essentially the same climate benefits as slower reductions beginning now. But what credibility would a pledge to reduce emissions sharply in the future have if the United States is unwilling to take small steps now? Only by requiring action now can the U.S. government send a credible signal to business, individuals,

and other governments that the future will not be the same as the past. Without this signal, people will be tempted to continue business as usual—to make investments in roads, factories, electric generation, appliances, and the like that will lock in higher emissions for 50 to 100 years and be wrenching to reverse. Policy makers must begin to act now to provide the political credibility needed to encourage a smoother, less expensive pathway to a future of lower emissions.

The second crucial element is *economic predictability*. Kyoto has been justly celebrated for its market-based mechanisms (such as emissions trading), which promote economic efficiency. But, given the substantial uncertainties about how much it will cost to limit emissions, economic predictability is perhaps even more important both politically and economically. Countries can change a domestic law if its provisions prove too expensive, but they cannot unilaterally change international obligations. If they do not know the potential costs, they do not know for sure whether what they are signing onto makes political or economic sense. This may make them reluctant to sign on at all, if they take their international commitments seriously. Or they may join but be tempted to violate the agreement later. In either case, the regime will be unstable. Stability requires an assurance that costs cannot go too high, so that countries know in advance what they are undertaking.

Of course, economic predictability comes at the price of environmental predictability. Just as we have no assurance how much a particular emissions reduction will cost, we have no assurance what level of reductions a given price will buy. There are risks either way. But the economic risks of excessive costs are immediate and, for some countries, politically unacceptable; in contrast, the environmental risks of insufficient reductions are longer term and correctable through stronger measures later. Moreover, economic predictability can even provide an environmental benefit: With a guaranteed ceiling on costs, countries may be willing to accept more ambitious targets, leading to greater emissions reductions if costs prove low.

The third element is *institutional realism*. For a policy to succeed, it must take into account both the capabilities and limitations of the institutions on which implementation will depend. Many an elegant policy initiative has foundered on the shoals of institutional incapacity. This is particularly true at the international level, where institutional capacity is notoriously weak. In pushing the policy envelope, climate change policy needs to be careful not to escape the bounds of institutional reality.

The Tortoise and the Hare

In addressing climate change, success will not go to the swiftest policy but to the most durable. How can the United States build such a regime? The answer is to start small and add

Kyoto appears on track. But it also reflects an important lesson of the U.S. rejection of Kyoto, namely, that climate policy should start at home: All the international attention in the world will not overcome failure to develop a domestic political consensus. The most obvious and desirable starting point would be a domestic emissions trading system covering a significant segment of the U.S. economy—for example, carbon emissions from electric utilities. This option has received by far the most attention, is economically efficient, and commands some support in the Cabinet if not the White House.

How realistic is a mandatory domestic program to control greenhouse gas emissions? At the moment, any mandatory program—

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complexity and ambition step by step. By beginning with achievable goals, a regime will be able to build on a foundation of success rather than failure. By not trying to do everything at once, it will be able to learn from experience and to develop institutional capacity over time.

Starting small has three dimensions, relating to the number of countries involved, the stringency of the commitments, and the complexity of the procedural and institutional mechanisms. Kyoto started big in every way: It is a global agreement, which establishes potentially tough commitments (at least before the United States dropped out) and quite complex implementation mechanisms. Alternatives to Kyoto should be more modest in all three respects.

Initially, U.S. climate policy should focus on domestic actions. In part, this is a necessity, because other countries will be reluctant to entertain international alternatives as long as

including a carbon trading system—faces an uphill climb. Until the White House's allergy to mandatory controls is overcome, the United States will be left only with voluntary approaches of the kind proposed by President Bush, which have done little to reduce emissions and lack international credibility.

Publicly, President Bush and congressional Republicans have articulated two grounds for opposing the Kyoto Protocol: high costs and a lack of developing-country emissions targets. But if the cost issue could be solved, this would help resolve the developing-country issue as well, because the lower the costs, the less the competitive edge developing countries would gain from their exemption from targets.

One way to address the cost issue is by expressing the emissions target not in absolute terms, but relative to economic output, like the voluntary target announced recently by President Bush to reduce the level of emissions relative to gross domestic product by 18 percent

during the next decade. Such a target could be credible if it required a real reduction in emissions from what is expected to occur anyway—a test the Bush target fails.

An alternative approach that provides even greater protection against excessive costs is a so-called safety valve, which caps the overall costs of compliance and thereby provides economic predictability. A safety valve controls compliance costs by setting a maximum price on carbon: If the emissions trading price reached this pre-agreed level, emissions targets would be relaxed. It thus combines positive features of both price- and quantity-based approaches to pollution control. Like quantity-based instruments such as emission targets, a safety valve provides a minimum level of emissions reductions if the price remains low. But like price-based instruments such as pollution taxes, a safety valve provides economic predictability by setting an upper bound on potential costs.

A domestic emissions trading program could easily incorporate international components over time. An initial step would be to provide credits for actions to reduce emissions in other countries, where reductions might be achievable at lower costs. A further option would be an agreement with like-minded states—for example, Latin American countries that are also interested in market-based approaches such as emissions trading. Such an agreement could coexist with Kyoto, because it would simply provide supplementary actions and mechanisms. Developing countries would have an interest in joining because they could make money from selling surplus emissions reductions to the United States.

In the long term, of course, a purely regional approach will not suffice—a global regime will be needed. But starting with a few like-minded countries such as Colombia, Costa Rica, and Mexico would have several advantages over the Kyoto process. Hard-line developing countries would not be able to prevent more moderate developing states from joining, as they are able to do under Kyoto, so the regime would begin to break down Kyoto's rigid, debilitating divide between industrial and developing countries.

The countries involved could design the system more coherently, because they would not need to compromise with states holding opposing views. And their common views would give them greater trust in one another, making them more willing to entrust international institutions with the necessary decision-making authority. For these reasons, regional human rights agreements have tended to be more effective than global regimes. Starting small, with fewer states, would provide a better opportunity to build a system with a sound architecture and strong institutions that could eventually merge with Kyoto or replace it.

A small group of states would be reluctant to make stringent commitments by themselves, for fear that this would put them at a competitive disadvantage *vis-à-vis* countries without comparable targets. They would likely want to begin with modest targets, so that they could gauge the costs of compliance before deciding how much further to proceed. However, beginning with modest, achievable targets would be an advantage rather than a drawback.

What distinguishes the Kyoto targets is their legally binding character. This is an asset that must be carefully nurtured. Like the emperor's new clothes, it is largely a state of mind. Once a state breaks the taboo by violating a target, countries may conclude that the legally binding nature of the target did not mean much after all. That is why, in the early days of a legal regime, it is important to start with relatively easy commitments. As the regime gains a track record of success, a culture of compliance develops.

A regional agreement could also incorporate a safety valve, to remove the cost uncertainties that have plagued the Kyoto negotiations. These uncertainties have created a dilemma for states: Either choose emissions targets that are definitely affordable but extremely weak, or agree to stronger targets that create significant economic risks. A safety valve would allow states to have the best of both worlds: strong targets with a guarantee that costs will not become excessive. And it would help contain the pressure toward noncompliance, thus protecting the agreement's legal authority.

Finally, a new international approach to climate need not do everything at once. It should establish the principle that climate policy should comprehensively address all the sources and sinks of greenhouse gases. But its operational rules could focus initially on the simplest parts of the problem—in particular, carbon dioxide emissions from energy—leaving more complex issues until later. As long as the emissions targets are moderate, this should not pose a problem. What drove the United States to push for the inclusion of six gases and carbon sinks was the need to have every possible means to achieve what were regarded as extremely tough targets. More modest targets could be achieved solely through reductions in carbon emissions.

versa. Initially, the domestic measures could be relatively modest. But, unlike President Bush's voluntary approach, they need to require real action now to have any domestic or international credibility.

As U.S. climate policy moves beyond purely domestic measures, it should follow the model of regional human rights regimes and the General Agreement on Tariffs and Trade, seeking agreement initially among a small, relatively cohesive group of states. And it should start with relatively modest commitments, with a safety valve to protect against the risk that even these reductions will prove unreasonably expensive.

The goal should be to launch a new U.S. climate policy, headed in the direction of lower

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Conclusion

Successful policy making must be sensitive to its institutional and political context. An ambitious climate agreement such as Kyoto risks failure by placing greater demands on the international system than it can bear. A better approach would allow the regime's institutional and decision-making capacity to develop over time. That has been the secret to the success of many notable international regimes, including the European human rights system and the General Agreement on Tariffs and Trade.

The essential first step is to build a domestic political consensus for mandatory measures. The history of Kyoto shows that, at least as far as the United States is concerned, domestic policy must lead international policy, not vice

emissions, but recognizing that many mid-course corrections will be needed along the way—not least because our exact destination remains uncertain. All that we know for sure is that the global journey will be difficult and that having alternatives may prove a blessing, as long as we keep the various approaches on parallel, not diverging, courses. ■

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Related Resources

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