



Identifying Options for a New International Climate Regime Arising from the Durban Platform for Enhanced Action

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The Harvard Project on Climate Agreements

The Mercator Research Institute on
Global Commons and Climate Change

IDENTIFYING OPTIONS FOR A NEW INTERNATIONAL CLIMATE REGIME ARISING FROM THE DURBAN PLATFORM FOR ENHANCED ACTION

Issue Brief

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THE HARVARD PROJECT ON CLIMATE AGREEMENTS

The goal of the Harvard Project on Climate Agreements is to help identify and advance scientifically sound, economically rational, and politically pragmatic public policy options for addressing global climate change. Drawing upon leading thinkers in Argentina, Australia, China, Europe, India, Japan, and the United States, the Project conducts research on policy architecture, key design elements, and institutional dimensions of domestic climate policy and a post-2015 international climate policy regime. The Project is directed by Robert N. Stavins, Albert Pratt Professor of Business and Government, Harvard Kennedy School. For more information, see the Project's website: <http://belfercenter.hks.harvard.edu/climate>

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BACKGROUND AND INTRODUCTION

The Durban Platform for Enhanced Action,¹ adopted by the Seventeenth Conference of the Parties² (COP-17) of the United Nations Framework Convention on Climate Change (UNFCCC) in December 2011, calls for a new international climate agreement by 2015, which would come into force in 2020. The Durban Platform provides an opportunity to include all key greenhouse-gas-emitting countries in a new international climate regime that brings about meaningful emissions reductions on an appropriate timetable at acceptable cost.

In this context, the Harvard Project on Climate Agreements³ and the Mercator Research Institute on Global Commons and Climate Change (MCC)⁴ convened a workshop⁵ to identify options for a new international climate regime based on the Durban Platform for Enhanced Action. MCC hosted the workshop in Berlin on 23–24 May, 2013.

On the first day, participants included economists, political scientists, and other researchers in the fields of law, international relations, and integrated-assessment modeling who have studied the international climate-policy process. On the second day, climate negotiators, who represent their governments in the UNFCCC process, joined these researchers for discussion of how new options for the Durban Platform might be introduced into that process.

Research participants were from China, Germany, India, the United Kingdom, and the United States. Representatives of the UNFCCC Secretariat, the European Commission, and the United Nations Environment Programme also participated, as did negotiators from Belgium, Germany, Poland (the host of COP-19 in November 2013), Sweden, and the United Kingdom.

This Issue Brief draws on the discussions at the workshop. It is hoped that it will prove useful to climate negotiators and others concerned with the process of building a more effective international climate-change regime. The workshop was conducted under Chatham House rules; there is no attribution of comments or analysis to individual participants. Some references have been added by the authors of the brief to provide background on key topics.

1 http://unfccc.int/files/meetings/durban_nov_2011/decisions/application/pdf/cop17_durbanplatform.pdf

2 http://unfccc.int/meetings/durban_nov_2011/meeting/6245.php

3 <http://belfercenter.hks.harvard.edu/climate>

4 <http://www.mcc-berlin.net>

5 <http://www.mcc-berlin.net/en/press/events/event-durban-platform-workshop.html#c607>; <http://belfercenter.hks.harvard.edu/publication/23163>

The workshop primarily addressed possible architectures for a new Durban-Platform agreement. “Policy architecture” for global climate change refers to “the basic nature and structure of an international agreement or other...climate regime” (Aldy and Stavins 2010, 1–2). The central challenges facing those who are designing and negotiating the new Durban-Platform climate-policy architecture are: ensuring sufficient *participation* in the agreement, *ambition* with regard to emissions reductions, and *compliance* with mitigation targets, goals, or commitments. These challenges are dynamic—that is, the agreement may include feedback to policy makers and evolving incentives that, in particular, increase ambition over time.

DEGREE OF CENTRALIZATION: TOP-DOWN, BOTTOM-UP, AND HYBRID ARCHITECTURES

A key design consideration for a new international climate-policy architecture—and a major focus of the workshop—is the relative weight given to centralized authority, on the one hand, and national determination of goals, targets, and processes, on the other. There was near consensus among workshop participants familiar with the UNFCCC negotiations that the 2015 agreement would be a “hybrid” one, incorporating and blending elements of both top-down and bottom-up.

Top-down approaches: Formulas and budgets

The UNFCCC’s Kyoto Protocol is generally considered to be top-down. Quantitative, economy-wide emissions-reduction commitments are prescribed for developed countries, as are other obligations (e.g., reporting) for developed and developing-countries.

One example of a top-down model that might be considered in the Durban-Platform process is a proposal by Valentina Bosetti and Jeffrey Frankel (2011).⁶ Bosetti and Frankel offer a framework of formulas that produce precise numerical targets for emissions of greenhouse gases (GHGs), in all regions of the world in all decades of this century. The formulas are expressed as the sum of a “progressive reductions factor” (requiring wealthier countries to abate more, with developing countries at first committing only to business-as-usual [BAU] emissions); a “latecomer catch-up factor” (requiring countries with a target baseline that commences later in time to abate more than those with a target baseline commencing earlier in time); and a “gradual equalization factor” (which moves the world, over the course of the century, toward equal emissions per capita).

6 Neither researcher participated in the workshop.

The formulas are based on pragmatic judgments about what kind and degree of cooperation is politically sustainable: Bosetti and Frankel allow for countries to opt out (at least temporarily) if either current-year or total (discounted) costs exceed certain thresholds. In their 2011 paper, Bosetti and Frankel incorporate Copenhagen/Cancun pledges, and, applying the WITCH model⁷ to the resulting proposal, they find that CO₂ concentrations can—in principle—be stabilized at 500 ppm by the end of the century.

Another top-down approach might employ carbon budgets. The central feature of carbon-budget approaches is to specify a total amount of GHGs that may be emitted globally over a certain period of time. One then divides this cumulative total among emitting countries, with each nation being assigned a cap on cumulative emissions over the same time period as the global total (Jayaraman, Kanitkar, and D’Souza 2011; Messner et al. 2010).

One version of the budget approach was that developed by the German Advisory Council on Global Change. Some aspects of the proposal are (WBGU 2009, 3–5): (1) The global budget is specified as allowing for a certain probability of achieving global-average-temperature stabilization at 2°C above pre-industrial levels.⁸ Two scenarios in the proposal are global carbon emission budgets of 600 and 750 billion tons CO₂. (2) The starting date for calculating country budgets is either 1990 or 2010, reflecting varying weights on historical responsibility. (3) The budget is divided among countries based on equal emissions per capita, from the start of the budget period. (4) Emissions trading is allowed to alleviate the cost incurred by high-emissions-per-capita countries.⁹ (5) Global emissions peak between 2015–2020.

Two important differences between the Bosetti-Frankel (B-F) approach and the WBGU budget approach are: (1) B-F does not have a global cap on emissions; WBGU identifies a cap on *cumulative* emissions over the budget period; and (2) In B-F, equal per capita emissions is achieved at the end of the century; the WBGU proposal *begins* with equal per capita emissions.

Neither model appears to be political feasible, though B-F explicitly attempts to be so. China and the United States—the two largest emitters—are very unlikely to accept externally determined, legally-binding constraints on emissions. In particular, the WBGU proposal’s starting with equal per

7 <http://www.witchmodel.org>

8 The WBGU proposes that this temperature target be made legally binding. It was subsequently incorporated into a decision of COP-16 in Cancun in December 2010 (1/CP.16, I.4, p. 3; <http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf>).

9 “Due to the currently striking differences between the per-capita emissions of industrialized and developing countries, emissions trading and other flexible mechanisms will bring about considerable financial and technological transfers, which could in turn open up attractive possibilities for sustainability investments for the countries supplying emission allowances.” (WBGU 2009, 3)

capita emissions seems impracticable politically. Developed countries (including those participating in the second commitment period of the Kyoto Protocol)—but also China, whose economy is growing rapidly—would be unlikely to accept such a constraint. Indeed, the two countries whose participation is most crucial to success, the United States and China, are among the countries that would be hardest hit by a budget approach based on per capita emissions.¹⁰ While politically infeasible as options guiding institutional regime design, the metrics for measuring aggregate global emission outcomes and equity approaches embodied in various top-down approaches might provide benchmarks guiding the assessment of effectiveness and equity in a future climate regime.

Bottom-up approach: Linkage

One example of a bottom-up approach is linkage between and among regional, national, and sub-national regulatory systems for reducing GHG emissions. Well-designed linkage: 1) yields more cost-effective emissions reductions, by providing a larger pool of abatement opportunities and enhancing the convergence of marginal costs of abatement across regions; 2) reduces price volatility in emissions-trading systems, by creating a more liquid market; and 3) provides a potential source of finance for mitigation-technology development and diffusion (from linkage mechanisms fostering the international support of such activities, or from taxes on transactions).

While linkage between emissions-allowance-trading systems is well understood (Flachsland, Marschinski, and Edenhofer 2009; Ranson and Stavins 2013), it is especially important for the Durban-Platform process to consider heterogeneous linkage—that is, between and among emissions-trading systems, carbon-tax regimes, and non-market regulatory systems. As an example of one such heterogeneous arrangement, firms could overpay their carbon tax bill in one jurisdiction and generate emission-tax-payment credits that could be used in place of allowances in cap-and-trade regimes.¹¹ Heterogeneous linkage will be important, as the 2015 agreement is likely to include pledges of mitigation targets and actions that are achieved through a diverse set of national policies.

Hybrid approaches

As the UNFCCC climate regime has evolved, the distinction between “top-down” and “bottom-up” has gradually blurred. The Copenhagen Accord¹² (arising from COP-15 in late 2009) and the closely-related Cancun Agreements¹³ (embodied in a decision of COP-16 in late 2010) are “bottom

10 The U.S budget would be depleted by 2020, and that of China prior to 2040, requiring both countries to cover any domestic emissions by internationally purchased emission allowances afterwards.

11 Details of how such heterogeneous linkage might be realized may be found in Metcalf and Weisbach (2012).

12 http://unfccc.int/meetings/copenhagen_dec_2009/items/5262.php

13 <http://unfccc.int/resource/docs/2010/cmp6/eng/12a01.pdf>

up” with regard to mitigation commitments, which are effective through 2020, when an agreement under the Durban Platform is scheduled to take effect. These commitments vary widely in form and stringency and have been voluntarily submitted to the UNFCCC. The Copenhagen/Cancun regime also provides for varying degrees of centralized oversight and direction of aspects of the regime other than mitigation commitments—most notably measurement, reporting, and verification (MRV); finance; and technology-related issues.

The 2015 agreement is also likely to be a “hybrid” one. As noted above, a number of major-emitting countries would likely not be able to accept negotiated, legally-binding mitigation commitments. Countries will instead probably submit voluntary pledges of economy-wide emissions-reduction targets—or actions to reduce emissions. Targets and actions are likely to arise out of—or at least be consistent with—national policies and goals to address climate change, which are emerging in a number of countries and thus can be central building blocks of a future climate regime.¹⁴

A hybrid international policy architecture could also provide some centralized oversight, guidance, and coordination. Thus, the new agreement’s architecture may be more similar to the Cancun/Copenhagen regime than to the Kyoto Protocol. The key question is not whether a top-down or bottom-up approach is taken, but rather how a hybrid approach can be constructed that takes the best elements from both—how it can be anchored in domestic political realities, while recognizing the imperatives to address emissions and climate impacts.

ENABLING INCREASED AMBITION OVER TIME

Top-down approaches promise more ambition than bottom-up systems—but often more ambition than some parties can politically accommodate. Participation (and later compliance) will suffer. Bottom-up approaches lend themselves to more participation and compliance, the former because each country will offer only what it believes it can accomplish at reasonable cost, and the latter because, in addition, its international commitment is more likely to be rooted in national law or policy.

A hybrid approach may offer some resolution of this trade-off. If it is well designed, it may be more conducive to optimizing participation, compliance, and especially ambition—by rendering the optimization problem *dynamic* (that is, in part, by incorporating feedback and iteration over time). There is at least the potential for such arrangements to facilitate mutually reinforcing exchanges between the international regime and national policies.

14 For an overview of the expansion in the range of emissions-trading systems, in particular, see: <http://icapcarbonaction.com> and click on “ETS Map.”

Top-down agreements tend to be *static*. In the Kyoto regime, to take an important example, it is difficult to adjust participation (especially between developing and developed countries) or quantitative emissions-reduction commitments. Though Kyoto's quantitative emissions-reduction targets were ambitious, global emissions reduction was modest, due to lack of participation. This is even more evident in the Protocol's second commitment period, in which the number of (developed) countries with mitigation commitments decreased, relative to the first commitment period, and which covers only 15–20 percent of global emissions.¹⁵

An international regime might achieve depth (ambition of emissions reduction) and breadth (of participation) in different sequence. Schmalensee (1998) argues for breadth first, in part to give time for the development of institutions that can ensure broader international participation in emissions abatement. His analysis might be supplemented by noting that institutional development would provide the structure and stability required to sustain the feedback and iteration that might, in turn, lead to increased national ambition. Others have suggested that depth should come before breadth because of the urgency of the climate-change problem. Many of the workshop participants suggested that in view of the current state of international negotiations, a broad-then-deep(er) agreement would probably yield greater aggregate emissions reduction over time.¹⁶

A central question is how to implement this approach—to determine *how* the new regime might engage a broad range of countries in mitigation and then ratchet up ambition over time. One approach would be through persuasion—for example, through a scientific review process, bringing to bear new knowledge from the natural sciences and from policy analysis. Another would be designing incentives for national governments to increase ambition over time.¹⁷

Among the possible incentives for increasing national ambition, in addition to avoiding climate-change impacts as such, are revenues from auctioned permits in cap-and-trade schemes or from carbon taxes. In addition, co-benefits of climate policy, including enhanced innovation, green jobs, reduced air pollution, or energy security could be drivers of domestic climate policy ambition. While some in the

15 See footnote 1 at: <http://insights.wri.org/news/2011/12/china-durban-first-steps-toward-new-climate-agreement>

16 The static trade-off has been analyzed as a comparison between an “ambitious versus a modest treaty” (Finus and Maus 2008; Courtois and Haeringer 2011) or between a focal (deep and narrow) versus a consensus (broad but shallow) treaty (Barrett 2002; Hafner-Burton, Victor, and Lupu 2012, 78). They conclude that, with some conditions, the consensus treaty may achieve more emissions reduction over time than the focal treaty.

17 Barrett and Stavins (2003) address the tradeoff between participation and ambition, the feasibility of a hybrid regime (though they do not label it as such), and possible incentives for increasing participation and compliance. Further dynamic analysis may show that the tradeoff between breadth and depth might be overcome, if broad participation increases environmental effectiveness (by covering more emissions), and reduces costs (by encompassing more low-cost abatement options in a larger market), so that breadth also enables greater ambition (subject to the costs of attracting participants) (Battaglini and Harstad 2012).

workshop argued that these incentives will be central for increasing ambition in a new climate regime, others were skeptical that they could be implemented or, if they were, that they could be effective.

An example of a procedural approach to encouraging increased ambition over time would be to employ conditional policies. One country might condition increased ambition on that of other parties, as the European Union (EU) and Australia announced they would do prior to COP-15 in Copenhagen.¹⁸ Policy coordination, linkage between regulatory systems, and international financial support (discussed below) could also be formulated in conditional terms—perhaps including provisions to reverse the more ambitious policy in case of breach, as a form of sanction. Transparent reporting, also discussed below, would be essential for the success of such an approach.¹⁹

Figure 1 presents one perspective on how the international regime and national policies might reinforce each other:

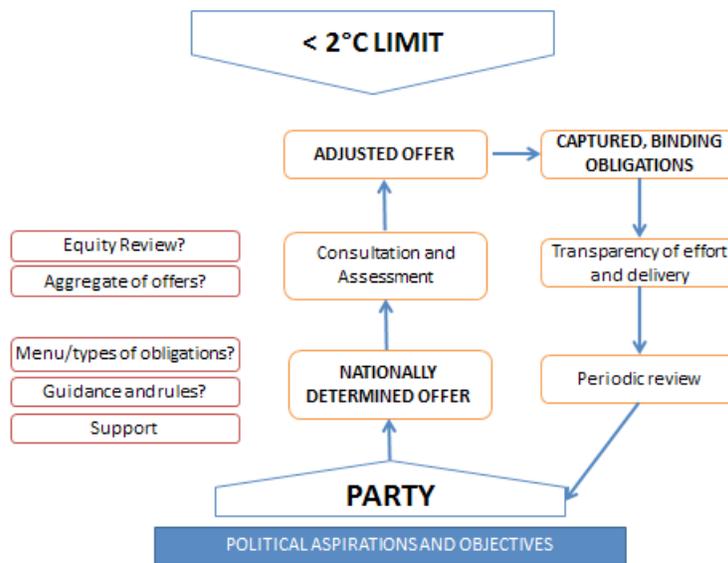


Figure 1: Outline of the potential structure of a dynamic hybrid climate regime emerging from the Durban Platform on Enhanced Action.

18 The EU promised to increase its aggregate emissions-reduction commitment through 2020 from 20 percent to 30 percent from 1990 levels, if other parties achieve certain emission-reduction goals http://ec.europa.eu/clima/policies/brief/eu/index_en.htm. The EU has not seen this condition being met, and commitment to the higher level of abatement is waning. For Australia, see Höhne and Hare (2011).

19 Underdal, et al. (2012) assess the potential of conditional policies for advancing cooperation on mitigation.

In Figure 1, the left and right columns present functions of the international regime, while the center column presents functions of national parties. In this example, the entire process is constrained by an aggregate temperature goal, embodied in the COP-16 (Cancun) decision²⁰ of limiting global-average temperature increase to 2°C over pre-industrial levels, and by domestic political aspirations and objectives. The diagram reinforces a dynamic view of a new climate regime based on the Durban Platform. An iterative process, in this view, is best suited to closing the gap between the 2°C objective and the aggregate of national offers;²¹ closing the gap is not likely to be an outcome of a static agreement.

Such a system may be considered as being a decentralized, multi-level governance regime, with the main design task over the next years being to identify the appropriate division of labor between the UNFCCC and other international institutions and forums, and between the international and domestic (including sub-national) levels (Edenhofer et al. 2013; Keohane and Victor 2011). In particular, given that initial national commitments in a 2015 agreement will be voluntary, a key issue is the nature and function of top-down elements. The UNFCCC and the broader international regime might be assigned a range of top-down responsibilities related to a 2015 agreement, such that it enables national ambition to increase over time:²² (1) Developing *principles, rules, and metrics*, possibly including the 2°C temperature goal, as well as others for evaluating the aggregate global outcomes of national offers and for informing equity reviews of these offers. The effectiveness of such evaluations would depend heavily on the transparency with which they were formulated and implemented; (2) formulating provisions regarding *finance, market mechanisms, and technological innovation* that may support, guide, and enhance national offers over time; and (3) specifying a *legal form that facilitates increasing ambition over time*, which may include provisions for capturing in text, periodically reviewing, and adjusting national obligations. Below we examine each of these potential functions.

Principles, rules, and metrics

Designing a 2015 agreement such that it encourages increased national ambition over time will depend on specifying a set of principles, rules, and metrics to:²³ (1) *evaluate aggregate global goals and outcomes*; (2) *review the equity of national offers (and related burden-sharing arrangements)*, with options for metrics including current emissions, allocations of emissions allowances, marginal and aggregate cost of abatement, emissions reductions relative to BAU, energy-use per capita, contributions to

20 1/CP.16, I.4, p. 3; <http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf>

21 See also the UNEP Emissions Gap Report (UNEP 2012), which provides an assessment of the aggregate outcome of Cancun pledges by comparing actual and required emissions trajectories to achieve the 2°C temperature objective.

22 As noted, some of these are nascent in the Copenhagen/Cancun regime.

23 Elements of these are evident in both the Bosetti-Frankel and budget approaches described above.

international climate finance, deployment rates of carbon-free energy technologies, macroeconomic parameters (such as per capita GDP), and comparisons across similar or competing countries; and (3) *assess national compliance with commitments* (MRV).

These three are complementary and mutually reinforcing. For example, compliance-assessment of national GHG emissions and policies would allow for accurate cross-national comparison of effort and evaluation of aggregate (global) emissions reductions. Conversely, both formal (e.g., driven by UNFCCC or various international organizations) and informal (e.g., science-driven) MRV—assessments and comparisons of national pledges, compliance with these pledges, and aggregate outcomes—might be based on equity-related principles, rules, and metrics.²⁴

The transparency and credibility of principles, rules, and metrics is crucial to generate the trust required to: (1) enhance cooperation, such as through policy linkages that may reduce costs; (2) coordinate and align countries' level of effort; and (3) most importantly, increase ambition, based on sound knowledge that other countries are complying with their commitments.

It will be challenging—both technically and politically—to specify principles, rules, and metrics in a 2015 agreement—as it has been in past agreements. There is reason to be skeptical that countries would seek opportunities to increase ambition, given any conceivable incentives. In fact, many countries in recent years have sought opportunities to weaken, not strengthen, their commitments. If such skepticism is borne out by the negotiations,²⁵ the assumption that principles, rules, and metrics be top down might be relaxed. Bottom-up versions may be adopted by participating governments and organizations, reflecting multiple perspectives on the corresponding issues. As with the more general statement above concerning the trade-off between top-down and bottom-up architectures, however, ambition may suffer as a result.

Finance, market mechanisms, and technological innovation

International financial support is clearly one top-down function that could strengthen national mitigation policies over time. International support for reducing subsidies on fossil-fuel usage is one example. International support measures will need to be well aligned with domestic policies focused on economic development.

24 See also Fischer and Morgenstern (2008).

25 As this brief was being completed, some parties to the UNFCCC negotiations differed on whether it would be desirable to submit national commitments only once, or in two steps. Some that preferred one step argued that parties would submit their best offers (of mitigation targets or actions) if they only had one opportunity. Those preferring two steps argued that many parties would find avenues to increase their ambition in the interim. See also Harstad (2012) on iterative negotiations.

As noted previously, market approaches to mitigation can both reduce the cost of abatement and, potentially, provide financial support for mitigation in countries with fewer resources. It is not clear, however, whether or how the UNFCCC or other Durban-Platform institutions could facilitate this process in a top-down manner. The Durban-Platform process might best adopt a “no harm” (or “hands off”) approach to bottom-up development of market approaches that might independently enhance ambition of domestic policies (often through linkage), while providing some top-down coordination to avoid clear potential problems, such as double counting of mitigation efforts.

Financial support for innovation and deployment of mitigation technologies might be prioritized in the new regime. The availability of more technological options that could reduce the cost of mitigation would alleviate time pressure and the collective-action challenge of coordinating and implementing policies for meeting a specific goal. Also, the cost differential between emissions-free energy technologies and fossil fuel-based energies may be reduced over time, and this would have a positive impact on the domestic and international politics of climate policy.

Legal form

Although the workshop did not address legal form in depth, participants did discuss one important dimension—the degree to which various aspects of the agreement underlying the new regime are legally binding (Bodansky 2012). For example, Australia has proposed²⁶ that MRV and accounting be legally binding and commitments be set out in a schedule that is domestically binding, but captured in an international agreement. Thus, a hybrid legal form may emerge, parallel to a hybrid policy architecture.

A related challenge in designing the legal form of an agreement based on the Durban Platform is to incorporate flexibility to facilitate response to novel and unforeseen developments. This may include provisions for capturing in text, reviewing, and updating national obligations submitted to the international regime over time. It may also include procedural mechanisms to review certain regime elements in case of “external shocks,” for example new insights on impacts or the climate system, unexpected changes in economic growth in some countries, or changes in the costs of mitigation technologies.

26 http://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp_australia_workstream_1_20130326.pdf

ADAPTATION, GEOENGINEERING, AND RISK MANAGEMENT

Mitigation policy will likely be insufficient to prevent significant climate impacts under most modeling scenarios, which suggests that adaptation will be a crucial component of a post-2020 regime. Moreover, given remaining uncertainties in the climate system, it is important to apply the perspectives and techniques of risk and risk management to international climate agreements and negotiations.

Adaptation is quite different from mitigation, in that it has no global-commons dimension. Adaptation efforts may, however, have externalities. For example, learning about adaptation in one country or region may yield knowledge that can be used in another. Alternatively, lack of needed adaptation may result in economic or social instability in neighboring regions. Given such externalities, more research and analysis is needed to determine the optimum design of adaptation policy, including the relative roles of public and private investment in adaptation.²⁷

A future international climate agreement may also address geoengineering, which is a third approach to addressing climate change—in addition to mitigation and adaptation. “Geoengineering” refers to a set of techniques that reduces the amount of solar radiation reaching the Earth or that remove GHGs directly from the atmosphere. Such approaches might be used in the event that mitigation and adaptation are both seen as insufficient in the face of a changing climate. The former set of approaches—solar radiation management (SRM)—pose unknown but potentially significant risks. These risks, together with some SRM techniques being relatively inexpensive to implement, suggest that it is important to advance the sharing of knowledge on and the governance of geoengineering.²⁸

SUMMARY AND OUTLOOK

It appears that a 2015 agreement arising from the Durban-Platform will combine elements of top-down and bottom-up policy architectures. Domestic aspirations, policies, and objectives will likely be the primary determinants of the ambition of a 2015 agreement. Given that, in aggregate, such domestic policies would not reduce emissions sufficiently, the new agreement must attempt to motivate increased national ambition over time—to create a self-reinforcing “loop” in which countries offer national policies, actions, and targets rooted in their domestic political processes—and review these over time in light of information on aggregate global outcomes, equity considerations, and (in the case of developing countries) international support.

27 See Malik and Smith (2012) and accompanying articles in special issue of *Climate Change Economics*.

28 See also Barrett (2008), Bodansky (2011); Moreno-Cruz and Keith (2012).

Incentives for increased national ambition include avoiding climate impacts as such, revenues from auctioned permits in cap-and-trade systems or GHG taxes, and co-benefits of climate policies. Procedural approaches to increasing ambition may include conditional policies implemented in participating countries and coordinated by the regime.

There remain significant technical and political obstacles to designing and implementing incentives for increasing ambition and procedures for review and evaluation. A key challenge is to define the division of labor between the UNFCCC (and, perhaps, other international organizations), bi- or pluri-lateral policy linkages, national, and sub-national governments, the private sector, and science- and technology-driven activities (e.g., possibly on MRV and policy assessment) in such a manner as to avoid conflicts, promote synergies, and increase domestic ambition. It will be as important to identify what the (top-down) regime should *not* do—that is, to avoid interfering in sub-global policy in potentially detrimental ways.

The outlook for completing a 2015 agreement based on the Durban Platform is positive—an assessment based in part on the insights from participants in the workshop—but it remains to be seen whether the Conference of the Parties can design an architecture that optimizes among participation, compliance, and ambition—and then reach agreement on such a design.

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APPENDIX 1: WORKSHOP AGENDA

Identifying Options for a New International Climate Regime Arising from the Durban Platform for Enhanced Action

May 23-24, 2013
Berlin, Germany

22 May

18.00 – 20.00h Reception

23 May, Day 1

| Time | Item |
|---|--|
| 9:00 – 9.30 | Welcome, introductions, and setting the stage |
| <i>Session 1 – Background</i> | |
| 9.30 – 9.45 | Background: The UNFCCC Durban Platform on Enhanced Action |
| 9.45 – 10.00 | Key lessons from integrated assessment modeling for the design of a Durban Platform regime |
| 10.00 – 10.45 | Plenary Discussion |
| 10.45 – 11.00 | <i>Coffee Break</i> |
| <i>Session 2 – Top-down options for a Durban Platform outcome</i> | |
| 11.00 – 11.10 | Proposals for top-down design of a Durban-Platform regime |
| 11.10 – 11.25 | Responses |
| 11.25 – 12.00 | Plenary Discussion |
| 12.00 – 12.10 | Key elements of a Durban Platform regime |
| 12.10 – 12.25 | Responses |
| 12.25 – 13.00 | Plenary Discussion |
| 13.00 – 14.00 | <i>Lunch</i> |

Session 3 – Bottom-up options for a Durban Platform outcome

| | |
|---------------|---|
| 14.00 – 14.10 | Linking ETS and other domestic policies |
| 14.10 – 14.25 | Responses |
| 14.25 – 15.45 | Plenary Discussion |
| 15.45 – 16.00 | Coffee Break |

Session 4 – The path forward

| | |
|---------------|--|
| 16.00 – 16.10 | Incorporating adaptation, geoengineering and risk management into a Durban Platform regime |
| 16.10 – 16.55 | Plenary Discussion |
| 16.55 – 17.00 | Building on the Kyoto Protocol and integrating the Cancun Agreements in a new Durban Platform regime |
| 17.00 – 17.45 | Plenary Discussion |
| 17:45 | End of Workshop Day 1 |
| 20:00 | Dinner |

24 May, Day 2

| Time | Item |
|-------------|---------------------------|
| 8:00 – 8.30 | Welcome and introductions |

Session 1 – Discussing top-down options

| | |
|---------------|---|
| 8.30 – 8.45 | Top-down approaches to a Durban Platform regime |
| 8.45 – 10.00 | Plenary Discussion |
| 10.00 – 10.15 | Coffee Break |

Session 2 – Discussing bottom-up options

| | |
|---------------|--|
| 10.15 – 10.30 | Bottom-up approaches to a Durban Platform regime |
| 10.30 – 11.45 | Plenary Discussion |
| 11.45 – 12.00 | Wrap-up |
| 12.00 | End of Workshop |
| 12.15 – 13.30 | Optional Lunch |

APPENDIX 2: RESEARCH WORKSHOP PARTICIPANTS

May 23-24, 2013

Berlin, Germany

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