DESIGNING THE GLOBAL STOCKTAKE: A GLOBAL GOVERNANCE INNOVATION

C2ES CENTER FOR CLIMATE AND ENERGY SOLUTIONS

Manjana Milkoreit
Kate Haapala

Purdue University

November 2017

The Paris Agreement establishes a Global Stocktake to facilitate a periodic review of parties' collective progress towards achieving global climate change goals, as a prelude to parties submitting enhanced "nationally determined contributions" (NDCs). The Stocktake's success in facilitating greater ambition may be critical to the ultimate effectiveness of the Paris Agreement. Given the unique nature and purpose of the Global Stocktake, existing review mechanisms in other international regimes offer only limited insight to help inform its design. Its key differentiating features are its underlying aim—increasing ambition over time—and its exclusive focus on collective rather than individual performance. This policy brief outlines unique features of the Global Stocktake that make it, potentially, a true innovation in global governance. Highlighting six design issues—purpose, object, sources and types of inputs, collective learning, especially concerning the practice of "doing transformations," and goal psychology—the brief draws lessons from existing international regimes and identifies opportunities for innovation in global governance in the design of the Global Stocktake.

INTRODUCTION

The Global Stocktake established by the Paris Agreement on climate change is an innovation—nothing quite like it exists in the landscape of global institutions. In global governance terminology, the Global Stocktake falls under the category of multilateral review mechanisms, which feature in most multilateral regimes. Virtually all of the existing mechanism, however, are designed to review individual, rather than collective, performance. Such a country-level approach is a fundamental feature of the U.N. Framework Convention on Climate Change (UNFCCC), and Article 13 of the Paris Agreement builds on existing review mechanisms to establish an "enhanced transparency framework." The Global Stocktake, on the other hand, is intended to periodically assess collective progress toward the long-term goals of the Paris Agreement, with the aim of informing parties "in updating and enhancing" their actions, support and cooperation. Together, these individual

and collective review mechanisms are integral to the new "hybrid" logic of Paris Agreement, combining non-binding, nationally-determined pledges with international progress checking. Given this logic, the transparency and review mechanisms are essential for the effectiveness of the Paris Agreement. At the same time, the unique characteristics of the Stocktake open up significant opportunities for crafting a much-needed learning institution, one that intentionally and regularly boost the process of collective knowledge generation, peer-learning and meaning-making in the international climate negotiations.

Article 14 of the Paris Agreement states that the parties to the agreement "shall periodically take stock of the implementation of the Paris Agreement to assess the collective progress towards achieving the purpose this Agreement and its long-term goals." The outcome of this process shall inform parties in updating their nationally determined contributions (NDCs) and in enhancing international cooperation on climate change. This formulation of Article 14 highlights two features that clearly differentiate the Global Stocktake from existing review processes in global governance: the assessment of exclusively collective, rather than individual, progress towards shared global goals (and the larger purpose of the Paris Agreement) and the implicit aim to increase ambition over time by encouraging parties to present scaled up NDCs and to increase their levels of coopera-tion. These two features have major design implications for the Global Stocktake, the details of which are currently being negotiated by the Ad-hoc Working Group on the Paris Agreement (APA).

TABLE 1: Global Stocktake: Key Features and Design Issues

UNIQUE FEATURE	DESIGN IMPLICATIONS
Purpose	The Global Stocktake's implicit aim of increasing parties' ambition over time is unique compared to other multilateral review mechanisms that work with a fixed performance standard. The logic of an upward sliding scale instead of meeting known and stable expecta-tions presents specific design challenges.
Object	The Global Stocktake assesses *collective* rather than individual progress towards achieving global long-term goals and the overall purpose of the Paris Agreement.
Sources and Types of Input	In contrast with other review mechanisms, information gathering and assessment will not include country-based reporting and in-country visits. Instead, the need to understand joint progress of the international community rather than that of individual countries calls for a range of global-scale (country-aggregated) information sources.
	Science could play a stronger role in the Global Stocktake in comparison to other multilateral review mechanisms. IPCC reports as the most authoritative source of scientific information may need to be complemented by other scientific and knowledge sources, including those produced by non-state actor groups.
Collective Learning	The central mechanism underlying the Global Stocktake is collective learning: the devel-opment of a shared understanding of the meaning of progress with a view to long-term, global goals.
	Collective learning requires, but goes far beyond gathering data and developing new knowledge; it's a communicative process of constructing shared meanings around new concepts, including normative expectations and identities.
Doing Transformations	The opportunity to use the Global Stocktake as a peer-learning platform for "how to do trans-formational change" could introduce a novel function for this multilateral review mechanism. This is a logical extension of the Stocktake's aim to increase collective ambition over time. A multilateral learning platform on transformational change could create a direct link between global politics and domestic action.
Stocktaking Psychology	The Stocktake's nature does not lend itself to naming and shaming practices that operate as an informal mechanism to compel parties' compliance. An alternative motivational mechanism could be based on pride, but requires the strengthening of the shared identity of Parties as the international community.

DESIGN CHALLENGES AND OPPORTUNITIES CHALLENGES

In the years leading up to the Paris Agreement, a number of analyses attempted to draw lessons from other multilateral regimes for the development of stipulations on ambition, review, and transparency to be included in the future agreement.[1] In the case of the Global Stocktake, however, experiences within other regimes have only limited applicability, while lessons from the Facilitative Dialogue to be undertaken by UNFCCC parties in 2018 are not yet available.[2] Significant differences exist between this new component of the climate regime and existing review mechanisms in other multilateral agreements. This section considers these differences in outlining six sets of challenges in designing the Global Stocktake and the opportunities they present for innovation in global governance (see Table 1).

STOCKTAKING WITH PURPOSE

Based on Article 14 PA, the Global Stocktake has three distinct, although connected and significantly overlapping, purposes:

1. Assessing collective progress towards *achieving the purpose of the Agreement* (i.e., strengthening the global response to the threat of climate change in the context of sustainable development and poverty eradication, Article 2.1),

2. Assessing collective progress towards *long-term global goals* (i.e., Article 2.1: temperature goal, adaptation goal, finance goal; Article 4.1: global peaking of greenhouse-gas [GHG] emissions, balancing GHG emissions and removals), and

3. Enhancing action, support and international cooperation (i.e., *increasing individual and collective ambition,* over time).

While there is some experience in other multilateral regimes with efforts to assess progress towards shared treaty objectives and goals (see below), the most innovative and intriguing, but also most challenging, purpose of the Global Stocktake is to facilitate the increase of parties' ambition over time. Ambition can be expressed in terms of voluntary pledges in countries' NDCs and in terms of the definition (and potential revisions) of global goals: How far below 2°C are countries aiming? How soon would they like global GHG emissions to peak or a balance between emissions and removals to be achieved? Increasing ambition could be observed in upward revisions of NDCs or increasingly stringent global goals. More than a passive review of the Paris Agreement's implementation, i.e., a status report, the Global Stocktake can instead facilitate an iterative process for ratcheting up ambition. That in turn would strengthen the international response to the threat of climate change—the overall purpose of the Paris Agreement.
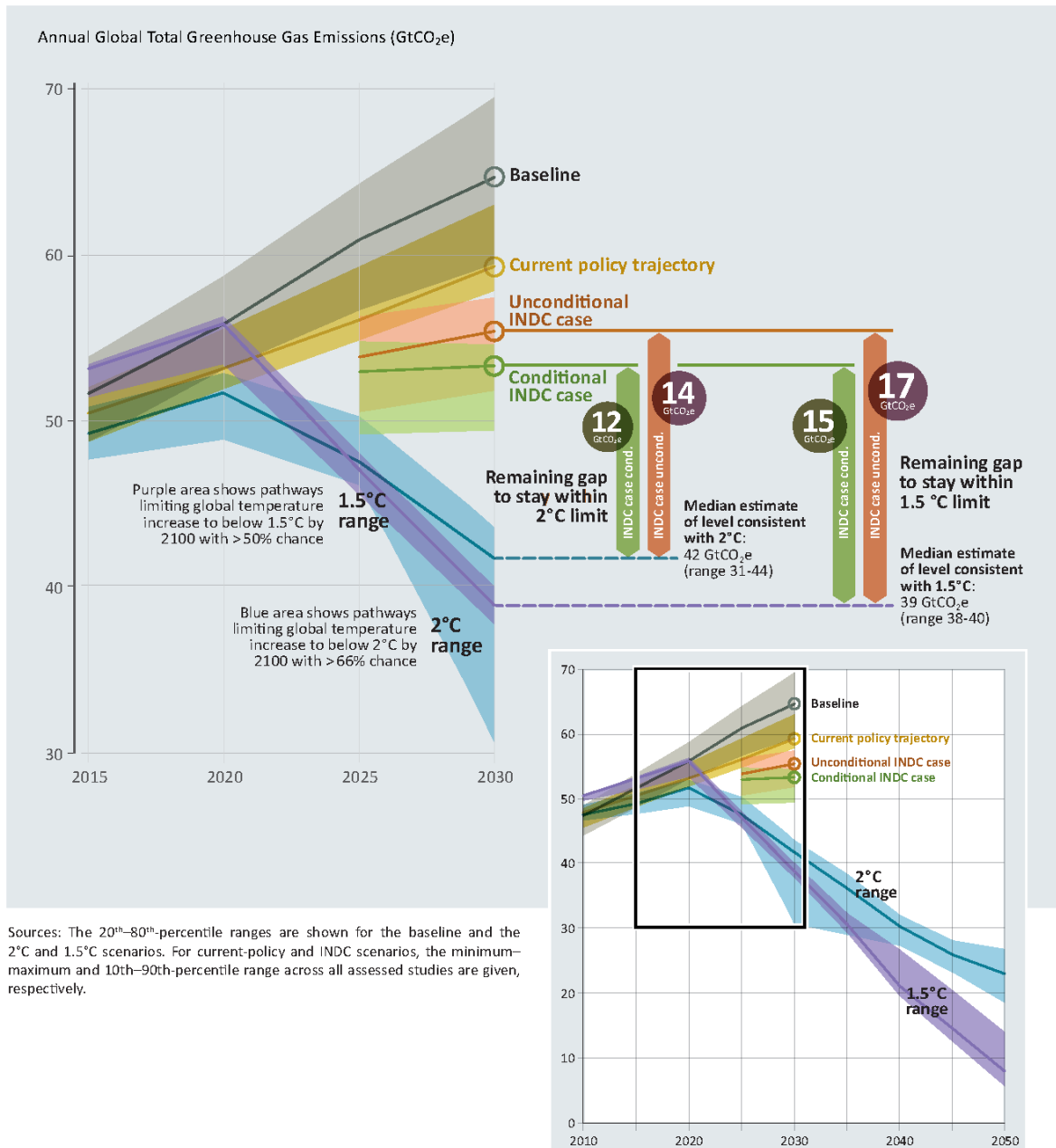
Existing review mechanisms in other multilateral regimes hold countries accountable to a set standard. Usually this set standard consists of the principles and obligations established in an international agreement; sometimes countries' domestic objectives are also used as a benchmark. In the climate regime, the global temperature goal comes closest to such a set standard. While there will always be some scientific uncertainty concerning the required amount, rate and timing of GHG reductions to limit global average temperatures to 2°C, there are sufficient approximations to judge whether or not the world is on track or has already achieved this goal. However, the new temperature target formulated in the Paris Agreement has replaced the well-established standard in favor of a more open-ended target: it is unclear what temperature limit between 1.5°C and 2°C "well below 2°C." It is also unclear when this temperature limit should be achieved and whether there might be an overshoot period. All of these uncertainties leave room for more ambition.

More generally, the idea of permanently increasing ambition does not allow for a set standard, which remains fixed over time. Instead, it is always a moving target—a standard with a sliding scale and presumably no upper limit. There are no clear expectations and indicators that could be used to judge the international community's collective policies and actions as "insufficiently ambitious," "adequate" or "overachieving," especially with regard to the vaguely formulated adaptation and finance goals. Except, the requirement to increase ambition over time establishes a floor, or minimum standard, which is also constantly moving. This minimum standard is defined by the levels of action, support and cooperation during a previous time period, which ought to be exceeded in the current and future time periods.

THE OBJECT OF THE STOCKTAKE: COLLECTIVE PERFORMANCE

The object of assessment in the Global Stocktake is collective, rather than individual, performance by all parties concerning progress towards achieving the purpose of the Paris Agreement and its long-term goals.

FIGURE 1: UNEP Gap Report 2016 - A Visualization of being 'off-track'

Annual Global Total Greenhouse Gas Emissions (GtCO$_2$e)

Purple area shows pathways limiting global temperature increase to below 1.5°C by 2100 with >50% chance

1.5°C range

Blue area shows pathways limiting global temperature increase to below 2°C by 2100 with >66% chance

2°C range

Baseline

Current policy trajectory

Unconditional INDC case

Conditional INDC case

12 GtCO$_2$e

14 GtCO$_2$e

15 GtCO$_2$e

17 GtCO$_2$e

INDC case cond.

INDC case uncond.

Remaining gap to stay within 2°C limit

Median estimate of level consistent with 2°C: 42 GtCO$_2$e (range 31-44)

Remaining gap to stay within 1.5 °C limit

Median estimate of level consistent with 1.5°C: 39 GtCO$_2$e (range 38-40)

Sources: The 20th–80th-percentile ranges are shown for the baseline and the 2°C and 1.5°C scenarios. For current-policy and INDC scenarios, the minimum–maximum and 10th–90th-percentile range across all assessed studies are given, respectively.

There are three multilateral regimes that attempt to do something similar, although with important differences: the International Monetary Fund's (IMF) Bilateral Surveillance, the World Trade Organization's (WTO) Trade Policy Review Mechanism (TPRM) and the Montreal Protocol's Implementation Review. In all three cases, the collective assessment occurs in addition to the main purpose of assessing individual policies and actions. The Global Stocktake on the other hand focuses exclusively on collective accomplishments.

In the case of the IMF and WTO, the bilateral components of the review assess country-level (economic, financial, trade) policies. These individual assessments inform a multilateral review component focusing on the

aggregate effects of individual countries' policies on the international monetary and trade systems respectively, given the principles established in these institutions' founding treaties (i.e., asking whether these policies contribute to or detract from global financial stability and open trade). The Global Stocktake, however, would assess collective progress rather than individual parties' changes in policies and actions, asking whether or not it signifies a strengthening of the overall global response to climate change.

The Montreal Protocol's Implementation Review considers the adequacy of parties' collective contribution to achieve shared emission reduction goals for ozone-depleting substances. The review is based on an aggregation of emission and production data reported annually by each party. This dimension of the Implementation Review bears strong similarities to the Stocktake's purpose of assessing collective progress towards the global temperature, peaking, and GHG balancing goals, since temperature goals can be expressed in terms of emission pathways and associated global emission reduction requirements. Initial experience with aggregating data provided by all parties of the climate regime has already been developed pre-Paris. For example, the UNFCCC Secretariat provided a report on the aggregate effect of Parties' intended nationally determined contributions (INDCs) submitted prior to COP 21,[3] which contributed to parties' understanding that pre-Paris commitments were not sufficient to limit global temperature increase to 2°C above pre-industrial levels, adding weight to arguments for greater ambition moving forward. Similar insights have been provided by UNEP's Emission Gap reports in the past (see Figure 1). More generally, given the highly technical nature of this collective component of the review process under the Montreal Protocol—the aggregation of annually reported emission data—and the absence of the need to raise ambition, the Global Stocktake presents a very different challenge.

However, the other long-term goals (adaptation and finance) are not well defined and not measurable in the same sense the temperature goal can be measured. The global adaptation goal combines three elements that are all subject to significant definitional and measurement challenges: increasing the ability to adapt, fostering climate resilience and fostering "low greenhouse gas emission development." Given the highly context-dependent nature of adaptation needs and corresponding abilities, it will be difficult to develop generally applicable, global-scale indicators and measures for

adaptation abilities that allow for a cross-site comparison, e.g., between a fishing village in Uganda and one in Alaska. Similarly, there is no single definition of climate resilience that would allow for a quantitative assessment (e.g., a score) and comparison of the state of resilience in development over time or an established notion of low-GHG development (e.g., compared to zero-GHG development).

The goal to make global finance flows consistent with climate-resilient and low-GHG development is beset by equally challenging conceptual uncertainties, e.g., the meaning of consistency and which financial flows count as "mobilized through public interventions." Assessing progress of this kind is a novel challenge of a qualitative rather than quantitative nature. UNEP's Adaptation Gap Reports,[4] the OECD's reporting on climate finance,[5] and the Global Landscape of Climate Finance reports by the Climate Policy Initiative[6] provide some initial insights into these challenges and how they could be approached. Ongoing APA negotiations on reporting guidelines for developed country Parties on the support they provide to developing country parties under Article 9 of the Paris Agreement also struggle with these questions.

Further, no other multilateral regime contains long-term global goals with timeframes similar to those in the climate regime, and hence, there is no experience with such extended time horizons in an assessment process. The Montreal Protocol offers the closest approximation. Its initial time horizon was only a decade. However, its 2016 Kigali amendment on hydrofluorocarbons (HFCs) introduced an emission reduction timeline of 30 years (ending in the mid 2040s). In contrast to the Paris Agreement, quantified emission reduction milestones between 2019 and 2047 are clearly defined. After 2019, the Implementation Review will presumably include an assessment of progress towards these goals. Early experience gathered with the Montreal Protocol's Implementation Review after 2019 could serve as valuable inputs into the design of the Global Stocktake.

SOURCES AND TYPES OF INPUT

Concerning necessary and appropriate information sources, i.e., inputs into the Global Stocktake to be gathered and synthesized, existing review mechanisms offer an important lesson: the design of the review mechanism will evolve over time. You rarely get all things right the first time around, placing a premium on flexibility. Flexibility implies that beyond a list of minimum initial

information requirements, the process should remain open to changing kinds of input and information sources over time.

Input-Gathering Process

Most existing review mechanisms gather and aggregate relevant information about a country's performance in an initial, technical phase that usually involves an in-country visit. In contrast, input gathering for the Global Stocktake will not involve individual parties and in-country visits; rather, such individual reviews will take place under the "enhanced transparency mechanism" established by Article 13. Since the Global Stocktake is a collective rather than individual review mechanism, the collection of relevant information—whether that occurs in a technical phase of the Stocktake or some other fashion—can integrate information produced in other UNFCCC processes, synthesis reports generated by the Secretariat, global-scale information produced by other international organizations (e.g., reports by UNEP, the Green Climate Fund, multilateral development banks), and scientific information, especially IPCC reports. A key input may be the aggregate findings from parties' NDC-related reporting under Article 13.

The Best Available Science

While all review mechanisms rely on some form of technical expertise (e.g., on economic policy, nuclear safety or accounting rules for emission reductions), and in some cases science plays a significant role in providing such technical expertise (e.g., in the Montreal Protocol), science and the Intergovernmental Panel on Climate Change (IPCC) may have an elevated position in the Global Stocktake compared to any existing multilateral review mechanism.

One reason for a strong emphasis on scientific inputs is the Stocktake's fundamental future orientation and the need to deal with tremendously long time horizons. Scientific knowledge (e.g., as a result of computational modeling of possible future changes in the climate system) is the major, and in some cases the only, available information source about the future. Any effort to assess whether or not the international community is "on track" to meeting long-term goals requires some form of future-modeling and scenario thinking, placing observations of the past and plans for future action into the context of global models. Being on track is becoming the single most important indicator of progress, in particular with

regard to the long-term temperature goal. This is the only goal that can be expressed in terms of an emission pathway, facilitating a quantitative evaluation of whether or not the global community is on or off-track, i.e., on or off the modeled pathway. For the other long-term goals, even global GHG peaking with its uncertain timing, it will be significantly more difficult to say what being on-track means. For those, more qualitative measures of progress will be required.

This situation highlights the important role of the IPCC could play in informing and supporting the global stocktaking process to ensure the availability of the best available science. However, for a number of reasons, it might be necessary to complement IPCC inputs with other forms of scientific information, which might be more recent and in some cases more specific than IPCC reports can be. Most generally, the IPCC does not conduct any science on its own; instead, it aggregates the scientific knowledge produced by the scientific community. Having to rely on 'what is out there' implies that the IPCC often cannot provide answers to a specific question asked by a negotiation body. If there is no published work on the issue in question, there is nothing the IPCC can aggregate and report on.

Second, some of the scientific input that will be required for the Global Stocktake will have to be produced in a conversation between policy-makers and scientists similar to Structured Expert Dialogue undertaken as part of the UNFCCC's 2013–2015 review of the adequacy of and collective progress towards the global temperature goal. Parties would benefit from assessments of the effectiveness of new policies and actions, and projections of the impacts of existing and new policies on future emissions trajectories. This is not a task the IPCC is designed to do or capable of doing. The global scientific community, however, including major research-based think tanks and policy advocacy platforms, have the capacity to develop this kind of dynamic knowledge in conversation with the climate policy community. Their knowledge products may be more recent, agile, and in-depth than IPCC reports, and could be valuable inputs to the Global Stocktake.

Non-party Participation

Importantly, it is worth considering whether or not information on collective progress gathered or created by non-governmental organizations (NGOs), civil society and non-IPCC affiliated research organizations should

be included in the stocktaking process. This kind of third-party information might provide important, novel and timely insights that go far beyond the reporting capabilities of governments and international organizations. Increased inclusiveness and openness to different information sources and knowledge systems would also contribute to the legitimacy of the Global Stocktake. Strong stakeholder engagement would be aligned with recent trends and principles that emerged on the path to Paris, including the Non-State Actor Zone of Climate Action (NAZCA). The Paris Agreement itself for the first time formally acknowledges the role of stakeholders in the multilateral process, especially in the implementation of the agreement.

However, formally allowing for such third-party contributions also presents significant challenges and would be a fairly unique feature of the Stocktake compared to other multilateral review mechanisms. In existing review processes, NGOs and independent experts often can be consulted during the in-country visit in the technical phase. The information these organizations provide is country-specific and based on their national experience. The Universal Periodic Review (UPR) of the UN Human Rights Council is the mechanism that goes furthest in allowing for input from civil society organizations. Here, anybody can contribute to the technical phase by providing information about a particular state's human rights record to the UNHCR secretariat, which compiles this information into a short report. Further, NGO representatives can attend, but not actively participate the UPR dialogue sessions, where the state under review can be questioned by other UNHCR member states.

None of these existing experiences apply directly to the Global Stocktake given its explicit focus on collective rather than individual performance review. But some kind of information filtering process, like the one conducted by the UNHCR Secretariat when compiling a country report, will be needed if the Global Stocktake is opened up to information from third-party organizations. Given the potentially overwhelming number of interested organizations and individuals all over the world, reasonable ways of prioritizing the engagement of the most useful organizations would be necessary. Similar to the UNFCCC's process for admitting observers, a simple accreditation system could be established that would require interested non-state actors to demonstrate their relevant expertise and request the right to participate. The twin logistical-communication challenges of managing interactions with and diverse

information flows from these non-state actors in the technical phase would also require careful consideration.

THE IMPLICIT GOAL OF STOCKTAKING: COLLECTIVE LEARNING

The key mechanism for achieving the multiple purposes of the Global Stocktake is collective learning. Looking beyond the procedural steps, questions of inputs and outputs, phases and decisions, the ultimate rationale of this process is to facilitate the development of a shared understanding among all parties of the *meaning,* measurement and status of progress.

Unlike the situation in many other multilateral regimes, the meaning of progress in the UNFCCC is hard to pin down. Much of this definitional challenge is related to the lack of a shared understanding of success among parties to the climate regime. Not only is the Convention vague on this topic, parties have also developed very different expectations of a successful climate regime over time, ranging from reducing GHG emissions, to supporting the global spread of clean energy, channeling international financial flows, changing lifestyle and consumption patterns, transforming economies, societies or cultures, or addressing historically rooted injustices.

However success is defined, parties would benefit from a common understanding concerning:

- The actual meaning of the shared global goals established in the Paris Agreement (e.g., what would a world look like where the adaptation goal has been successfully met?);
- The notion of progress towards these goals;
- The collective status quo (baseline) of the international community with regard to these objectives (distance from goal and trajectory); and
- The indicators and information that would be most useful to track future progress.

Given the complexity of the task at hand, it is essential for the international community to engage in a constant learning process about its own performance. This involves not only factual learning - literally the development of new knowledge in participants' minds concerning the state of the (changing) world based on new scientific or other forms of information. It also requires the collective construction of meaning, including new normative expectations and identities. The former (factual learning) can be achieved with aggregation and assessment of new data. The latter

(meaning-making) involves much more than that. Through continuous communication, parties need to share ideas and opinions regarding the meaning of data and certain words or concepts (e.g., Adaptation Goal). Initially, there might be starkly contrasting national perspectives, which have to be contested and negotiated over time, involving a multitude of cognitive changes, value alignments, compromise and associated emotional experiences among participants. Ultimately the community should strive to stabilize the meaning of a concept by settling on and consistently using a single, dominant understanding of the term.

Collective learning has always been a central feature of multilateral negotiations in the UNFCCC, from efforts to define the meaning of "dangerous interference with the climate system" to the principle of "common but differentiated responsibilities and respective capabilities" (CBDR-RC). The Global Stocktake entails a regular process of collective learning with a focus on the fundamental issues of regime effectiveness, especially collective goal achievement. With regard to the long-term global goals, the negotiation community so far has made most progress in developing a shared understanding of the global temperature goal (as a proxy for dangerous climate impacts), the current trajectory towards that goal and measures of progress. While it took 25 years to arrive at the understanding that it would be desirable to limit average global warming to "well below" 2°C, and that the world is not on track to meeting this goal, a lot of open questions and differences in interpretation remain (e.g., what does "well below" mean).

The new, additional long-term goals established in the Paris Agreement offer potentially much larger definitional and meaning-making challenges than the global temperature goal. While both adaptation and climate finance have been a topic of negotiations for a considerable amount of time, they were not formalized as goals until 2015. The terminology used in the Paris Agreement (e.g., climate resilience and low-GHG development) is new, and there is not yet a widely shared understanding among parties what these terms mean. For example, the term resilience can be used to describe very different phenomena, from the ability to bounce back after an extreme event to a kind of flexibility that enables coping with detrimental environmental change, and even the ability to transform the nature of a social-ecological system. Major differences in understanding also exist with regard to climate finance, e.g., the kinds of financial flows to be included. There are also major challenges in

gathering relevant data for both of these goals; relevant research is scarce. The collective learning work related to these goals lies largely ahead.

LEARNING HOW TO DO TRANSFORMATIONS

Going beyond the typical functions of a multilateral review mechanism, some parties have expressed a desire to use the Global Stocktake as a platform for learning "How to do transformations" that would facilitate the sharing of experiences and best practices, peer learning and practical guidance to domestic policy making. Turning the GST into an intentional collective learning institutions presents truly significant opportunities for innovation in global climate governance.

Early experience with International Assessment and Review and International Consultation and Analysis processes under the existing UNFCCC transparency system indicates that a learning and experience-sharing function can be a beneficial side-effect of a review mechanism. While making this component central to the process is an unusual idea compared to the narrower scope of other multilateral review mechanisms, it is a logical extension of the Stocktake's purpose to increase collective ambition over time. In very practical terms, increasing ambition requires setting in motion and managing transformational change in national economies, social and physical infrastructure systems, and cultures in the process of decarbonizing the global economy. By expressing their expectation to make the Stocktake a 'how to' session, parties' are linking political action to on-the-ground change.

While other multilateral regimes might require significant policy and institutional changes in a particular domain, a global response to climate change is increasingly understood to require fundamental reorganizations of large and complex systems. Managing such deliberate transformations is an unprecedented task for governments around the world, presenting them with significant learning challenges. There are no historical lessons to draw from; learning will have to occur in real time as the process unfolds, and will largely have to be based on experimentation. The Global Stocktake presents an opportunity to create an intentional, structured and recurring learning environment for transformational change, where governments (and possibly non-state actors) can share their own experience with others and learn from their peers with a fairly quick turnaround time.

A parallel institutional development that might offer design lessons for this dimension of the Global Stocktake is taking place in the UN High-Level Political Forum (HLPF) for Sustainable Development. Established in 2012, the HLPF provides a platform for political leadership to voluntarily showcase national efforts towards achieving the Sustainable Development Goals (SDGs). One of the key aims of these Voluntary National Reviews (VNRs) is "to facilitate the sharing of experiences, including successes, challenges and lessons learned, with a view to accelerating the implementation of the 2030 Agenda [for Sustainable Development]." [https://sustainabledevelopment.un.org/vnrs]. However, the VNR differs from the Global Stocktake in the same sense that most other multilateral review mechanisms differ: it focuses on individual countries' performance (at the national and sub-national scale) based on a fixed standard (the SDGs). Despite its voluntary nature, i.e., a state can choose whether and when to take part in a review, the VNR process has been very popular. This suggests that an explicitly "country-led and country-driven" process could also spur voluntary GST participation from parties to the Paris Agreement.

STOCKTAKING PSYCHOLOGY: FEAR AND SHAME VS. PRIDE AND FAME

The psychological mechanism that makes multilateral review processes work is a naming-and-shaming logic. While there might be no legal obligations or material consequences for failing to comply with international commitments, having to publicly acknowledge one's failure to live up to agreed-upon standards or promises can be very uncomfortable for a state government. Admitting to such failure can reduce the party's trustworthiness and respect among their peers—it has negative reputational consequences. This discomfort is caused by shame, a negative emotion painful feelings of humiliation or distress brought about by the consciousness of wrong behavior. States' desire to avoid such embarrassment, which is often associated with negative press and increased civil society pressure, can motivate action and ultimately compliance with international agreements. However, the naming-and-shaming logic does not (easily) apply to the Global Stocktake.

Parties to the Paris Agreement made a conscious political decision to separate individual performance reviews that have the potential to exert negative pressure on individual parties and collective reviews. The former is captured in Art. 13 (11) & (12) PA (NDC review under the Enhanced Transparency Framework), which emphasizes the technical nature of this expert-driven review process, and its potential positive consequences for capacity-building support. The naming-and-shaming logic easily lends itself to this NDC review that measures individual countries' progress, but it is disabled by the exclusive focus of the GST on collective achievements and shortcomings. No single party can be solely responsible for collective progress; hence, no single party can be blamed for a lack of collective progress. Only the community of states that are party to the agreement—all Parties seen as an entity—can be the subject of blame and the associated negative emotions, reputational effects and stakeholder responses. That collective entity potentially offers lots of cover for individual laggards and veils the success of star performers.

Parties clearly intended to establish positive, constructive and supportive environment with the PA—handholding rather than scolding. But if the usual motivational mechanism of a review (the desire to avoid shame and embarrassment) does not apply, what alternative mechanism can take its place? Which positive emotions could motivate parties to contribute to global goal achievement and increase ambition over time? The answer might be pride and admiration. Parties' desire to experience a strong sense of accomplishment and to receive the praise of others for performing well might exert the necessary motivational power to move parties to more ambitious action over time.

But, the collective nature of the Global Stocktake still relies on Parties *collectively* feeling pride.

No individual party can be fully responsible for collective progress; hence no individual party can expect to be praised for collective progress. Both pride and shame only work as motivational emotions if the members of the Paris Agreement can be shamed or famed as a collective entity rather than as individual countries. In other words, for the motivational mechanism to work, representatives of countries would have to feel pride and shame on behalf of the international community in a similar way that they can feel pride and shame on behalf of their countries.

CONCLUSIONS

The Global Stocktake is a tool for strengthening the effectiveness of the multilateral climate regime. But defining effectiveness, establishing the meaning of shared global goals and knowing whether or not progress has been made is far from straightforward. In this policy brief, we have highlighted six characteristics of the Global Stocktake that present distinct design challenges for the APA and at the same time opportunities for innovation in global governance. Key analytic insights for the design of the GST include:

- While existing multilateral review mechanisms apply a fixed performance standard, the Global Stocktake's **purpose** of increasing parties' ambition over time imposes a sliding-scale logic without a fixed endpoint. It presents a unique **governance logic**.

- The **object** of the Global Stocktake is *collective* rather than individual progress towards achieving global long-term goals and the overall purpose of the Paris Agreement. This exclusive focus on collective performance has major design implications, esp. the kinds of information sources needed, and the psychological mechanisms at work.

- **Science** will likely occupy an elevated position in the Global Stocktake in comparison to other multilateral review mechanisms. While the IPCC is the most authoritative source of scientific information in global climate governance, the specific information needs to assess collective progress towards shared global goals make it important to consider additional forms and sources of information, including knowledge products by NGOs and civil society groups.

- **Collective learning** is the central mechanism underlying the Global Stocktake: the ongoing development of a shared understanding of the meaning of progress with a view to long-term, global goals. Collective learning requires, but goes far beyond the gathering of data and developing of new knowledge; it's a communicative process of constructing shared meanings around new concepts, including normative expectations and identities.

- Parties' expressed desire to leverage the Global Stocktake as a **peer-learning platform for doing transformational change** introduces a unique function for this multilateral review mechanism, potentially opening up an innovative space with practical benefits. While this might become a resource- and time-intensive component of the Stocktake, the potential benefits in terms of scaling action and learning cascades is significant.

- The Stocktake's exclusive focus on collective rather than individual performance largely disables the **naming and shaming** logic that operates in other multilateral regimes to motivate compliance. Similarly, an alternative logic based on pride can only be effective if Parties share a strong collective identity that allows them to experience pride on behalf of the group of all Parties to the Paris Agreement.

In completing the design of the Global Stocktake, parties have before them the opportunity both to introduce innovative new approaches in global governance, and to ensure that this unique mechanism effectively serves its intended aim of facilitating rising ambition in the global climate effort.

REFERENCES

1. Pew Center on Global Climate Change. 2010. "MRV: A Survey of Reporting and Review in Multilateral Regimes," https://www.c2es.org/docUploads/survey-reporting-review-multilateral-regimes.pdf; Hale, Thomas, and Max Harris. 2014. "Country-to-Country Review under the Next Climate Treaty: Lessons from Other Intergovernmental Review Processes." *Policy memo* 24. Blavatnik School of Government, http://www.bsg.ox.ac.uk/sites/www.bsg.ox.ac.uk/files/documents/2014-IntergovernmentalReviews-PolicyMemo.pdf; Van Asselt, Harro, Håkon Sælen, and Pieter Pauw. 2015. *Assessment and Review under a 2015 Climate Change Agreement*. Nordic Council of Ministers.

2. Rajamani, Lavanya. 2017. "Structuring the UNFCCC 2018 Facilitative Dialogue," Center for Climate and Energy Solutions (C2ES), https://www.c2es.org/document/structuring-the-unfccc-2018-facilitative-dialogue.

3. UNFCCC. 2015. "Synthesis report on the aggregate effect of the intended nationally determined contributions," FCCC/CP/201/7, updated in 2016, "Aggregate effect of the intended nationally determined contributions: an update, Synthesis report by the Secretariat," FCCC/CP/2016/2.

4. United Nations Environment Program (UNEP). The Adaptation Finance Gap Report 2016. Nairobi, Kenya.

OECD (2015), *Climate Finance in 2013-14 and the USD 100 billion Goal: A Report by the OECD in Collaboration with Climate Policy Initiative, OECD Publishing*, Paris. http://dx.doi.org/10.1787/9789264249424-en.

5. Barbara K. Buchner, Chiara Trabacchi, Federico Mazza, Dario Abramskiehn and David Wang. 2015. Global Landscape of Climate Finance 2015. A CPI Report. Climate Policy Initiative, https://climatepolicyinitiative.org.

OTHER C2ES RESOURCES:

Elaborating the Paris Agreement: Implementation and Compliance, November 2017. *https://www.c2es.org/document/elaborating-the-paris-agreement-implementation-and-compliance*

Elaborating the Paris Agreement: Information and Accounting, November 2017. *https://www.c2es.org/document/elaborating-the-paris-agreement-information-andaccounting*

Elaborating the Paris Agreement: Potential Linkages Between Articles 13, 14, and 15, November 2016. *https://www.c2es.org/document/elaborating-the-paris-agreement-potential-linkages-between-articles-13-14-and-15*

ICAO's CORSIA and the Paris Agreement: Cross-Cutting Issues, November 2017. *https://www.c2es.org/document/icaos-corsia-and-the-paris-agreement-cross-cutting-issues*

Structuring the UNFCCC 2018 Facilitative Dialogue, May 2017. *https://www.c2es.org/document/structuringthe-unfccc-2018-facilitative-dialogue*

Key Issues in Completing the Paris Climate Architecture, October 2016. *https://www.c2es.org/document/keyissues-in-completing-the-paris-climate-architecture*

Paris Agreement Q&A. *https://www.c2es.org/content/paris-climate-agreement-qa*

C2ES CENTER FOR CLIMATE AND ENERGY SOLUTIONS