

5

A New Assessment Cycle

The aim of this chapter is to begin mapping the pathway that an Intergovernmental Panel on Climate Change (IPCC) assessment report travels as a practice, which means distinguishing the regular activities from those of a particular report or assessment cycle and attempting to weave the story of both. To document a pathway that a report travels in this way is to give your research to a journey of intricate details – scouring document after document to try and establish in whose hands it started, passed through and ended in. When I began reconstructing this journey and following the paper trails archived on the IPCC website, I learned of the multitude of activities that put together the first stage of producing an assessment of climate change: the *outline* of an IPCC report. At first sight, the outline seems like a mundane, even uninteresting element of the IPCC's practice of writing – a list of chapter headings and bullet points identifying the core topics of the next assessment to serve as a guide for the chapter authors (see Table 5.1 for an example). There are four stages to this document's formation: the decision to repeat the process (Section 5.1), the election of the bureau (Section 5.2), the scoping meeting (Section 5.3), and the panel's approval of the final report outline (Section 5.4). Through the unravelling and recounting of each of these stages, however, the web of government and expert input and avenues to influence the content of the next assessment are revealed and the purpose and politics of this list of titles and bullet points come into focus.

In Chapter 4, I described the units of the IPCC and a structure that is fixed, but this chapter captures an organisation in a process of formation. The IPCC reforms with the decision to repeat the assessment. There is continuity in the actors, processes and procedures and the conduct and culture of the organisation, but there is also reflection and re-evaluation at the end of an assessment cycle and change and renewal with the decision to repeat the process, the election of a new bureau and the appointment of technical support units (TSUs). This moment between assessments and the organisational practice for producing the outline allows for those

most deeply invested in the IPCC, particularly actors within the bureau and panel, to examine changes in global climate politics and the implications these have on the organisation and for its products. One of the most significant shifts in climate politics took place between the fifth and sixth assessment reports (AR5 and AR6), when a post-Kyoto framework – the Paris Agreement – was negotiated and ratified. The Paris Agreement makes specific mention to IPCC assessment reports as input to the Global Stocktake (GST), as well as the invitation for the special report on the impacts of global warming of 1.5°C (SR1.5) (UNFCCC 2015). The outline's pathway ensures these shifts are captured in the next assessment and by the leadership, assuring the continued relevance of IPCC products (see Table 5.1).

The chapter identifies the central role that member governments have in the scoping and outlining of the next report, from the decision to repeat the process to the election of the bureau, from submitting comments to approval of the final document. Describing the panel's involvement in the production of the outline reveals the avenues that member governments mobilise to influence the election of bureau members and direct the IPCC's next assessment of climate change. This document, however, does not only serve the purposes of member governments; it must also meet the expectations and capture the interests of the scientific community, which will author and validate the report, as well as other stakeholders. This account makes apparent that as with all IPCC documents, the outline serves the purposes and embodies the political and social relations and forces that compile it, which only become visible with intimate knowledge of that practice and the social order shaping it.

5.1 The Decision to Repeat the Process

The practice of writing the outline has developed over time. Many of the features described later were put in place during the scoping and outlining of the SAR and were traversed by each assessment thereafter. In the FAR, the scoping of the assessment was less formalised: terms of reference were established at the first session of the IPCC in November 1988, and these essentially delimited the core topics to be addressed by each WG (IPCC 1988). These terms of reference requested the WG chairs to submit an outline to the bureau within 60–90 days of its establishment (IPCC 1988). In forming an outline, WGI held a scoping meeting that brought together about seventy experts from around the world to agree on chapter headings and outline the contents of the report, the outcome of which was then approved retroactively by the panel (Bolin 2007: 55; interview 1.07.2010). With the completion of the FAR in 1990, and with international negotiations for a framework convention on climate change underway, the continuation of the IPCC, its structure and future work programme became a matter of concern to the institution and its parent bodies.

Table 5.1 *Left: Sample of WGI's outline for the AR5 (IPCC, 2009a); Right: Sample of WGI's outline for the AR6 (IPCC, 2017a). The italics identify reference to the assessment's relevance for the GST; similar references can be found in chapter 1 of the WGII and WGIII outlines for the AR6 (see IPCC, 2017a)*

AR5 WGI Outline <i>Approved October 2009 (IPCC 2009a)</i>	AR6 WGI Outline <i>Approved September 2017 (IPCC 2017a)</i>
<p>Chapter 1: Introduction</p> <p>Executive Summary</p> <ul style="list-style-type: none"> • Rationale and key concepts of the WG1 contribution • Treatment of uncertainty • Climate change projections since FAR <p>Frequently Asked Questions</p>	<p>Chapter 1: Framing, Context, Methods</p> <p>Executive Summary</p> <ul style="list-style-type: none"> • Synthesis of key findings from AR5 and earlier assessment reports, and connections to AR6 Special Reports • <i>Framing of the physical science information relevant for mitigation, adaptation, and risk assessment in the context of the Global Stocktake</i> • Assessment approach • Observational and reanalysis developments since the AR5 • Model and experimental design developments since the AR5 • Emissions and forcing scenarios • Treatment and evaluation of uncertainty throughout the report <p>Frequently Asked Questions</p>
<p>Chapter 2: Observations: Atmosphere and Surface</p> <p>Executive Summary</p> <ul style="list-style-type: none"> • Changes in surface temperature and soil temperature • Changes in temperature, humidity and clouds • Changes in atmospheric composition • Changes in radiation fields and energy budget • Changes in hydrology, runoff, precipitation and drought • Changes in atmospheric circulation, including wind • Spatial and temporal patterns of climate variability • Changes in extreme events, including tropical and extratropical storms <p>Frequently Asked Questions</p>	<p>Chapter 2: Changing state of the climate system</p> <p>Executive Summary</p> <ul style="list-style-type: none"> • Multi-millennial context, pre-industrial to present day • Natural and anthropogenic forcings • Radiative forcing • Large-scale indicators of observed change in the atmosphere, ocean, cryosphere, land, and biosphere • Modes of variability <p>Frequently Asked Questions</p>
<p>Chapter 3: Observations: Ocean</p> <p>Executive Summary</p> <ul style="list-style-type: none"> • Changes in ocean temperature and heat content • Ocean salinity change and freshwater fluxes • Sea level change, ocean waves and storm surges • Ocean biogeochemical changes, including ocean acidification • Changes in ocean surface processes • Changes in ocean circulation • Spatial and temporal patterns of ocean variability <p>Frequently Asked Questions</p>	<p>Chapter 3: Human influence on the climate system</p> <p>Executive Summary</p> <ul style="list-style-type: none"> • Overview of model performance and development since the AR5 • Simulated large-scale indicators of change in the atmosphere, ocean, cryosphere, land, and biosphere • Simulated modes of variability • Natural variability versus anthropogenically forced change • Attribution of large-scale observed changes <p>Frequently Asked Questions</p>

The IPCC's FAR proved influential in providing a common scientific understanding of the climate issue and would serve as the basis for negotiations towards a framework convention on climate change (UNGA resolution 45/212 1990).¹ The establishment of the INC, under the auspices of the United Nations General Assembly (UNGA), transferred the responsibility for formulating policy response options from the IPCC's WGIII to this newly formed body, with the IPCC tasked with providing necessary scientific and technical advice to the negotiating process (UNGA res 45/212 1990). The IPCC's relationship to the climate convention was reflected in the WMO's reformulation of the organisation's terms of reference, which charged the IPCC to undertake 'scientific and technical work in support of the negotiations of a framework convention on climate change' and to periodically update 'the assessments of the available scientific information on climate change and the resulting environmental and socio-economic impacts' (Resolution 11 of the WMO congress 1991, see IPCC 2006a, 2007c). In light of these new terms of reference and to help insulate the assessment process from the political environment in which it became situated, the IPCC's practice of writing was subject to codification, and at the fifth session of the panel in 1991, the principles governing IPCC work were formulated (IPCC 1991: 9–9). At this session, a pattern for devising the IPCC's future work programme emerged, laying the foundations of the pathway detailed in this chapter (IPCC 1991).

The assessment pathway formally begins with a panel decision. As an assessment cycle nears completion, the future work programme becomes an item on the panel's agenda and member governments take a formal decision to repeat the assessment process. The documents informing this decision depend on the assessment cycle and whether there is an IPCC chair to guide the process or elections are required, as described in the following section. Either way, the chair's vision paper is one of the first documents produced in the practice of writing climate change. With the support of the secretariat, the chair composes a vision paper on the future work programme and organisational structure of the IPCC to inform government submissions and panel discussions on the IPCC's future work (IPCC 2001a, 2001b; Pachauri 2008). The construction of this vision paper has its own, informal pathway. The product represents the chair's view on the future of the IPCC as informed by bureau discussions, panel members, authors, representatives of the UNFCCC and other international organisations, as well as reflecting commentary taking place in the scientific community (Moss 2000; IPCC 2001a, 2017a, 2017b; Pachauri 2008).² While the vision paper centres on the work programme,

¹ See Bolin 2007, chapter 6.

² Pachauri (2008: 4) references the discussions in the 'scientific and professional community' on the scale, scope and timeliness of the IPCC assessment process and the suggestions put forward 'which seem to favour a set of focused special reports rather than a comprehensive assessment of the type that has been produced in the past'.

woven within this document are proposals on the appropriate structure of the WGs, the timeline and the content and themes of the next report (IPCC 2001a, 2001b, 2008b, 2008c; Pachauri 2008).

In the case of AR5, the chair's vision highlights the economic and sustainable development aspects of climate change (Pachauri 2008). For the AR6, a new chair – Hoesung Lee – was elected, which meant that the chair's vision paper was circulated after the panel's formal decision to repeat the assessment. When circulated in 2017, the chair's vision highlights the need to shift towards 'applied' and 'solution-focused' assessments that support the implementation of the Paris Agreement and Sustainable Development Goals (SDGs) (IPCC 2017b, annex II). The paper discusses the GST at length, including the timetable for finalising the AR6 in time to inform this newly established process for assessing collective progress towards the Paris Agreement in 2023 and aligning subsequent IPCC assessment cycles to the five yearly cycle of future GSTs (IPCC 2017b: 18–19). This highlights that even before a new bureau is elected or in some cycles, a formal decision is taken, the purpose and content of the next report are taking shape.

The formal decision to repeat the assessment cycle is taken by the panel at plenary session.³ The panel generally meets annually or biannually in plenary. The sessions are organised by the secretariat, chaired by the IPCC chair and are open to all member governments. They are attended by the bureau, TSU staff, representatives of the parent organisations, WMO and UNEP, and the UNFCCC and other organisations with observer status. Plenary sessions are an important constituent of the IPCC's practice of writing. This coming together at one venue for a three-to-five-day meeting is essential in the formation of a common IPCC identity and shared culture between the distinct units of the organisation. As Chapter 4 describes, it is through routine plenary activities that a collective way of thinking about and conducting the organisation, its assessment practice and an actor's relation to and position on this have emerged.

Plenary sessions take place at different venues around the world by invitation of member governments and are generally hosted in large conference halls where participants are seated in long rows behind alphabetically arranged country

³ As highlighted above the exact details depend on the chair and the assessment round. For AR4 there were separate plenary meetings for the discussion of the vision paper and the decision to repeat the assessment process (IPCC 2001a, 2001b, 2001c, 2001d). For the AR5 the discussion and decision were held and taken at the same plenary (IPCC 2008a). In the case of the AR6 the decision to repeat the assessment was taken by the panel in February 2015, and the Chair's vision paper and the response by governments and international organisations were presented at the AR6 scoping meeting in May 2017 once a new chair had been elected (IPCC 2017b: 1–2). At the same time as the AR6 was being scoped, a new government task group was established to assess the consequences of the five-yearly GST under the Paris Agreement for the structure and timing of future work, which meant the AR7 was discussed much earlier than in previous cycles (IPCC 2018i).



Figure 5.1 View of the room at the 59th Plenary of the IPCC, Nairobi, 25–28th July 2023. Photo by IISD/ENB: <http://enb.iisd.org/media/ipcc-chair-hoesung-lee-welcomes-delegates-ipcc-59-ipcc59-25jul2023-photo>.

plaques or flags, with the IPCC chair and secretariat sat on a podium in front, see Figure 5.1. Each place is provided with a microphone and an earpiece for simultaneous translations into the six UN languages. The meeting schedule is divided between morning, afternoon and evening sessions, and as well as these formal sessions, there is a less formal culture of doing IPCC business in coffee breaks, over lunch and at dinner. These sites of interaction enable delegates, bureau members, secretariat and TSU staff to discuss panel matters and share and shape opinions at a personal level.

The plenary sessions are opened by the chair, who hands the floor to the hosting government and representatives of WMO, UNEP and the UNFCCC (IPCC 2008a). As Neumann (2007) observes in his analysis of ministry speeches, the content of the speech remains largely uniform from plenary to plenary, a practice that enables the speaker to reiterate an organisation's interests in and support for the IPCC and to instil a vision for the forthcoming report. After these speeches, the agenda is approved and the session gets underway. The chair's vision paper and submitted commentary tend to form the basis of discussions on the IPCC's future work programme, and governments raise their country flag to intervene and state their views – or re-state their submitted views – on the subject. Decisions are not usually reached in the full plenary in this manner, instead discussions are moved to contact

groups to formulate proposals on key issues, such as the structure of the working groups and organisation and timing of the next assessment. These proposals are then referred back to the plenary for agreement and decision. Contact groups are co-chaired by a developed and developing country member of the panel, as assigned by the chair, and are open to all member governments, although one party delegations are unable to attend parallel sessions.⁴ Large contact groups dealing with issues of interest to the majority of the panel are scheduled during the main plenary sessions, where there is translation into all UN languages, otherwise the contact groups proceed in English.

The panel's decision to repeat the assessment process opens the assessment pathway to the next stage in the assembly process: the election of the bureau. This step, the focus of the following section, introduces a new management team to the IPCC's practice of writing, putting in place the necessary professional personnel and administrative machinery required for the production of a global assessment on climate change. The fact that the outline of the report is yet to formally appear on the panel's agenda does not mean that its formation is not underway. When the chair produces a vision paper, and governments, past authors and relevant organisations submit comments, and when these comments are compiled and synthesised by the secretariat informing plenary discussion, the direction and content of the next report is taking shape, orientated by each of these activities and imprinted by the issues, topics and framings that actors write through these tasks. Thus, by the time a new bureau is elected and the scoping of the report formally begins, there are already signposts demarcating preferred directions for the IPCC's next assessment of climate change and criteria identified for those best qualified to lead the process.

5.2 **Electing the Bureau**

Exploring the outcome of the bureau elections on the distribution of social and cultural forms of capital helps to illuminate the significance of this event and the excitement it generates. While the majority of bureau members are seen as independent from government,⁵ bureau membership is an advantage because it enables a country delegate to attend bureau meetings. This increases a member governments social capital, providing increased access to and interaction with the secretariat, chair of the IPCC and those leading and overseeing the next assessment in the WG bureaux and TSUs. These smaller, more collegial proceedings also enable governments to form closer relations with other panel members and offer

⁴ Wherever possible this effect is minimised and one-party delegations can request these groups be held separately, although ultimately this is determined by the practical demands of the agenda.

⁵ Some bureau members are regarded as political appointees, with 'political instructions from their respective governments' (Bolin 2007: 84).

the opportunity to rehearse decisions and shape their presentation to the panel as well as generate the necessary support for their approval (interview 26.07.2010).⁶ These governments accumulate the most valued forms of cultural capital through this testing and formulation of bureau advice and substantive knowledge of the assessment report in progress (see Table 4.1). The additional opportunities to accumulate social and cultural capital that bureau membership offers translate into symbolic power during plenary proceedings and the approval of IPCC documentation through informed interventions that need to be noted and addressed.⁷ Bureau membership offers further expertise and insider perspectives during the plenary itself, as bureau members sit alongside and may even speak for the member government during proceedings (interview 4.08.2010).

Holding the most respected positions within the bureau and leading the WG assessments, the election of the developed country WG co-chairs is an important event for the distribution of symbolic power during the assessment cycle. Developed country governments with an elected WG co-chair fund and host the TSU, which, as Section 4.4 described, has greater day-to-day contact with and knowledge of the assessment than any other unit of the IPCC. The office of the national focal point is in regular contact with TSU staff over budgetary and administrative issues, and delegates are likely to seek information, advice and the WG position on plenary issues prior to and during bureau and plenary sessions (interview 20.01.2011). To date, eight countries have hosted a TSU – an investment that enriches them with the most valuable forms of social and cultural capital during the assessment cycle and lasting symbolic power in panel relations (see Table 4.2).

The bureau election also impacts the institutions that support bureau members and the fields of knowledge and professional expertise that authorise them to hold this position. Each WG report is overseen by a WG bureau (see Figure 5.3 for illustration), and the expertise of the co-chairs and six vice-chairs that make up the three WG bureaux, along with the TSU, orientates the direction of the next assessment, delineating the forms of knowledge and epistemic networks accessed in scoping the outline, selecting authors and literature assessed (interview 5.08.2010). This symbolic power to influence is not evenly distributed between bureau members and is governed by bureau position, scientific and/or professional credentials and an actor's investment in the process. Once again, the most significant figure in this regard is the developed country co-chair, as they have the most access to and authority over the emerging assessment and technical and administrative support to implement their vision. Vice-chairs also play a role in scoping the next assessment and identifying regional expertise and colleagues within their epistemic

⁶ Bureau meetings are attended by around 50 actors, compared to the 280 or more that attend plenary sessions.

⁷ As illustrated in Table 4.2, the six countries that intervened most during the plenary had bureau members.

networks to participate (interviews 4.08.2010; 13.12.2010). However, the extent of their role in decision making and contact with the emerging report depends on individual investment in the process as enabled and encouraged by the co-chairs and TSU and conditioned and shaped by their national institutional setting and the time and resources this provides to invest.

The bureau's impact on the distribution of capital within the panel and the direction of the next assessment means that the elections create considerable activity and excitement, as governments nominate bureau members and lobby for their election. In the case of the most symbolic role in the organisation, the IPCC chair, these election campaigns are visible across social media (see Figure 5.2). The nominating governments promote their candidates through tweets, videos and other social media tools, which are often revealing of the global campaign trail. Until recently however, there was little evidence of the behind-the-scenes manoeuvring that accompanied this element of the IPCC's practice of writing, although the controversy surrounding the election of Rajendra Pachauri in 2002 indicated its extent (see Section 4.2). This changed when Wikileaks provided clear evidence of the importance that some governments place on bureau elections.

Panel and bureau members have attempted to contain the disorder this engenders by codifying election procedures (IPCC 2006b). These stipulate that once the session is open, proceedings pass to a nominations committee, who compile and present candidates to the panel (IPCC 2006b). There has been a long-standing aim to fill bureau positions by consensus rather than taking a formal vote (interview 9.11.2010). Starting with the IPCC chair, followed by the positions of WG co-chairs and vice-chairs, the relevant WMO regional groups meet and attempt to broker agreement on the candidates nominated (IPCC 2006b).⁸ Until 2002, this outcome was achieved through the leadership of the chair and the malleability of IPCC organisational structures, which enabled the political interests and geographical representation of the panel to be met through bureau expansion (Bolin 2007: 82–83, 146). However, as interest and investment in climate change and the IPCC have increased, elections have become increasingly reliant on the ballot, and while standing bureau members may want to maintain the spirit of accommodation, behind the scenes governments mobilise all available avenues to influence the outcome.

Research and WikiLeaks on the AR5 bureau election offer us a window on the behind-the-scenes manoeuvring. Observations and interviews by Yulia Yamineva

⁸ The overall regional distribution in bureau membership for the AR6 and AR7 is as follows: Region I (Africa) – 7 positions; Region II (Asia) – 6 positions; Region III (South America) – 4 positions; Region IV (North America, Central America and the Caribbean) – 4 members; Region V (South-West Pacific) – 4 positions and Region VI (Europe) – 8 positions (IPCC 2023b).

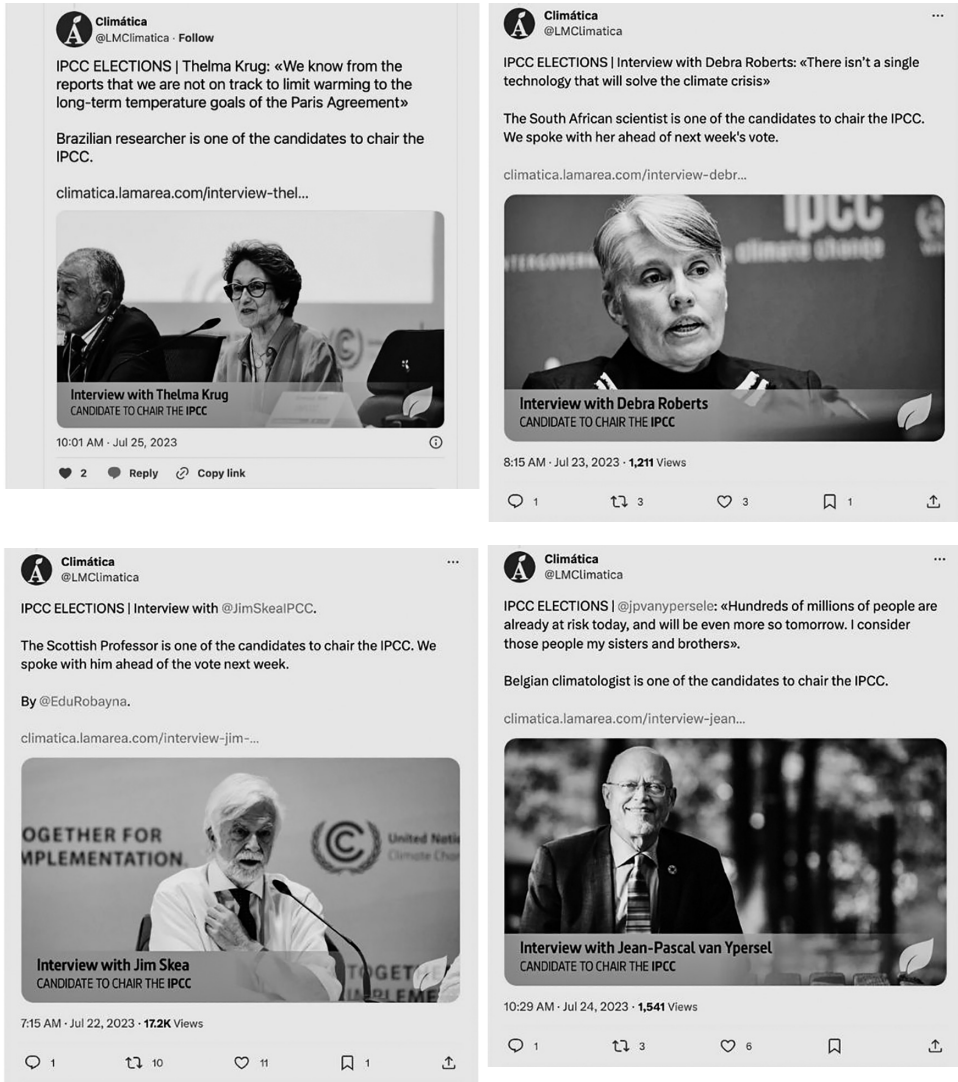


Figure 5.2 Tweets depicting the four candidates in the election campaign for IPCC Chair for the AR7 in 2023. From top left: Thelma Krug (Brazil); Debra Roberts (South Africa); Jim Skea (United Kingdom); Jean-Pascal van Ypersele (Belgium). Tweets by Climática @LMClimatica, 22.07.2023: <https://twitter.com/LMClimatica/status/1682635437926481920>.

suggested that many delegations arrived at plenary with ‘guidance from their ministries of foreign affairs on what countries’ candidates to support’ (Yamineva 2010: 85), and the WikiLeaks reveal the extent of lobbying by the United States. Embassy cables document US efforts to ensure that their candidate for WGII co-chair (Chris Fields) was elected, but not alongside the proposed Iranian candidate (Mostafa Jafari).

Co-chairing WGII with Iran was perceived as ‘problematic and potentially at odds with overall U.S. policy towards Iran’, which could ‘complicate the U.S. commitment to funding the Working Group Two secretariat’ (Guardian 2010a). The United States would not consider withdrawing their nominee for the message it would send to Iran and because ‘having a U.S. co-chair at the IPCC significantly bolsters U.S. interests on climate change, a key foreign policy issue’ (Guardian 2010a). As this cable indicates, to achieve the desired outcome, the United States sought the support of the IPCC chair and other delegations prior to the election proceedings:

Prior to arrival in Geneva, *USDEL*⁹ contacted *IPCC Chairman Dr. Rajendra Pachauri (please protect)*, who agreed to work on this issue to avoid the potential for disruption to one of the organization’s three core working groups ... Next, USDEL contacted the Austrian delegate serving as EU representative on the nominating committee that manages the election process, who showed an understanding of U.S. equities. USDEL contacted the Malian and Argentinean delegations, who have nominated highly-qualified co-chair candidates (see below), and the German delegation, who have been interested in advancing the Malian for co-chair of Working Group Three, for which Germany has nominated an unopposed candidate as developed-country co-chair.... Also prior to arrival in Geneva, USDEL contacted the UK and Netherlands delegations, both of which we have worked closely with in the past. (Guardian 2010a, italics in original)

In return, the US delegation gave assurances to the countries contacted that it would consider their election outcome preferences (Guardian 2010b, 2010c). This proved effective, with Chris Fields elected opposite the Argentinian candidate, Vincente Barros (see Figure 5.3).

Although political manoeuvring shaped the AR5 bureau election, political interests are not the only force structuring how the IPCC and its assessment practice unfold; maintaining the order of proceedings and the malleability of organisational arrangements continue to act as determinants of eventual outcomes. For instance, in the election of the developed country co-chair for WGI, three candidates were nominated. As a precedence, pressure was applied to candidates and nominating countries to consider withdrawing to avoid a formal vote, as ‘it was speculated that a lack of strong consensus for one candidate could potentially be divisive to the work of the IPCC’ (IAC 2010b: 245). Nominating delegations did not respond well to this pressure and in the end, candidates were permitted to present themselves to the panel and a formal vote followed, which saw Thomas Stocker of Switzerland elected (Barnett 2008; see Figure 5.3). The adaptability of the organisational structure and proceedings are also apparent in the election of the developing country co-chair for WGIII. Here, rules did not stipulate how to resolve an election result that saw both candidates on the same ballot paper separated by a single vote, an

⁹ US Delegation.

Chairman Mr. Rajendra Pachauri (India)			
IPCC Vice-chairs			
Mr Ogunlade Davidson (Sierra Leone)	Mr. Jean-Pascal van Ypersele (Belgium)	Mr. Hoesung Lee (Republic of Korea)	
WG I The Physical Science Basis	WG II Impacts, Adaptation, Vulnerabilities	WG III Mitigation	Task Force National Greenhouse Gas Inventories
Co-chairs	Co-chairs	Co-chairs	Co-chairs
Mr. Dahe Qin (China)	Mr. Vincente Barros (Argentina)	Mr. Ramon Pichs Madruga (Cuba) Mr. Youba Sokona (Mali)	Ms. Thelma Krug (Brazil)
Mr. Thomas Stocker (Switzerland)	Mr. Christopher Field (USA)	Mr. Ottmar Edenhofer (Germany)	Mr. Taka Hirasishi (Japan)
Vice-chairs	Vice-chairs	Vice-chairs	Vice-chairs
Mr Abdullad Mokssit (Morocco)	Ms. Nirivololona Raholijao (Madagascar)	Mr. Ismail A.R. Elgizouli (Sudan)	
Fatemeh Rahimzadeh (Islamic Republic of Iran)	Mr. Amjad Abdulla (Maldives)	Ms. Suzana Khan Ribeiro (Brazil)	
Mr. Francis Zwiers (Canada)	Mr. Eduardo Calvo Buendia (Peru)	Ms. Antonina I. Boncheva (Mexico)	
Mr. Fredolin T. Tangang (Malaysia)	Mr. Neville Smith (Australia)	Mr. Carlo Carraro (Italy)	
Mr David Wratt (New Zealand)	Mr. Jose M. Moreno (Spain)	Mr. Jim Skea (UK)	
Mr. Jean Jouzel (France)	Mr. Serguei M. Semenov (Russian Federation)		

Figure 5.3 The AR5 IPCC Bureau was elected in September 2008 (IPCC 2008d). As Asia was not represented in WGIII, an additional vice-chair position was subsequently filled by Saudi Arabia.

outcome the panel responded to by enabling both candidates to take up the co-chair position (see Figure 5.3). The resulting AR5 bureau embodied these contrasting forces and highlights that the election of the bureau, like all constituents of the IPCC’s practice of writing, is a dynamic interplay between the interests of involved actors (in this case, member governments), IPCC practices and procedures, and the corresponding attitudes and dispositions that investment in the organisation instils.

5.3 Scoping the Next Assessment of Climate Change

With the newly elected bureau in place, momentum for the scoping and outlining of the next assessment report gathers pace, and the pathway widens to make way for the unit that will have greater day-to-day contact with the assessment report than any other unit of the IPCC: the TSUs. Until now, the pathway has concentrated on the activities and decisions taken by the panel at plenary session, and the necessary operations performed by the chair and secretariat to facilitate the decision to repeat the assessment and initiate the process. However, once the bureau has been elected and the TSU assembled, the purpose of each unit becomes more distinct and while their parallel pathways intersect at regular intervals, each unit is focused on its duties. Here, I document the assembly of the TSU before exploring the combined operations of all units at two key events in the outline's production: the scoping meeting and the panel approval of the outline.

It takes about fourteen months from the bureau elections to produce an outline for the next assessment of climate change. In this time, one of the key pieces of machinery required to produce a WG report is put in place. As Chapter 4 indicates, each WG has a TSU, which is funded by the developed country government of the elected WG co-chair and housed in or near their home institution. TSUs are made up of between 5 and 15 members of staff, and it is these units that hold the assessment process together – its timeline, its authors and its contents – to produce an intergovernmentally approvable product. The TSUs sit above and incubate the WG reports from the moment they are assembled until publication, and even when placed into the hands of the authors, the unit maintains a watchful presence over the assessment, editing and polishing the final document. Once the WG co-chairs have been elected, hiring the right staff and assembling this unit becomes the priority of the chairs and those that support them (interview 20.01.2011). The most important hires will be the heads or leads of the unit. Officially, 50% of the chair's time belongs to the assessment, which means that the chair's capacity to fulfil this role rests upon the TSU's ability to manage and conduct the process. To guard the process, the WG co-chair seeks to hire actors with skills, expertise and personal characteristics complementary to their own.

The TSU's first major role in the assessment practice is the scoping meeting. This meeting lasts up to a week and aims to produce a detailed outline of the next assessment report, including the chapter headings and bullet points of the topics to be covered, as in Table 5.1. The meeting centres on identifying and scoping advances in climate change knowledge and in doing so opens the assessment pathway to the scientific communities that will author the report. As such, the meeting also serves as a platform for the newly elected bureau and appointed TSUs to gain the respect and support of those they lead into and rely upon in realising an assessment. For the scoping of the AR5, participants were selected from nominations

made by governments and observer organisations and from the expertise identified by the WG bureaux and TSU staff.¹⁰ Out of the 186 experts and government representatives participating, the majority had some prior experience and involvement with the IPCC. As with author selection (Section 6.1), disagreement may arise within the WG bureau during this selection process, particularly over the disciplinary expertise and geographical balance of participants. The scientific and professional expertise of the WG bureau and TSU staff delineate the expert networks accessed and the disciplinary fields represented (interviews 5.08.2010; 20.01.2011). As the developed country co-chair and the TSU have greater contact with and responsibility for identifying expertise and compiling expert lists, the epistemic preferences and geographical range of these personnel can be overrepresented in the participant list unless challenged by the wider bureau (interview 4.08.2010).

The chair's vision paper is the starting document for scoping the next assessment. This document has evolved since its first circulation, reflecting the comments received from member governments, author surveys, plenary discussions and the views of the newly elected bureau (IPCC 2009d, 2017a). Attached to the vision paper is a contribution from each of the WGs that is prepared by the co-chairs and TSUs with input from the wider WG bureau. The WG contributions to the scoping document identify remaining gaps and uncertainties from the last assessment, indicate potential advances in knowledge and include an initial draft outline, or 'straw man' (IPCC 2009d, 2017a).¹¹ Opened by the IPCC chair, the first day of the scoping meeting is taken up with familiarising participants with IPCC rules and procedures, identifying the main users and target audience of IPCC reports and outlining the initial vision (IPCC 2009e, 2017b, c). The meeting then turns to getting a sense of the state of the field by locating the advances in research, anticipating where further contributions are likely to occur, and finding the means to represent these in the next report (interview 5.10.2010). The ease at which discussion and debate is settled and reflected in the final document depends on the homogeneity of the expert communities and management of the process. It is for instance, easier for WGI participants to identify and agree upon advances in the physical basis of climate change than it is for the diverse range of disciplinary and sectoral expertise constituting WGIII to agree upon the most relevant economic, political, social and ethical dimensions of mitigating climate change (interview 4.08.2010).

¹⁰ Although the InterAcademy review concluded that the scoping process and the selection of participants for the scoping meetings remained 'opaque to those who have not participated' (IAC 2010a: 17), the AR5 scoping process was the most formalised to date. In previous assessments, experts were largely identified and selected by the IPCC chair, the WG co-chairs and TSU staff (IPCC 2003).

¹¹ The WG TSUs also conduct their own period of consultation with previous authors and relevant experts on the scope of the next assessment report, see for example WGI's background information on the outline (IPCC 2009j, 2017).

The outline generated by the scoping meeting is polished by the co-chairs and TSU staff and sent out to member governments and IPCC observer organisations for comment (IPCC 2009b). Prior to the scheduled approval, the WG bureaux meet to discuss this commentary and revise the outline accordingly. The majority of comments are on the report structure, the timeline and policy relevance (IPCC 2009f). Some comments will identify the use of politically sensitive language, particularly if the topics covered are perceived to relate to the UNFCCC negotiating process (interview 4.08.2010). For the AR5, the WG bureaux took a day to revise the draft outlines, and once presented and approved by the full bureau, they were sent out to member governments along with an information document prepared by the TSU on the context and detail of the outline's production (IPCC 2009g, 2009h, 2009i, 2009j). With the draft in the hands of member governments, focus turns to preparing for the final stage of the outline's formation.

5.4 Approving the Outline

The IPCC process for approving documents is one of the most fascinating facets of the IPCC's practice of writing. Different materials or documents produced by the IPCC are subject to varying levels of 'formal endorsement' by its member governments (IPCC 2013: 2). These start from 'acceptance', which signals that the material presents 'a comprehensive, objective and balanced view of the subject matter', to 'Adoption', where the text is endorsed 'section by section', to the highest level of 'Approval', which 'signifies that the material has been subject to detailed, line by line discussion and agreement' (IPCC 2013: 2). The outline of the next assessment and the final report summary for policymakers (SPM) are subject to the highest level of formal endorsement – line-by-line 'approval' – which, as becomes apparent in Chapter 7, is a process that frequently breaks down into a word-by-word negotiation. In this section, we follow the outline of the next assessment into each of the three WG sessions where it is subject to this process of approval. Although the WG report outlines are much smaller documents in comparison to the SPM, the necessary brevity of chapter titles and bullets "makes each word count just a little bit more" (interview 26.02.2019). As a result, while in some instances there may be mild tweaking, in others, there can be substantial revision by government interventions, objections and suggestions for rearranging the document and rewording the bullet points.

Government's interest and investment in controlling the wording, and thereby potential implications of key findings of an IPCC assessment are central to understanding the struggle that approval sessions generate. The key findings of an assessment report, as presented in the SPM, provide evidence on and warnings about the state of advancement and future projections of climate change, its impacts,

adaptation to and mitigation by which methods and on what scale. Once endorsed by member governments through the approval process, these findings become the accepted knowledge base for negotiating the collective response to climate change in the UNFCCC. While the outline only identifies the topics to be covered and is not a widely scrutinised document or an object of the negotiations, its approval can generate the same level of contestation; to understand this, the influence of the final assessment needs to be brought into focus. It is the potential that assessment findings have to impact negotiations – to legitimise or challenge existing objects or to introduce new ones – that governments are sensitive to and seek to guard against (Hughes and Vadrot 2019). The surest way to achieve this is to prevent certain terms, concepts or policies from being assessed in the first place, and this is where the approval of the outline is crucial.

Once approved, the outline constitutes a form of contract: an agreement between the member governments authorising the assessment and the co-chairs leading its production on what the content of the next report will (and will not) cover. As such, the outline can be brought in to play if the final SPM ventures into territory that member governments had sought to avoid by eliminating reference to it in the outline document, as happened in the approval of the SPM for the Special Report on 1.5°C (IPCC 2018a). During the approval, Saudi Arabia expressed ‘substantial disagreement’ with references in the SR1.5 to Nationally Determined Contributions (NDCs), disagreement they requested was reflected in the report of the session (IPCC 2018b: 6). In making these objections, Saudi Arabia brought the approval of the outline into focus, as recorded in the report of the session:

The IPCC is providing a scientific basis for governments at all levels. In accordance to the IPCC principles, IPCC products must be policy-relevant and policy neutral and not policy-prescriptive. NDCs and their guidance are currently being negotiated under the United Nations Framework Convention on Climate Change (UNFCCC). Based on this, *the outline* of this Special Report and its scoping were discussed during the deliberations of the Panel on these issues and the Panel agreed *not* to include NDCs in both instances because it would undermine our principles. (IPCC 2018b: 14, italics added)

This statement indicates government’s expectation of the approved outline and demonstrates how it has the potential to be deployed later to support objections to and interventions on the SPM text. While instances of this are uncommon, this event highlights the stakes and illuminates the politics in approving the outline.

The WG approval sessions adhere to the same opening routines as all plenaries, although the room may be more crowded than usual, as larger delegations are required to cover the parallel sessions. Once the hosts have been thanked, speeches given and national positions stated, the plenary is suspended and the WG approval sessions begin (Carter, Schulz and Yamineva 2009). These

sessions are chaired by the WG co-chairs or a member of the wider bureau, and in general the developed country co-chair leads the proceedings with TSU staff seated next to her or him.¹² The outline is projected on large screens at the front of the hall, and the co-chairs begin the session by identifying the revisions that have been made in response to government comments and suggestions. The session then turns over to the floor, as each chapter heading and bullet point is subject to the scrutiny of delegates, their interventions veering between concern for the political relevancy of the forthcoming assessment to wariness over the political implications of its content. Contact groups are formed to organise the approval and these sessions – focused on particular sections or bullets – are chaired by a developed and developing country member government. Should substantial disagreement over a given chapter or bullet arise, the chair of the session may request dissenting parties to put their heads together in a huddle to agree some acceptable language. Huddles can be formed on the side and/or between proceedings, with the aim of facilitating agreement to be taken back to plenary for approval.

In the case of the AR5, WGIII's outline was subject to substantial revision during the WG approval session in October 2009. WG III is charged with assessing policy options and pathways for mitigating greenhouse gases, and many of the issues arising during the approval centred on the practical utility of the outlined topics and the academic language used to frame the draft (Carter, Schulz and Yamineva 2009: 6–8). Two contact groups were formed, and these groups reordered and reformulated assigned sections of the outline, at times breaking down into smaller groups or huddles, to deal with particularly contentious areas (Carter, Schulz and Yamineva 2009; IPCC 2009k, 2009l). Much of the technical and scientific material assessed by WG III relates to and has implications for negotiations in the UNFCCC. Consequently, many of the tensions that arose were the result of government delegations defending and contesting formulations that could potentially impact the process at a time when a post-Kyoto framework was under negotiation.

In the draft outline, chapter 16 on National and Sub-National Policies separated the analysis of policy implementation and performance into *developed* and *developing* countries, see Table 5.2 (IPCC 2009k, emphasis added). Switzerland raised an objection to these two bullet points, noting that it was difficult to identify a threshold between developed and developing countries (Carter, Schulz and Yamineva 2009: 7). Other countries also intervened, including the Netherlands, the UK and Mexico, suggesting that development

¹² To date, there have been three female WG co-chairs: Valérie Masson-Delmotte (WG I, France) and Debra Roberts (WG II, South Africa) for the AR6 and Susan Solomon (WG I, US) for the AR4.

levels needed to be subject to analysis (Carter, Schulz and Yamineva 2009: 8). Saudi Arabia responded, highlighting that the UNFCCC clearly differentiated between developed and developing countries, as reflected in the division between Annex 1 and non-Annex 1 parties (Carter, Schulz and Yamineva 2009). Such significant categorisations as developed and developing, and the knowledge that they rest upon, have implications for all countries national commitments under the UNFCCC (Dubash, Fleurbaey and Kartha 2014; Edenhofer and Minx 2014). Saudi Arabia did not want its developing country status undermined through IPCC knowledge production processes, particularly at a time when the final report had the potential to impact the negotiations at a key moment in a new agreement's formation. One of the ways to limit this potential is to ensure that these categories are not subject to analysis by authors, an item we revisit in Chapter 7.

While some contestation may be resolved between assessments by decisions taken and agreement reached in the UNFCCC, deep-seated struggles, such as those over developed and developing country differentiation and responsibility for climate action transfers on to new or related objects. This was visible in the approval of the WGIII outline for the AR6 in chapter 15 on Investment and Finance (see Table 5.2). During discussions over the content of the bullets, China and Saudi Arabia suggested adding reference to 'financial flows to developing countries' in the bullet point on investment needs (Mead et al. 2017: 12). This was opposed by the EU, Ireland and Germany on grounds of ensuring political neutrality and to 'avoid being policy prescriptive' (Mead et al. 2017: 12). Ecuador requested to include 'a review of methodologies used to assess financial flows to help ensure objectivity' (Mead et al. 2017). Saudi Arabia and China responded that the UNFCCC and the Paris Agreement mention financial flows to developing countries and emphasised the need to respect this language (Mead et al. 2017). The ENB report of the session demonstrates the bat and ball between these critical elements of negotiation, which requires delegates to be ever attentive to the proposals they offer, how they are received and the discussion and initiatives they invite, which are not always foreseen or easily controlled.

The length of time it takes to approve the outlines depends on the WG and the discussion and debates that surface. The outlines of WGII and WGIII tend to be subject to the most substantial revisions, with sessions running into the night and the approved outline growing in length, as bullets and words are added to capture disparate views and resolve disagreement (see Table 5.2). Although the WGI outline is subject to less revision, this does not mean points of tension do not arise over the direction of the next scientific assessment and its potential to impact UNFCCC negotiations. During the AR5 approval process, China proposed deleting a reference to black carbon in the chapter on clouds and aerosols (Carter,

Table 5.2 Comparison between the submitted draft outline and the final approved outline for chapters in WG III's contribution to the AR5 and AR6

AR5 WG III Proposed chapter outline (IPCC 2009k)	AR5 WG III Approved chapter outline (IPCC 2009m)
<p>16. National and Sub-national Policies</p> <ul style="list-style-type: none"> • Introduction • Taxonomy of policy instruments • Criteria for evaluating policy instruments • Evidence on policy implementation and performance: common experiences across countries • Evidence on policy implementation and performance: Aspects specific to developed countries • Evidence on policy implementation and performance: Aspects specific to developing countries • Framework: role of institutions and governance • National/state/local linkages • Links to adaptation • Synergies and conflicts among policies • Assessing policy design options 	<p>15. National and Sub-national Policies and Institutions</p> <ul style="list-style-type: none"> • Introduction • Characteristics and classification of policy instruments and packages • Approaches and tools used to evaluate policies and institutions • Research and development policy • Assessment of the performance of policies and measures in developed and developing countries taking into account development level and capacity • Framework: Role of institutions and governance • Capacity building • National, state and local linkages • Links to adaptation • Synergies and trade-offs among policies • Assessing policy design options • Investment and finance • The role of public and private sectors and public-private partnership • The role of stakeholders including NGOs • Frequently asked questions

Table 5.2 (cont.)

AR6 WG III Proposed chapter outline (IPCC 2017c)	AR6 WG III Approved chapter outline (IPCC 2017a)
<p>Chapter 15: Mobilising finance</p> <ul style="list-style-type: none"> • Lessons learnt from AR5 and what is new since AR5 • Need for finance – the Paris temperature targets and the NDCs • Public climate finance flows, including multilateral and bilateral, and taking into account effectiveness and scaling up of such flows • International private flows of climate finance • National and sub-national climate finance mobilization and flows, including link to climate policy • Links between national and international finance: Moving the Trillions, including innovative financial mechanisms and public-private partnerships • Successful case studies • The difference in climate-resilient financing consistent with 2, well-below 2 and 1.5 degree scenarios or pathways • Links to adaptation and sustainable development (including co-benefits, synergies and trade-offs) • Financial accountability, including disclosure of climate risks to assets • Emerging trend (e.g. community involvement) 	<p>Chapter 15: Investment and finance</p> <ul style="list-style-type: none"> • Key findings from AR5 and recent developments • Definitions of climate finance • Scenarios of and needs for investment and financial flows related to mitigation pathways and climate change action at the global and regional scales • Scenarios of and needs for investment and financial flows related to mitigation pathways and climate change action in developing countries • Investment patterns, and financing for climate resilient development, consistent with different mitigation pathways • Enabling conditions for changing finance and investment patterns • Public climate finance flows, including multilateral and bilateral, taking into account the scaling up of such flows • International private flows of climate finance • Links between national and international finance including developments in financial mechanisms and public-private partnerships • National and sub-national climate finance mobilization and flows, within and across countries, including links to climate policy • Emerging trends (community involvement in climate finance, sustainable investment criteria by institutional investors) • Climate-related investment opportunities and risks • Linkages between finance and investments in adaptation and mitigation, and implications for sustainable development • Case studies

Schulz and Yamineva 2009: 4).¹³ This deletion was opposed by the US, UK, Austrian and Canadian delegations, and in the end, China agreed to keep the bullet point unaltered, ‘stating that they appreciate the need for an assessment of black carbon but noted that many aerosols also play an important role’ (Carter, Schulz and Yamineva 2009).

Struggles over particular elements of the scientific conceptualisation of climate change highlight that these objects can have implications for member governments that are as significant as those that relate directly to mitigation in WGIII. These are struggles over scientific objects that have the potential to become politically weighted through the IPCC’s practice of writing climate change. Once the threat of black carbon has been calculated and accepted through the IPCC scientific assessment process, this substance – and the industries that produce it – will be drawn into the political struggle over the international community’s response to climate change. Identifying the warming effect that particular gases or particles have on the atmosphere, such as carbon dioxide, methane or black carbon, weights these concepts, and makes scientific terms constituents of global contestation and struggle over emission reduction targets. Those country delegations aware of the political stakes of introducing or highlighting a scientific term in the outline come to the plenary approval session prepared to contest, and if successful, remove these references.¹⁴

Once the WG outlines have been approved, the plenary is reconvened. The WG co-chairs report back to the panel on their respective approval sessions, highlighting the revisions made and indicating their commitment to the next assessment of climate change (Carter, Schulz and Yamineva 2009: 8). The WG outlines are then accepted by the panel as the outline for the IPCC’s next assessment of climate change (with any party disagreement noted in the report of the session), and a timeline for its production agreed.¹⁵

5.5 Summing Up

This chapter traced the outline’s formation from the panel’s decision to repeat the process to its acceptance of the final product. The pathway identifies the central role played by member governments at all stages of the outline’s development. It is the panel’s role in electing the bureau and approving the outline, combined with the IPCC’s practice of seeking comments, which enables governments to

¹³ The common name for black carbon is soot. These are small light-absorbing particles released into the atmosphere through the incomplete combustion of fossil fuels and biomass. These particles are thought to have both a local cooling effect by reducing the solar radiation that reaches the surface of the earth as well as a regional warming effect through the absorption of sunlight and by the darkening of ice and snow (Forster et al. 2007).

¹⁴ Chapter 7 explores how delegations prepare for approval sessions.

¹⁵ The publication of the WG assessments are staggered to allow the findings from WG I’s assessment of the science of climate change to feed into WGs II and III.

imprint at every stage of the outline's formation and shape the topics covered and knowledge surveyed in the next assessment of climate change. This power to influence through the IPCC's practice of writing is not equally distributed among panel members, and an elected bureau member can significantly increase a delegate's access to and authority in and over the process. As such, the bureau election is one of the most politically charged elements of the assessment's assembly pathway. By attending bureau meetings and by having the social and cultural capital of bureau members close at hand during plenary, governments expand their knowledge of the process and capacity for authoritative interventions. This access to the IPCC's practice of writing and knowledge of its proceedings translates into symbolic power during the approval of IPCC documents.

Following the draft outline into the approval session makes apparent why governments seek to maximise their authority in the (re)writing of climate change. As the struggle over chapter 14 and its potential to subject development levels to analysis reveals, how knowledge is assessed and compiled within IPCC reports may have profound implications for elements of negotiation and agreement-making within the UNFCCC. Some forces and tensions may dissipate, as they did between the AR5 and the AR6, once a post-Kyoto framework was reached in the Paris Agreement. However, deep seated contestation – as there is over developed and developing responsibilities and obligations – emerges around new concepts, objects and targets that have the potential to influence the negotiations and here, caution is taken by parties not to re-open for assessment elements that the Paris Agreement settled in their favour.

Once approved, the outline effectively serves as an agreement on the direction of the next assessment between the member governments commissioning the report and the bureau elected to oversee its production. While the outline enables authors to insert their knowledge into the final assessment, it also confines the scope and reach of how climate change will be reported, and any adjustments to approved titles and bullets must be approved by the panel. The assembly pathway as mapped in this chapter, facilitates the creation of a shared vision between all those involved in the assessment's production and serves to harmonise the expectations of the authors with those of the member governments, increasing the likelihood that the panel recognises the outcome and accepts the final product. Now it is time to follow this outline into the hands of the authors at the first lead author meeting, where the bullet points and headings will be transformed into content on climate change. Like all aspects of the IPCC's practice of writing, this pathway through the scientific assessment indicates that while governments aim to structure the reality of climate change through the outline, this reality is subject to re-writing in and through the interests of the authors and other actors that participate in reviewing and redrafting IPCC assessments.