

7th Annual Meeting Integrated Assessment Modelling Community
University of Maryland, College Park
November 17, 2014

Negotiation of a comprehensive Post 2020 Agreement

**The Road to Paris 2015:
What Role Could the IAM Community Play?**

Proposed answer →

Brian P. Flannery
Resources for the Future

Potential Contribution from IAM Community

Understand and assess proposed national commitments (INDCs)

? Is the information adequate to:

- Represent domestic policies
- Evaluate their domestic consequences
- Characterize their implications for other nations
- Aggregate global implications from the portfolio of INDCs

? What can we say concerning key concepts in the negotiation, e.g.

- Comparable effort
- National implications of sectoral and other commitments
- “on track” to 2 °C (or 1.5)
- Business as usual
- Scope for Markets and Offsets
- ...

Provide valuable (perhaps unique) input to *ex ante* efforts to understand and assess INDCs

Framework for the Talk

- UNFCCC (ADP) negotiation of a comprehensive Post 2015 Climate Agreement by 2015 (CoP 21 Paris December 2015)
- Conventional narrative: Limit global warming to less than 2 (or 1,5) °C; understood (by negotiators) to require CO₂eq < 450 ppm
- Current Copenhagen pledges through 2020 *not on track for 2 °C*
- Negotiations go well beyond mitigation; Adaptation, Finance and other *Means of Implementation* are essential to developing nations

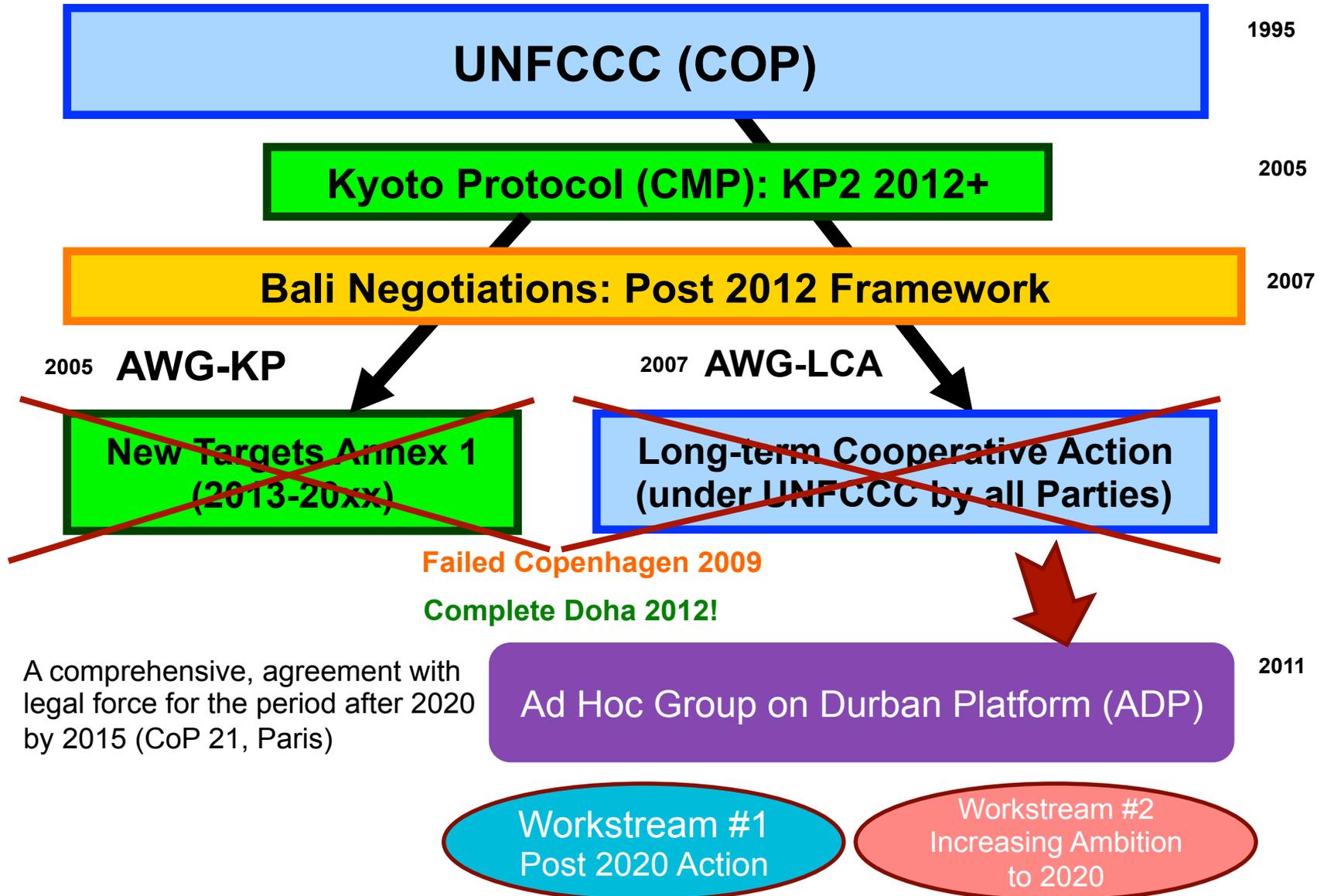
Growing gap between political aspirations
and actual policies and trends

Four Major Developments Since 2008

- Demise of the international top-down approach (CoP 15 Copenhagen)
advent of the Mosaic World
- (Ongoing) Financial challenge/crisis
inability of public finance to meet growing expectations of
developing world regarding “climate” aid and compensation
- Energy innovation revolution in tight gas and oil
higher opportunity cost of moving from fossil fuels
- Far more prominent role for developing nations
major differences within G77 & China, e.g. AOSIS, BASIC, ALBA

Unmet expectations regarding emissions and finance

The Road to Post 2020 Agreement



Doha Outcomes 2012

- **Kyoto Protocol** (absent USA, Canada, Japan, New Zealand, Russia)
 - 2nd Period covers 2013-2020
 - Cover <15% of global emissions (and falling)
- **Unresolved issues**
 - Mitigation gap: 2 °C goal
 - New Mechanisms for mitigation: Various Approaches, New Market Mechanisms, non-Market Mechanisms, Sectoral Approaches (relevance KP?)
 - “*mobilizing 100 B\$/yr*” by 2020
- **ADP proceeds: 2 work streams on ambition and 2020 agreement**
 - Draft negotiating text: *elements* by CoP 20 (2014), *text* by May 2015
 - Develop options to close the pre-2020 gaps: mitigation and finance

Issues play out in Subsidiary Bodies and ADP

ADP: Far More Comprehensive than Kyoto

Six explicit themes:

- **Mitigation**
 - Developed nations: economy-wide commitments
 - Developing nations: appropriate actions
- **Adaptation**
- **Means of Implementation: Finance, Technology, Capacity Building**
 - Aid for Mitigation and Adaptation
 - Compensation for Loss and Damage, Adverse impacts of policies
- **Transparency: Measurement, Reporting, Verification (MRV), Review**

Process under the UNFCCC

- **Principles: CBDR(RC), Historical Responsibility and Equity**
- **Legal form, entry into force, timing, updating, compliance (?)**

Agreement and Accompanying Decisions

ADP Views

- **USA (Umbrella Group)**
 - Commit to submit and report progress
 - MRV according to appropriate, credible methodology (land use)
 - No forced reconciliation of pledges
- **EU and entire G77 & China**
 - Commitment must go beyond pledge and review
 - Legally binding commitments with common MRV and compliance
 - Be “on track” not to exceed 2 °C
- **Developing nations: CBDR in all things**
- **INDCs: ex ante review and global aggregation**
 - Supported by developed and many developing nations (AOSIS, LDCS)
 - Opposed by China and Like Minded Developing Nations
- **Workstream 2: increasing pre 2020 ambition... G77 & China call for**
 - Strengthen mitigation (KP and other A1) to 40% below 1990 by 2020
 - Finance, e.g. commit now to ramp up (40, 50, ..100 B\$/yr in 2014,15,...20)

ADP Process

- **Hybrid Approach: Bottom UP (✓), Top Down (?)**
 - Commence with voluntary, self determined national proposals (INDCs)
 - (?) Ex Ante review to clarify pledges
 - (?) Assessment of combined implications for global goals
 - (?) Forced reconciliation to be “on track” to meet global goals...or
 - Opportunity for nations to revise pledges before final “inscription”
- **Little agreement on focus or information to accompany INDCs**
 - Developed nations call for (sole) focus on mitigation pledges
 - Developing nations seek commitments on all six themes: Adaptation, MOI
- **Examples of accompanying information (see NZ submission)**
 - Developed nations: economy-wide commitment, covered gases and sectors, methods, use of markets (?) avoiding double crediting, offsets
 - Developing nations: commitment
 - All: Duration of commitment, why the commitment is appropriate
 - ...

Submitted by March 2015 (those prepared to do so)
Time for discussion, assessment (?), reconciliation (?)

Process through 2015

Agreed steps:

- Lima CoP 20 tasked to take decisions on:
 - Information to accompany INDCs
 - Decision on WS2: Increasing pre-2020 ambition
 - Elements of the Agreement
- INDCs submitted Q1 (if prepared to do so)
 - Some major nations may not be prepared until later
- Draft text of agreement by ~May
- ADP Negotiating sessions
 - February 8-13 (Geneva)
 - June 3-14 (Bonn)
 - November 30-December 11 (Paris CoP 21)

Failed to agree on draft decisions (ADP October)

Likely that additional ADP sessions will be needed

Other Issues and Challenges

- **Duration of commitments and process to update**
- **Availability (or not) of international markets**
 - Internationally approved and denominated offsets
 - Bilateral and multilateral agreements with joint crediting (Japan)
 - Avoiding double crediting in exchanges
- **Evaluating actual meaning and impact of**
 - Non-economy wide commitments
 - Commitments that reference improvements beyond Business as Usual
 - Peaking by 2030
- **How to assess “comparable effort”**
- **Ex Post Reviews of progress**, with force majeure interference (tsunamis, recession, financial crises, war...)

IAMs are the best (only) tool available to assess outcome with interactions

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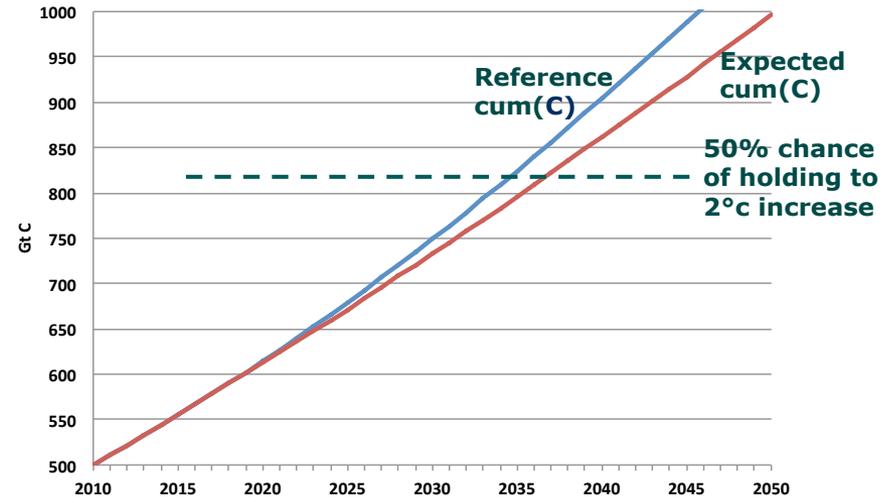
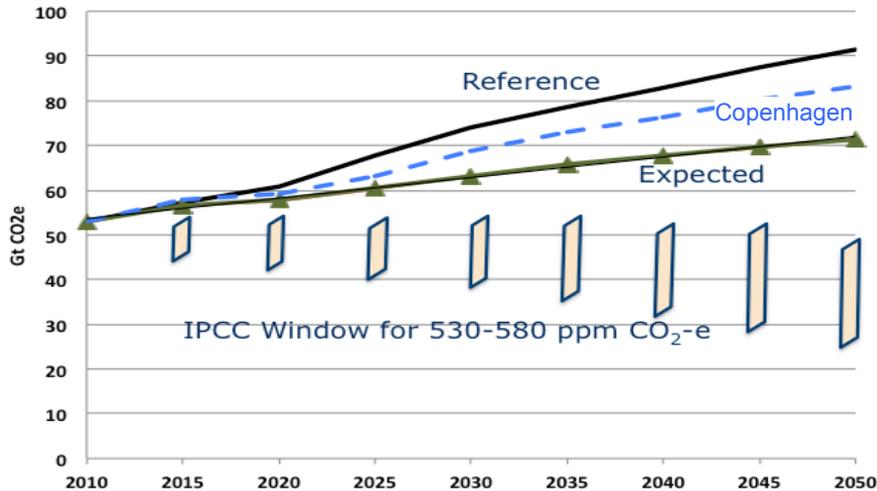
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An early example: MIT Projection

Expectations for a New Climate Agreement (Jacoby and Henry Chen) Report no. 264, August 2014



Expectations for the 2015 UN Climate Agreement (MIT Joint Program):

Likely efforts will further bend the curve ... 68 Gt CO₂-eq emissions in 2050—about 9 Gt less than our Copenhagen estimate.

Emissions ... will diverge further from what IPCC WG III shows to be consistent with stabilization @ 530–580 CO₂-eq ... concentrations by 2100

By 2030 the world will be within about 7 years of .. cumulative emissions... consistent with a 50% chance of holding temperature increase below 2°C

Pathways to 2050 (RFF Proposal)

- Dialogues to assess and understand INDCs and other ADP issues
- Engage participants from government, academia, business on major issues: mitigation, finance, markets, legal form
- With input from the IAM community and others
- To raise awareness of critical issues
 - In the negotiation through CoP 21: current trends, implications of pledges
 - Implementation and follow on activities
- The outcome is unlikely to meet expectations for mitigation or finance in the continuing dominant narrative for a legally binding agreement with compliance to be “on track” < 2 or 1.5 °C
- How to develop cooperative efforts with adequate global participation

To increase understanding to avoid the failure of Copenhagen: rancor over unmet expectations

Thank You & Discussion