

Date and time	05 Jun 2024, 13:15-14:30
Agenda item	UNFCCC: The IPCC Inventory Software: A Tool to Support the ETF Implementation under the Paris Agreement.
Session	Side event
Location	Bonn 1/2/3
Notes taken by	Dr Renuka Thakore, Future Earth, <a href="mailto:RThakore1@uclan.ac.uk">RThakore1@uclan.ac.uk</a> ; <a href="mailto:ceo@gfn.co.uk">ceo@gfn.co.uk</a>
Context	<a href="https://www.ipcc.ch/event/ipcc-at-sb60-unfccc/">https://www.ipcc.ch/event/ipcc-at-sb60-unfccc/</a>

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- **Session 1: Opening Session** (10 min)
  - Opening Remarks by the UNFCCC Secretariat – (*Dominique Revet, UNFCCC secretariat*)
  - Opening Remarks by the IPCC TFI – (*IPCC TFI Co-Chair*)

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- **Session 2: Evolution of the IPCC Inventory Software for National Greenhouse Gas (GHG) Inventories** (*IPCC TFI TSU*) – (20 min.)

*This section will explain the evolution of the IPCC Inventory Software including the interoperability function with the UNFCCC ETF GHG Inventory Reporting tool.*

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- **Session 3: Demonstration of the IPCC Inventory Software** (*IPCC TFI TSU*) – (45 min.)

*This section will demonstrate – by navigating through the software – how to use the Software to estimate GHG emissions and removals and the new features and functionalities including the interoperability function with the UNFCCC ETF GHG Inventory Reporting tool.*

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- **Session 4: Possible enhancements to the IPCC Inventory Software** (*IPCC TFI TSU*) – (5 min.)

*This session will explain the on-going/planned work being implemented/envisaged by the IPCC TFI to refine the IPCC Inventory Software in the future.*

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- **Session 5: Questions & Answers** – (10 min.)

- **Closing remarks** – IPCC TFI and UNFCCC secretariat (5 min.)
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## Plans and Process

Jim Skea – IPCC Chair

- Three themes for the 7<sup>th</sup> cycle of IPCC
- Gender, regional, indigenous peoples
- Interdisciplinarity, within IPCC (x-Working Group) and outside IPCC (other UN environmental assessments)
- Policy relevance – communication strategies, UNFCCC/Paris Agreement and national and sub-national policymaker and practitioners
- Given consideration to the global stocktake and finalise that consideration in next plenary
- Information, assessments that benefit national and sub-national levels will be emphasised
- Uptaking guidelines on the adaptation programme
- 1<sup>st</sup> plenary – Istanbul – resulting into a comprehensive assessment report

- WGI – The Physical Science Basis
- WGII –
- A synthesis report for the 7<sup>th</sup> assessment cycle will be produced by late 2029, after the completion of working group reports
- Distinct product revising and updating the 1994 IPCC technical guidelines on impacts and adaptation, including indicators, metrics and methodologies will be scoped, developed, reviewed and should be considered
- TFI methodological report on short-lived climate forces
- What are the scientific foundations
- Methodology report on carbon dioxide removal technologies

#### Diana Uege-Vorsatz, IPCC Vice-Chair

- Special report on climate change and cities
- Key focus areas – impacts on urban environments, adaptation for enhancing resilience and protecting urban residents and infrastructure, mitigation of reducing GHG and role of cities
- Privileged to Chair of the SRCITIES SSC
- Scoping in Apr 2024 – outline approval by IPCC P-61 – Author nomination – Author selection and publish in 2027
- Broad scale and diverse interests, enormous enthusiasms, scoping meetings with 90 experts and now the report outline submitted to P61.
- New emphasis on urban practitioners' engagement
- Detailed report will be published in 2027

#### Abdalah Mokssit, IPCC Secretary

- Engagement with the focal point
- Finalise on the next plenary
- First time in the history of IPCC – high emphasis on inclusivity
- 796 authors – 33% female – developing countries and economies in transition – 44%
- Process of IPCC report must follow 10 steps – engagement between scientists
- IPCC Newsletter – booklets, working explained, dashboard to show all the necessary process – self declaration
- Roadmap for 2024 – side event, briefing – August (tbc) and other activities (COP29 and beyond – November)
- Webinar encourages
- Nomination must be made in large number, including women, indigenous and various sectors

#### Update of the 1994 Technical Guidelines for Assessing climate Change Impact and Adaptation

##### Bart van den Hurk, IPCC WPII Co-Chair

- 1994 Impacts and Adaptation guideline
  - Define problem
  - Select method
  - Test method/sensitivity
  - Select scenarios
  - Assess biophysical impacts, assess socio-economic impacts
  - Assess autonomous adjustments

- Evaluate adaptation strategies
- What's the climate pressure?
- What does it do to the nation/region?
- How will that change?
- What adaptation is required?
- Update in AR7
- Major conclusion from AR6
  - Climate models and scenarios have advanced
  - Incremental adaptation is prevalent, whereas transformative adaptation is infrequent
  - Existing response are not enough
  - Globally application adaptation indicators are lacking
  - Adaptation successes can have some degree of maladaptation
  - M&E are essential
- Example – Progress of Climate models
  - Higher resolution
  - Higher complexity
- Approaching adaption at difference scales of transformation
  - Different kind of approaches
- Learning from adaptation through monitoring and evaluation
  - What to monitor
  - Continuous upgrand
- Examples – policy attention changes since 1994
  - Public & private funding – who is actually funding it
  - Just resilience
  - Stress testing
  - Preventing maladaptation
  - Win-win options
- Multiple actors are stepping into the domain of adaptation
- The original schedule with change accordingly to consider:
  - Present day challenges
  - Scenarios and methods
  - Impact assessment – enriched with bigger and broader
  - Evaluate adaption strategies
  - Implementation of adaptation strategies
  - Monitoring and evaluation

#### Carbon Dioxide Removal and Carbon Capture Utilisation and Storage of in AR6 WGIII

- Many methods will be considers
- Potential implications will be considered.
- CDR methods vary depending on their maturity, removal process, time scale of carbon storage, storage medium, mitigation potential cost, co-benefits, impacts and risk, governance requirements
- CDR Taxonomy –
  - CDR method
  - Implementation open – soil sequestration is land related
  - Earth system

- Storage medium
- Roles of CDR in global or national mitigation strategies
  - Figure shared to show how Net Zero will be achieved
- CCS – Carbon Capture and Storage
  - CCS is an option to reduce emissions from large-scale fossil-based energy and industry sources
  - CO<sub>2</sub> capture and subsurface injection is a mature technology for gas processing and enhanced oil recovery
  - The technical geological CO<sub>2</sub> storage capacity
- The residual fossil fuel and industry emissions, carbon dioxide removal (CDR) {LUC, DACCS, BECCS}

#### Takeshi Enoki, IPCC TFI Co-Chair

- Mandate to produce methodology report
- Planning to hold an expert meeting in July 2024 – to identify existing gaps in the IPCC guidelines
- Expert meeting – invite a large number of experts, CCS and CCU methods – new categories or enhancement of existing categories, knowledge available to develop an IPCC Tier 1 methodology application under any national circumstances
- Quality control – discuss different methods to verify activities – to include in the scoping report

#### Robert Vautard, IPCC WGI Co-Chair

- What are short-lived climate forces
  - Short-lived – 10-20 years – different physiochemical properties environmental effects than CO<sub>2</sub>
  - Direct or indirect effects
  - Precursors of second effect leading to CO<sub>2</sub>
  - Emissions are along with the long-lived components – these are interacting and are affecting radiative forcing impacting clouds, e.g., precursors of ozone are sensitive to nature
  - The importance of SLCFs
    - Aerosols
    - Sulphur dioxide – have cooling effects
    - Thus SLCFs can also have cooling effects and can be determined by the approximate lifetime
    - Their interaction result into some biogeochemical cycles
    - Over time scales of 10 to 20 years, they can help us mitigate quickly
- Variations of aerosols across time and regions – warming in atmosphere
- Uncertainties in emissions
  - Anthropogenic emissions
  - Emissions from natural systems
- Mitigation
  - Strong, rapid and sustained reduction in CH<sub>4</sub> emissions would also limit the warming effect resulting from declining aerosol pollution and would improve air quality
  - sectors producing the largest SLCF induced working – high confidence fossil fuel, etc,
  - health co-benefits in mitigation from climate change
- SLCFs and scope of the GHG Inventory

- Additional guidance where there is limited
- Mandate to produce a methodology report on SLCFs
  - IPCC49 (2019) – IPCC TFI – develop methodology report
    - Approach – preparatory work
    - Outline and timeline
    - Required activities
    - 2 methodology reports will be produced