

Update on CCS in the UNFCCC

Tim Dixon - IEAGHG

Ellina Levina - IEA CCS Unit

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IEA Regulatory Network

UNFCCC



UNFCCC: United Nations Framework Convention on Climate Change (1992)

UNFCCC:

- COP – Conference of the Parties to the UNFCCC (195 Parties)
- **ADP – Ad Hoc Working Group Durban Platform for Enhanced Action**

Kyoto Protocol (1997: 1st period 2008-2012; 2nd period 2013-2020)

- CMP – Conference of the Parties serving as a Meeting of the Parties to the Kyoto Protocol (188 Parties, 33 ‘developed’ countries)
- SBSTA – Subsidiary Body for Scientific and Technological Advice
- SBI – Subsidiary Body for Implementation

Durban Platform for Enhanced Action



- **New negotiating process established at COP-17 (2011) (AWG on the Durban Platform for Enhanced Action);**
- Recognises that current emission pledges inadequate $<2^{\circ}\text{C}$
- Process to develop “protocol, another legal instrument or outcome...with legal force” for all Parties
- Timeline;
 - Process to completed no later than 2015
 - Implemented by 2020

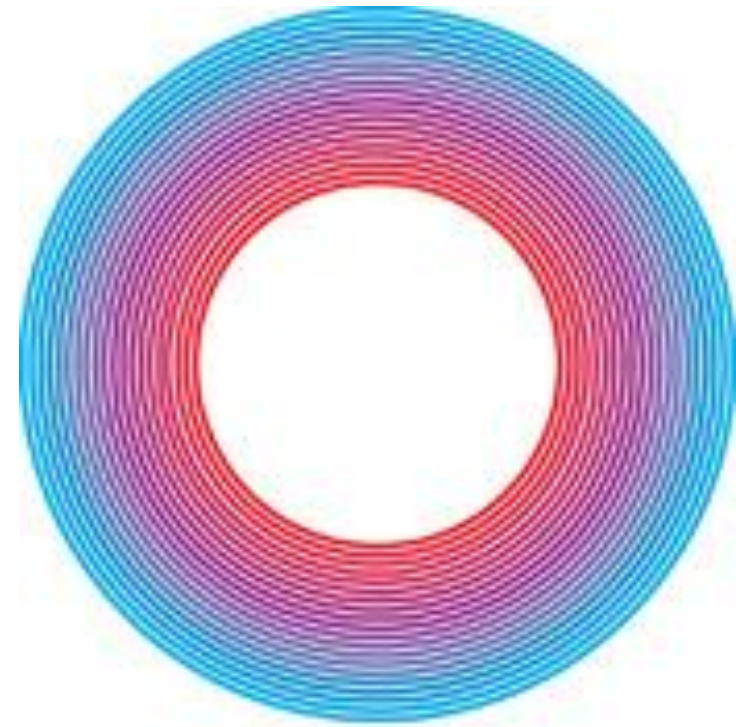


courtesy of IISD/Earth
Negotiations Bulletin

UNFCCC



- COP-20 Lima, Peru



LIMA COP20 | CMP 10

UN CLIMATE CHANGE CONFERENCE 2014

COP-20 Outcomes

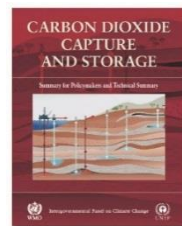


- Out of COP-20 Lima: “Lima Call for Climate Action”
 - confirms intentions for ambitious climate agreement at COP-21
 - will include: Mitigation, Adaptation, Finance, Technology development and transfer, Capacity building, Transparency.
 - based on Intended Nationally Determined Contribution (INDCs) – ‘progression beyond current undertakings’
 - further ‘technical examination’ of high mitigation opportunities’
 - Annex has the draft negotiating text for global agreement
- Further ADP meetings in 2015 (Feb, June, August, October)
- COP-21 Paris – 30 Nov –11 Dec 2015

CCS in UNFCCC



- 2005 - IPCC SR on CCS



- 2005– 2011 CCS in CDM?

- 2011 – CCS CDM Abu Dhabi workshop



- 2011 - COP-17 CCS in CDM



- 2014 - ADP – TEM on CCS – project focussed



- 2014 - COP-20 – CCS Projects Side Event





IPCC Fifth Assessment Report Synthesis Report

2nd November 2014
Copenhagen

IPCC AR5 Synthesis Report

ipcc
INTERGOVERNMENTAL PANEL ON climate change



Key Messages

- Human influence on the climate system is clear
- The more we disrupt our climate, the more we risk severe, pervasive and irreversible impacts
- We have the means to limit climate change and build a more prosperous, sustainable future

AR5 WGI SPM, AR5 WGII SPM, AR5 WGIII SPM

Mitigation Measures



More efficient use of energy



Greater use of low-carbon and no-carbon energy

- Many of these technologies exist today



Improved carbon sinks

- Reduced deforestation and improved forest management and planting of new forests
- Bio-energy with carbon capture and storage



Lifestyle and behavioural changes

AR5 WGIII SPM

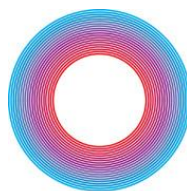
**IPCC AR5
SYR
Table 3.2
(2014)**

	Increase in total discounted mitigation costs in scenarios with limited availability of technologies			
	[% increase in total discounted mitigation costs (2015–2100) relative to default technology assumptions]			
2100 Concentration (ppm CO ₂ eq)	No CCS	Nuclear phase out	Limited Solar / Wind	Limited Bio- energy
450 (430–480)	138 (29–297) [N: 4]	7 (4–18) [N: 8]	6 (2–29) [N: 8]	64 (44–78) [N: 8]
500 (480–530)				
550 (530–580)	39 (18–78) [N: 11]	13 (2–23) [N: 10]	8 (5–15) [N: 10]	18 (4–66) [N: 12]
580–650				



How could UNFCCC mechanisms consider CCS?

Ellina Levina



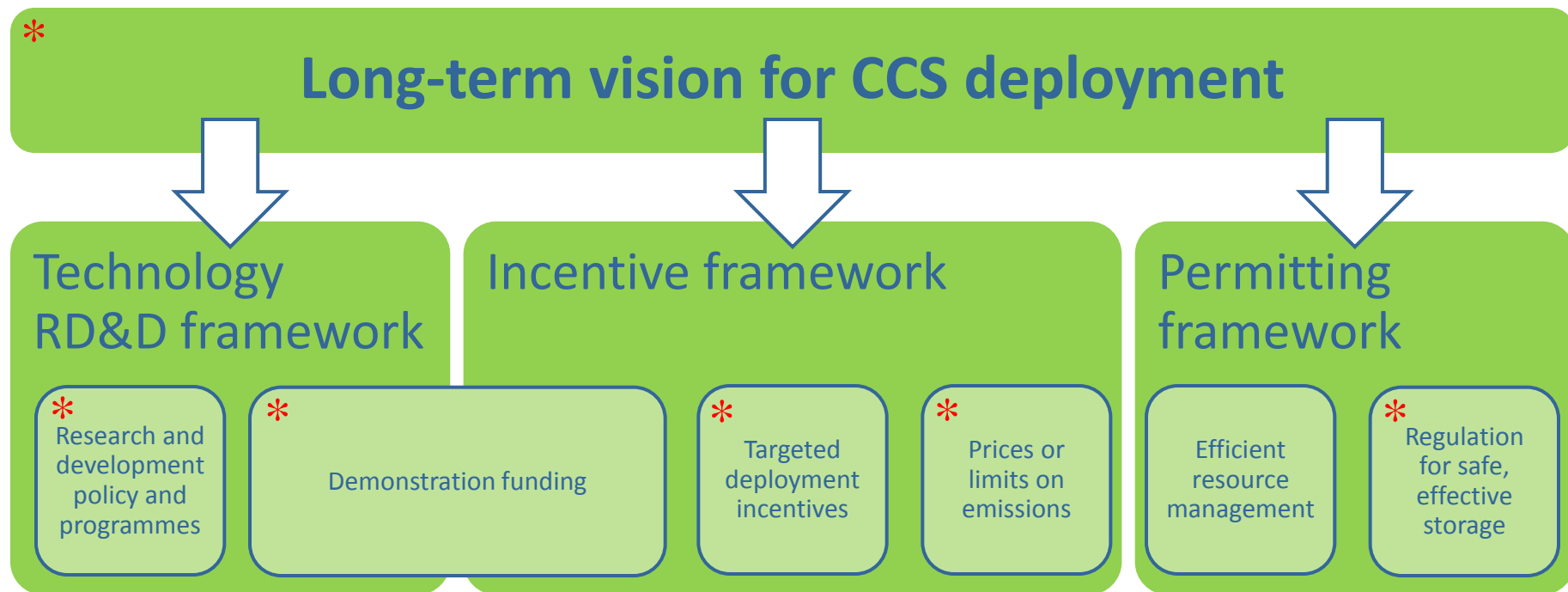
LIMA COP20/CMP10
UN CLIMATE CHANGE CONFERENCE 2014



United Nations
Framework Convention on
Climate Change



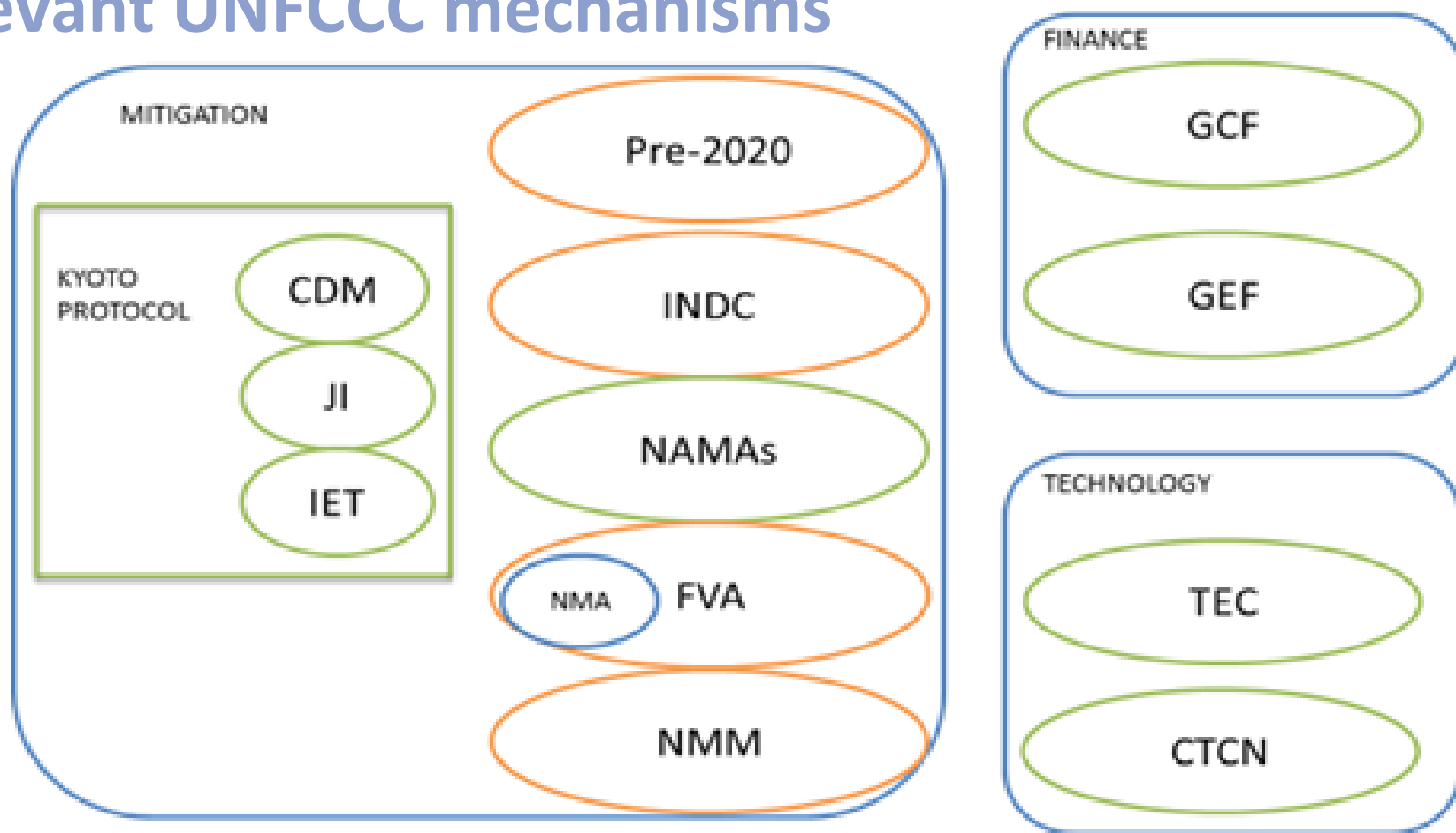
Drivers and supportive policies are essential





** UNFCCC process critical for shaping policy environment for clean energy including CCS: Ambitious climate targets, Technology Mechanism, Green Climate Fund, CDM, incl. modalities and procedures etc.*



Relevant UNFCCC mechanisms



-  - mechanisms under the negotiations
-  - agreed mechanisms under implementation



Intended Nationally Determined Contributions

INDCs will form the foundation for Parties' contribution “bottom-up”.

WAYS TO INCLUDE CCS:

- **Indicative** % of the role CCS could play, based on analysis
- **Mt of CO₂** captured and stored by 2030, 2040 etc.
- Target % or GW of **power generation capacity** equipped with CCS
- Policy **actions and mechanisms** supporting CCS
- Investments in **R&D** and long-term CCS development
- **Industrial** CO₂ emission policies that encourage CCS



The Green Climate Fund

The Green Climate Fund was established to mobilise funding for developing countries' mitigation and adaptation efforts.

WAYS TO INCLUDE CCS:

- Actively **highlight the availability** of funds for CCS projects
- Potentially include a **specific temporary funding window** for CCS
- Leverage **private sector investments** in CCS



Technology Mechanism

The Technology Mechanism aims at enhancing action on technology development and transfer to support mitigation and adaptation.

WAYS TO INCLUDE CCS:

- Create **enabling conditions** for CCS deployment through:
 - information on CCS that interested countries can use
 - inclusion of CCS in technology needs assessments
 - assessing regulatory and technical readiness and gaps for CCS deployment
- Broker **project financing** through:
 - international evaluation of CCS projects & international financing partnerships
 - linking defined projects with GCF funding opportunities
- Support existing **international RD&D cooperation** and partnerships by:
 - providing information to Parties on these partnerships
 - possibly covering costs of developing countries' participation in such partnerships
 - reporting on achievements to the UNFCCC



The NAMA framework

The NAMA framework recognises developing countries' contributions through unilateral or internationally supported actions.

WAYS TO INCLUDE CCS:

- Support **legal work** to make CCS a legal activity and define all necessary storage safety requirements
- CO₂ **storage exploration** and site identification
- Support development of **incentive policy** frameworks
- Funding to partly cover capital and/or operating **costs** of a CCS project
- Support **MRV** during operation and/or post-closure



Enhanced pre-2020 climate action

Parties agreed to work on mitigation action pre-2020.

WAYS TO INCLUDE ACTIONABLE ITEMS ON CCS:

- Support development of **incentive policy** frameworks
- Support development of detailed CCS **safety regulations**
- Foster development of CCS **pilot and demonstration projects**
- Support assessment work to identify specific **CO₂ storage sites**
- **Build capacity** for pilot projects in non-Annex I Parties
- Encourage national and international **cooperation on R&D**
- Provide guidance on **CO₂-EOR projects** modalities and procedures as short-term mitigation options in some countries
- Provide recommendations to the **Technology Mechanism** for its work on CCS



How could UNFCCC mechanisms consider CCS?

“Top-down”: UNFCCC mechanisms

Technology mechanism

- Knowledge sharing
- Help financing
- Partnerships

Green Climate Fund

- Actively highlight CCS
- Specific CCS window

NAMAs

- Laws & regulations
- Storage exploration
- Funds for CCS

CDM

- Continue to include CCS
- Retain M&P technical work

Enhanced pre-2020 action

- Knowledge sharing
- Policy & regulation

Other multilateral schemes

- Cooperation on CCS



“Bottom-up”: Intended Nationally Determined Contributions

INCLUDE CCS AND RELATED METRICS WHERE RELEVANT!

“Keep the oil in the soil, and the coal in the hole”



"They Have Destroyed Our Livelihood": Activists Protest Shell and Chevron at U.N. Climate Talks





Thank you

Any Questions?