



Bio-energy, CCS and BECCS: Options for Indonesia
Jakarta, Indonesia
 21-22 September 2012/ Site visit: 23-24 September 2012

Agenda

Day 1 – Friday, September 21 Open Sessions: 60 participants Experts Meetings: 30 participants	
8:40 - 11:30	Open Sessions
8:40 - 9:30	Opening Session - CCS and bioenergy in a Global Climate Change and Energy Context
	Welcome note (Indonesia) from Kuntoro Mangkusubroto (Head of UKP4) (10 min)
	Opening remarks from Wolf Heidug, Senior Analyst, IEA (20 min)
	Opening remarks from Director General for New and Renewable Energy and Conservation, Ministry of Energy and Mineral Resources (20 min)
9:30-9:45	Coffee Break
Session 1 9:45-11:30	Understanding BECCS: from Biomass to Storage Session Chair – Ping Yowargana, UKP4 Session Rapporteur – Wolf Heidug, IEA
	Dennis Best, IEA - The role of CCS as an option to reduce CO2 emissions - Options for CCS applications: power, industry, CO2-EOR, BECCS (20 min)
	Sabine Fuss, IIASA - BECCS today status and gaps: Results from the IEA-IIASA Workshop on BECCS (20 min)
	Michael Obersteiner - Biomass use in a climate context and sustainable Potentials for BECCS (20 min)
	Session Q&A (45 min)
11:30-13:30	Lunch and Friday prayers
13:30-18:00	Experts Meetings
Session 2 13:30-15:30	The Bigger Environment: Setting Context for Policies and Objectives
13:30-14:30	Review Indonesia Climate, Biomass and CCS policy Session Chair: Wolf Heidug, IEA Session Rapporteur: Sabine Fuss, IIASA
	Farhan Helmy, National Climate Change Council - Picturing Bioenergy and CCS in Indonesia's Energy and Climate (10 min)
	Maritje Hutapea, MEMR - Indonesia's Bioenergy and Biomass Policies (10 min)

	<p>Usman Pasarai, R&D Centre Lemigas, Indonesia's CCS storage availability and options for CCS Biomass (10 min)</p> <p>Session Q&A (30 min)</p>
14:30-15:30	<p>Costs and Emissions Reductions Session Chair: TBD, MEMR Session Rapporteur – Sabine Fuss, IIASA; Ping Yowargana, UKP4</p>
	<p>Stefan Kronkvist, KTH – Techno economic perspective on CO2 Capture from Biomass and criteria for BECCS projects (10 min)</p> <p>Michael Obersteiner - Exploring negative emissions potential - a global perspective (10 min)</p> <p>Wolf Heidug – Reporting and accounting for negative emissions under UNFCCC and the Kyoto Protocol (10 min)</p> <p>Session Q&A (30 min)</p>
15:30-15:45	Coffee break
15:45-17:15 Session 3	Framing BECCS in Indonesia
15:45-16:30	<p>Sources and Sinks (Experts Meeting Room) Session Chair: TBD, MEMR Session Rapporteur: Florian Kraxner, IIASA</p>
	<p>Kamaruddin Abdullah, Darma Persada University - Supply chain issue in developing Bioenergy in Indonesia (10 min)</p> <p>Bambang Prastowo, Ministry of Agriculture - Biomass availability and identification of feedstock potential (10 min)</p> <p>Jonatan Handojo, Growth Steel Group, - Exploring business opportunities from bioenergy application in Indonesia (10 min)</p> <p>Session Q&A (15 min)</p>
16:30-17:15	<p>International Perspectives Session Chair: Florian Kraxner, IIASA Session Rapporteur: Dennis Best, IEA</p>
	<p>Rick Causebrook, Geologist, Storage Capacity estimation and defining a methodology for BECCS storage assessments (10 min)</p> <p>Tom Mikunda, Energy Center of the Netherlands – CCS and BECCS, Policy and public support challenges (10 min)</p> <p>Nyoman Iswarayoga, Climate Change and Energy Director, WWF - Sustainability and biomass potential, linking to ecosystem services (10 min)</p> <p>Session Q&A (15 min)</p>
Session 3 Roundtable 17:15-17:45	<p>BECCS Roundtable I: Synthesizing Bioenergy and CCS – Towards A Systems Approach to Harnessing Benefits (Chaired by Florian Kraxner, IIASA) Dialogue question: What steps are taken to address two scenarios? BECCS is deployed, BECCS is not deployed</p>
17:45-18:00	<p>Day 1 Closing remarks and announcements Dennis Best, IEA; Agung Wicaksono, UKP4</p>

Day 2 – Saturday, September 22 Open Afternoon Session 13:00-16:00	
9:00-12:00	Experts Meetings
9:00-9:15	A Reflection of Workshop Day 1 – Rapporteur’s Remarks – Florian Kraxner, IIASA (15 min)
9:15-10:45 Session 4	Exploring International funding mechanisms for Bioenergy, CCS and BECCS Session Chair: Wolf Heidug Session Rapporteur: Dennis Best, IEA
	Paul Chambers, UK DECC - Climate Change Funding Mechanisms and International Cooperation on Climate Change (10 min)
	Dieter Brulez, GIZ - Gesellschaft fuer internationale Zusammenarbeit - The Climate Context of Bioenergy and CCS in Indonesia: Options and Challenges (10 min)
	Hardiv H. Situmeang, ASEAN Centre for Energy - Financing Bioenergy and CCS-challenges and opportunities (10 min)
	Agus Sari REDD+ Funding instruments Working Group Indonesia’s experience with international funding mechanisms, CDM, NAMAs, etc (10 min)
	Pradeep Tharakan, ADB - Project development requirements and financing options for CCS and BECCS (10 min)
	Session Q&A (40 min)
10:45-11:00	Coffee Break
Session 4 Roundtable 11:00 – 12:00	BECCS Roundtable II: Reflection and Prioritization for identifying next steps (Chair: TBD, MEMR) Opportunities and challenges: Wolf Heidug, IEA (5 min) Dialogue question: How do we ensure that we address opportunities and risks of BECCS deployment?
12:00-13:00	Lunch
13:00-16:00	Open Sessions
13:00-15:30 Session 5	Open Consultation Roundtable III: Bioenergy, CCS and BECCS: Outlining Indonesia’s BECCS potential and next steps (Chaired by MEMR) - Framing a global dialogue for Bioenergy, CCS and BECCS: Dennis Best, IEA (10 min) - Rapporteur’s Remarks Day 2: Florian Kraxner, IIASA (10 min)
15:30-16:00	Workshop Closing Remarks – UKP4/MEMR
Coffee Reception	

Day 3 – Optional Site Visit, Sunday, September 23	
8:55-11:10	Jakarta-Medan with flight GA 184 (Garuda Indonesia)
12:30-13:30	Lunch
13:30-16:30	Site introduction and discussions
	Welcome note from GSG Power Plant (10 min)
	Opening Remarks from Ministry of Energy and Mineral Resources (10 min)
	Site Introduction (1,5 hour)
	Power plant visit (1 hour)
16:30-17:30	GSG Power Plant-Medan
17:30-19:00	Check in and refreshing at Hotel Aryaduta Medan*
19:00-20:00	Dinner
Day 4 – Optional Site Visit, Monday, September 24	
8:00	Check out
10:15-12:30	Medan-Jakarta with flight GA 185 (Garuda Indonesia)*

* Recommended location ([link](#)) and flight