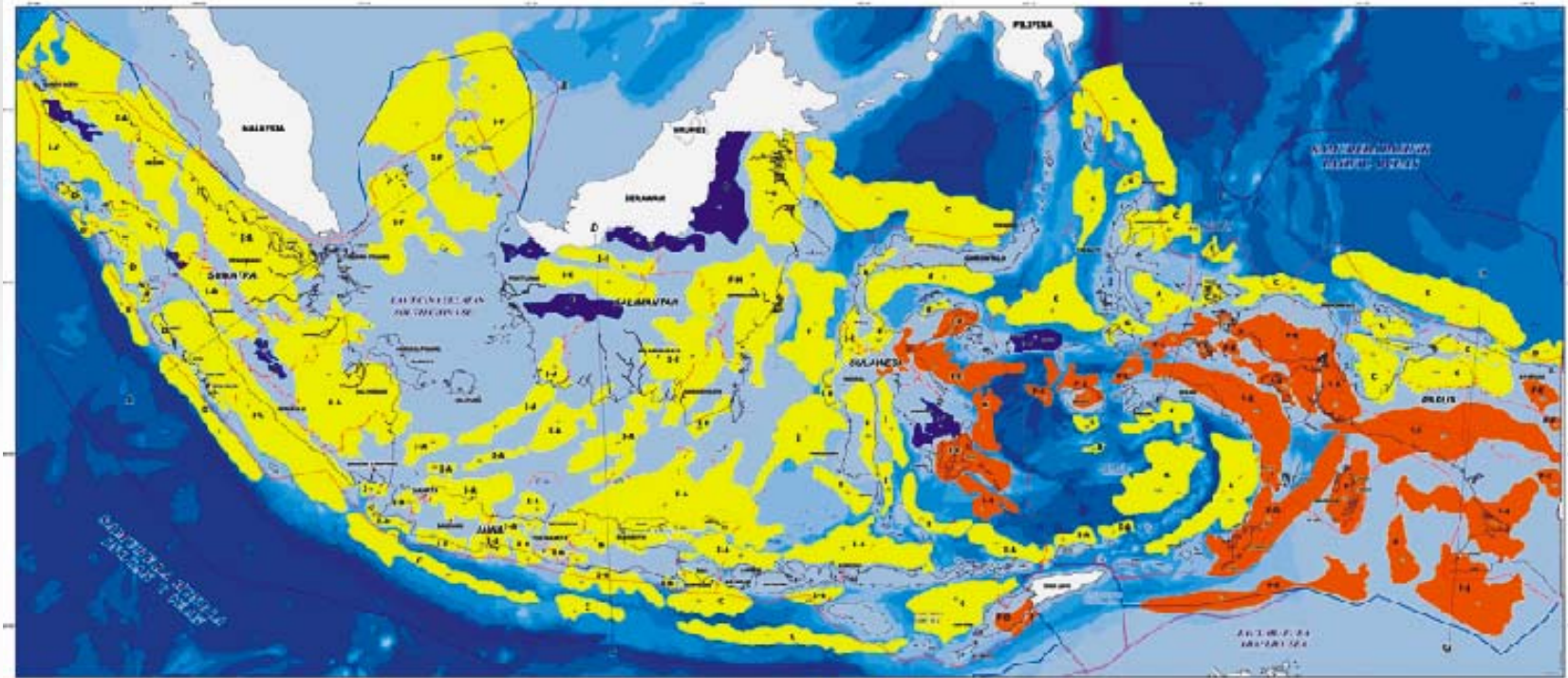# Major Challenges and Opportunities Experienced:
A Perspective From Research Organization

Letty Brioletty

Agency of R&D for Energy and Mineral Resources

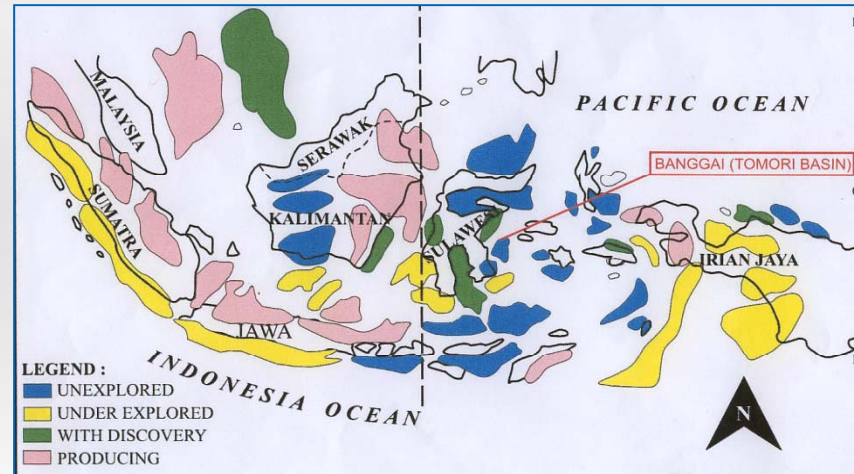R&D Centre for Oil and Gas Technology

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Sedimentary Map of Indonesia

Source: Geological Agency, 2009

Sites Selection and Storage Capacity Estimates


Table: CO2CRC & Bachu

- Depleted Oil and Gas Reservoirs

- Screening and ranking of sedimentary basins in Indonesia regions

- Developing screening criteria based on Indonesia geological characteristics

- Storage capacity estimates approach:
  - Production based volume

Inventory of CO_2 Emission and Possibility of CO_2 Storage in East Kalimantan

- Total CO_2 sources in East Kalimantan is circa 28 Mt CO_2/year

- Identified physical trapping is a combination of stratigraphic and structural trap which is potential for CO_2 storage

- The estimate storage capacity from four depleted gas reservoirs and four saline aquifers is approximately 3.5 Mt CO_2

- Well integrity and completion are important criteria on CO_2 storage

CO$_2$ Sequestration in Coal Seams-South Sumatera
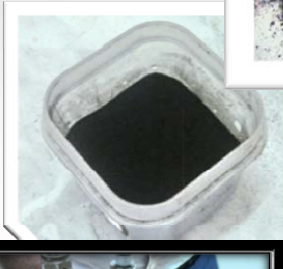

Sorption Apparatus

- **Determining storage capacity in coal seams**

- **Investigating storage capacity due to the following effects:**
  - Moisture
  - Ash content
  - Coal rank
  - Seams depth

- **Laboratory study using sorption apparatus**

Major Challenges and Opportunities Experienced

- Lack of fundings for research

- Public reluctance for supporting this technology

- Extensive research area in CCS chain activity

- Integrated working group between government institution and industry need more intensively and seriously

- Collaboration with international institutions
  - IEA
  - GCCSI
  - RITE

- Capacity building through seminars or workshops
  - Carbon Capture and Storage Forum: Opportunities of CCS development in Indonesia
  - Carbon Capture and Storage (CCS) Workshop: From Research to Reality
  - Workshop on Mapping of Potential Reservoir for CCS & Selection Criteria

Thank You
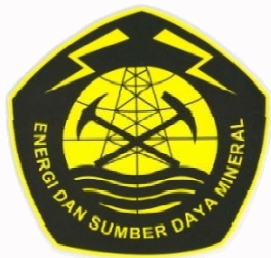
✉ **lettyb@lemigas.esdm.go.id**

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