Description of document: Three (3) U.S. Energy Information Administration (EIA) presentations:

- Controlled Unclassified Information
  Federal Committee on Statistical Methodology (FCSM) Conference
  Jacob Bournazian, Confidentiality Officer, U.S. Energy Information Administration (EIA), December 5, 2012
- The U.S. Greenhouse Gas Inventory: Energy Related Carbon Dioxide
  Presentation to the Chinese Delegation
  Center for Climate Strategies
  Perry M. Lindstrom, Project Leader, U.S. Greenhouse Gas Inventory, July 28, 2010
- The potential scale of the CO2-EOR (Carbon dioxide enhanced oil recovery) pipeline network with implications for CCS (carbon capture and storage)
  Transatlantic Infraday Conference
  Matthew Tanner, Ph.D., Office of Energy Analysis, U.S. Energy Information Administration, November 05, 2010

Requested date: October 2019

Release date: 13-December-2019

Posted date: 17-February-2020

Source of document: FOIA Request
Department of Energy
FOIA Requester Service Center
1000 Independence Avenue, SW
Mail Stop MA-46
Washington, DC 20585
Fax; (202) 586-0575

Department of Energy
Washington, DC 20585

DEC 7 2020

Via email

Re: HQ-2020-00058-F

This is the final response to the request for information you sent to the Department of Energy (DOE) under the Freedom of Information Act (FOIA), 5 U.S.C. § 552. You requested:

> First, a copy of the December 2012 Presentation by Jacob Bournazian on Controlled Unclassified Information found on the Inside EIA internal website page for Presentations. Second, a copy of EACH presentation document posted under the Analysis section of the Presentations section of the Inside EIA internal website (for example the Tanner presentation dated November 5, 2010 and the Lindstrom presentation dated July 28, 2010.).

Your request was assigned to DOE's Energy Information Administration (EIA). EIA started its search on October 23, 2019, which is the cutoff date for responsive records. EIA has completed its search and identified three (3) documents responsive to your request. These documents are being provided to you in their entirety.

This decision, as well as the adequacy of the search, may be appealed within 90 calendar days from your receipt of this letter pursuant to 10 C.F.R. § 1004.8. Appeals should be addressed to Director, Office of Hearings and Appeals, HG-1, L'Enfant Plaza, U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, D.C. 20585-1615. The written appeal, including the envelope, must clearly indicate that a FOIA appeal is being made. You may also submit your appeal by e-mail to OHA.filings@hq.doe.gov, including the phrase "Freedom of Information Appeal" in the subject line (this is the preferred method by the Office of Hearings and Appeals). The appeal must contain all the elements required by 10 C.F.R. § 1004.8, including a copy of the determination letter. Thereafter, judicial review will be available to you in the Federal District Court either (1) in the district where you reside, (2) where you have your principal place of business, (3) where DOE's records are situated, or (4) in the District of Columbia.

You may contact DOE's FOIA Public Liaison, Alexander Morris, FOIA Officer, Office of Public Information, at 202-586-5955, or by mail at MA-46/Forrestal Building 1000 Independence Avenue, S.W., Washington, D.C., 20585, for any further assistance and to discuss

any aspect of your request. Additionally, you may contact the Office of Government Information Services (OGIS) at the National Archives and Records Administration to inquire about the FOIA mediation services they offer. The contact information for OGIS is as follows: Office of Government Information Services, National Archives and Records Administration, 8601 Adelphi Road-OGIS, College Park, Maryland 20740-6001, e-mail at ogis@nara.gov; telephone at 202-741-5770; toll free at 1-877-684-6448; or facsimile at 202-741-5769.

The FOIA provides for the assessment of fees for the processing of requests. *See* 5 U.S.C. § 552(a)(4)(A)(i); *see also* 10 C.F.R. § 1004.9(a). In our October 17, 2019 letter, you were advised that your request was placed in the "other" category for fee purposes. Requesters in this category are entitled to two free hours of search time and 100 free pages. DOE's processing costs did not exceed $15.00, the minimum amount at which DOE assesses fees. Accordingly, no fees were charged for processing your request.

If you have any questions about this letter, you may contact me or Mr. Stephen Jochem of my office at:

MA-46/Forrestal Building
1000 Independence Avenue, S.W.
Washington, D.C. 20585
(202) 586-2708

I appreciate the opportunity to assist you with this matter.

Sincerely,

Alexander C. Morris
FOIA Officer
Office of Public Information

Enclosures

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Request #: HQ-2020-00058-F

Final response

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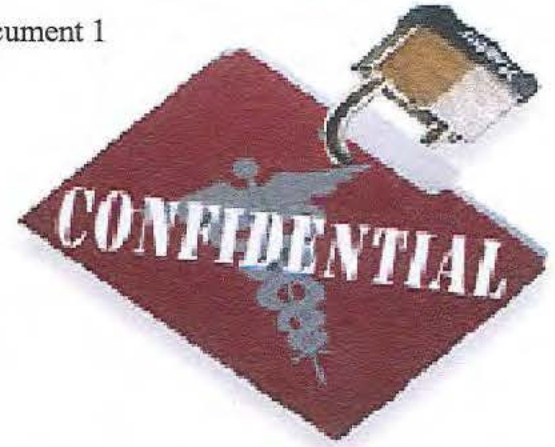
The Energy Information Administration (EIA) has completed its search and identified three (3) documents responsive to your request.

- Three (3) documents *are being released in their entirety.*

Document 1



Patent Applications

Witness Protection Program

Suspicious Activity Reports

Publicly Available: http://www.copafs.org/UserFiles/file/seminars/2012FCSM/Session08BournazianControlledUnclassifiedInformation.pptx

Controlled Unclassified Information

FCSM Conference

Jacob Bournazian, Confidentiality Officer, EIA

December 5, 2012 | Washington, D.C.

Doctor visits

School grades

Consumer Expenditures

Overview

- May 7, 2008, President issues Memorandum on Information Sharing.
- May 27, 2009 President issues Memorandum on Classified Information and Controlled Unclassified Information.
- August 25, 2009 Interagency Task Force issues report.
- November 4, 2010 Executive Order 13556.
- Response by federal departments 2011-2012.

President's Memorandum May 7, 2008

- The Intelligence Reform and Terrorism Prevention Act of 2004 mandated greater information sharing and created the "Information Sharing Environment" (ISE)

- Designation and Sharing of Controlled Unclassified Information (CUI)

- A category designation for unclassified information that does not meet the standards for National Security Classification. But is pertinent to the national interests of the U.S. and under law or policy requires protection from unauthorized disclosure, special handling safeguards, or prescribed limits on exchange or dissemination.

  CUI to be used in place of Sensitive But Unclassified (SBU).

  CUI Framework – refers to a single set of policies and procedures governing the designation, marking, safeguarding and dissemination of terrorism-related SBU information.

President's Memorandum May 27, 2009

- Directs a task force to do a 90 day review of the CUI framework for terrorism related information
- Determine if it should be expanded to all sensitive but unclassified information under the control of the Executive Branch.
- Present findings and identify problems relating to the portability of unclassified documents.

CUI Task Force

Nine Information Sharing Environment (ISE) agencies

Dept of State
Dept of Justice
Dept. of Defense
Dept. of Homeland Security
Federal Bureau of Investigation
Office of the Director of National Intelligence
Office of Management and Budget
Program Manager, Information Sharing Environment
Dept. of Health and Human Services

3 Non-ISE agencies

Dept. of Agriculture, Dept. of Interior, and National Archives and Records Administration (NARA)

Task Force Findings

117 different SBU markings currently in use.

- Executive branch suffers immensely from interagency inconsistent policies for sensitive information
- Frequent uncertainty as to what policies apply to sensitive info
- Inconsistent application of similar policies across agencies
- Absence of effective training, oversight and accountability. Tendency to over protect information, and diminishing government transparency.

Goals – Simple, Concise, and Standardize

Standardize disparate terminology and procedures.

Facilitate Information sharing by applying a common set of understandable rules for information protection and dissemination.

Enhance government transparency through policies and training that clarify the standards for protecting information.

Provide centralized governance.

Establish a life cycle approach for CUI information, by date or event.

Task Force Recommendations

- 40 Recommendations
- CUI Framework should be expanded to include all information under the control of the Executive Branch.
- CUI Framework should be the single categorical designation used to identify, safeguard, and disseminate unclassified information.
- Moratorium on efforts within the Executive Branch to define or develop new SBU categories outside of the CUI Framework.

Executive Order 13556 – issued 11/4/2010
Controlled Unclassified Information (FRN 11/9/2012)

Designated National Archives and Records Administration (NARA) as the Executive Agent to implement the CUI program.

Described the process for developing and approving CUI categories during 2011-2012.

Government-wide, uniform program to identify and protect sensitive but unclassified information

CUI categories and subcategories in Registry to be only designations permitted for unclassified information that requires safeguarding or dissemination controls.

Executive Order 13556 – Cont.

What should be the basis for information control?

Only law, regulation, Government-wide policy

How should controlled information be handled?

Follow OMB and National Institute of Standards and Technology (NIST) standards, others established by Agency and published in Registry.

In 2015 Public CUI registry will contain:

- Approved CUI categories/subcategories
- Associated markings
- CUI safeguarding, dissemination, and decontrol procedures

Factors to consider when expanding the CUI Framework

- Agency missions differ.
- Agency requirements differ.
- Agency processes differ for managing sensitive information.

Two Safeguarding Levels

- Different levels of security and controls apply to different categories of unclassified information.
  - Patent applications and witness protection program vs. government financial.

1) Basic - the minimum safeguarding level.

2) High - provides more stringent safeguarding measures.

Decontrol vs. Release of CUI

"Decontrol" is the act of removing information previously designated as CUI from the CUI framework.

- Decontrol is NOT by itself authorization for public release.

At no time is a CUI marking itself determinative of whether it may be released.

Decontrol vs. FOIA and Records Schedules

A document marked as CUI is NOT automatically exempt from release under FOIA or to Congress.

For FOIA – must still be processed and reviewed under applicable statutes and regulations

For the Congress, follow existing statutes.

CUI Framework should not impact record destruction timelines established by statute, regulation or record management policies.

Memorandum 11/22/2011 DOJ Guidance for agencies

Information Security Oversight Office

The Information Security Oversight Office (ISOO) is a component of the National Archives and Records Administration (NARA) and receives policy and program guidance from the National Security Council (NSC).

ISOO has three components:

1) Develops security classification policies for classifying, declassifying and safeguarding national security information.

2) Evaluates the effectiveness of the security classification programs.

3) Develops standardized CUI policies and procedures.

Department Compliance Plan Elements filed 12/5/2011

Governance – Roles and responsibilities, describe process to establish and direct CUI program.

Policy –Target dates for issuing CUI procedures.

Training - Define who must be trained, training methods and proposed dates.

Technology – Review IT systems, plans for electronic marking.

Self-Inspection – Target dates for self-inspection program, how lessons learned will be incorporated.

Milestones/Deadlines

- January 2013 ISOO issues final CUI policies regarding safeguarding and marking.
- Feb-Mar 2013 Department CIO reviews IT systems.
- June, 2013 Review Departmental regulations, directives.
  - Senior management determines program-specific CUI policies.
- December, 2014 Each Department issues CUI Order.

The U.S. Greenhouse Gas Inventory: Energy-Related Carbon Dioxide

PRESENTATION TO THE CHINESE DELEGATION
CENTER FOR CLIMATE STRATEGIES
July, 28, 2010
Washington, DC

Perry M. Lindstrom, Project Leader, U.S. Greenhouse Gas Inventory

U.S. Energy Information Administration
Independent Statistics and Analysis

Outline of Presentation

- Part I: Who is the U.S. Energy Information Administration (EIA), why is EIA in the inventory business and how does EIA conduct the U.S. inventory?
- Part II: What is the relationship between EIA and the U.S. Environmental Protection Agency (EPA)?
- Part III: How certain are the data, what stories do energy-carbon dioxide emissions tell and what can be applied to other countries?

Part I

- Who is the U.S. Energy Information Administration (EIA), why is EIA in the inventory business and how does EIA conduct the U.S. inventory?

Who is the U.S. Energy Information Administration?

- The U.S. Energy Information Administration (EIA) is the independent statistical and analytical agency within the U.S. Department of Energy

- EIA collects, analyzes, and disseminates independent and impartial energy information to promote sound policymaking, efficient markets, and public understanding of energy and its interaction with the economy and the environment

- EIA is policy neutral

Why is EIA in the inventory business?

- Energy Policy Act of 1992
  - Title XVI, Section 1605(a) of the Act
  - Annual estimate of GHG emissions
  - First report published in September, 1993
  - Report published in December, 2009 was 17th in series
  - The energy sector of the economy is responsible for about 85 percent of all greenhouse gas emissions

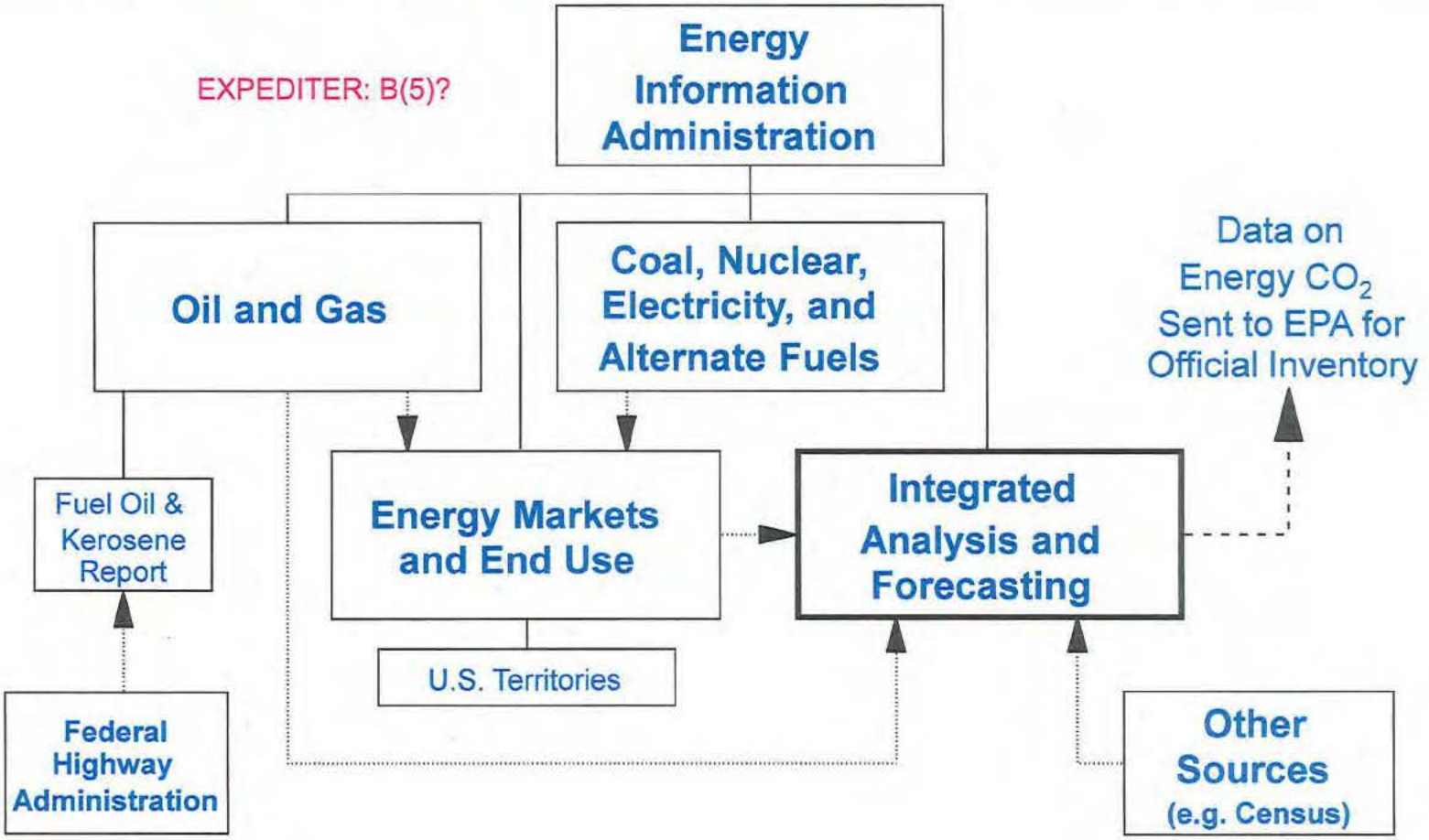
How does EIA conduct its inventory?

- Use EIA's surveys to estimate activity data by fuel for four end-use sectors as well as for the electric power sector
  - Residential
  - Commercial
  - Industrial
  - Transportation
- Activity data are collected in physical units
- Activity data are converted to British Thermal Units (Btu)

How does EIA conduct its inventory? (continued)

- Emissions estimated by multiplying carbon dioxide factors times the Btu values
- Electric power sector emissions are allocated to the end-use sectors by electricity sales to those sectors
- Sequestration of carbon dioxide equivalent from nonfuel uses of fossil fuels is estimated by input product
-
- If nonfuel products such as plastics are later combusted to produced energy the emissions are counted then

How is EIA organized for data collection?



How are EIA consumption data estimated?

- Most EIA consumption data are based on "apparent" consumption

  Domestic production

  Plus imports

  Minus exports

  Minus stock change

  Equals consumption

How are stationary combustion activity data collected?

- Data on coal, natural gas and petroleum consumption by electricity generators are collected from the companies that generate the electricity
- Data on other types of coal, natural gas and petroleum consumption are collected from refiners and other fuel suppliers
- Data for natural gas pipeline compressors are reported in the transportation sector and aggregated with mobile sources such as CNG vehicles
  - Data and methods are available to separate compressors from vehicles

How are mobile combustion activity data collected?

- Refiners are surveyed monthly
- Federal Highway Administration provides on-highway diesel data
- Biofuels are subtracted at the Btu level (activity data)
- Supplier surveys and consumption surveys can yield differing results
- Assumption is that jet fuel is used in jets
  - Because of low-temperature performance it may be used in trains, trucks, etc.
  - Going below the sector level requires end-use surveys

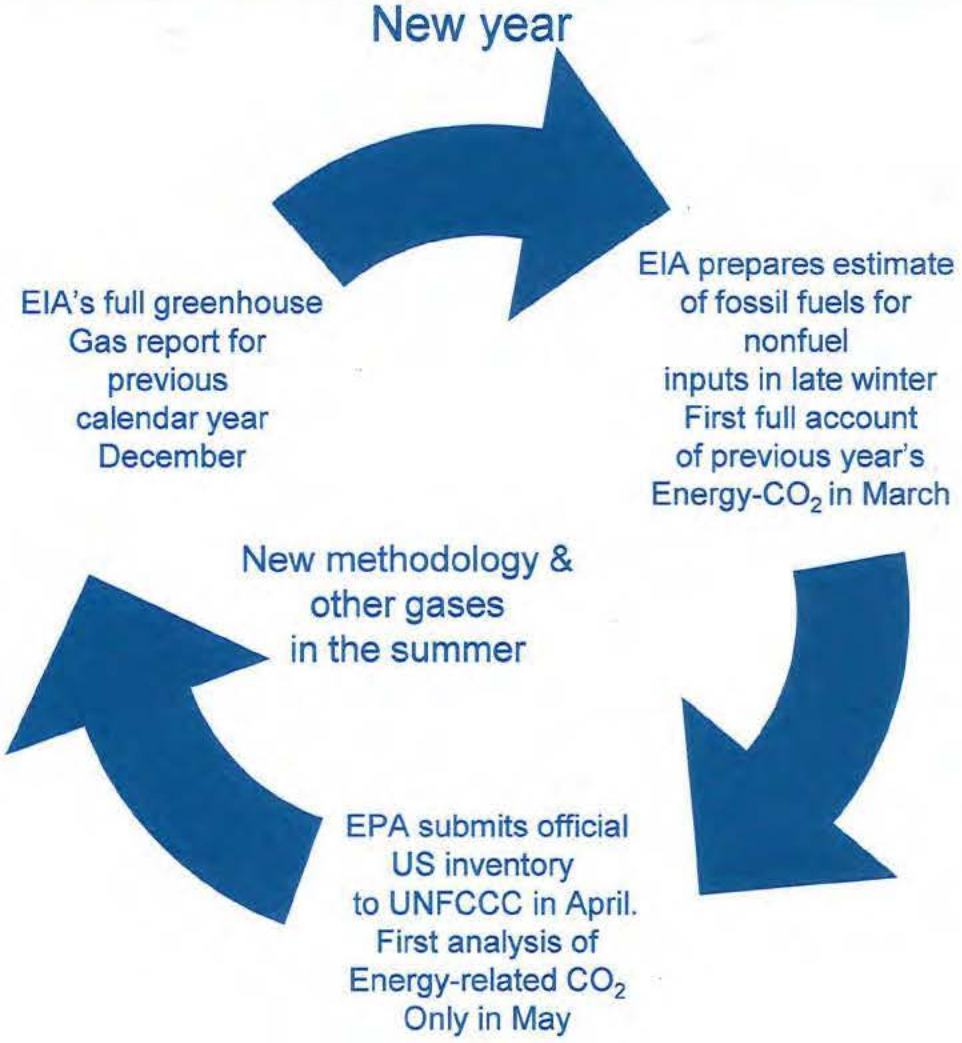
Are end-use consumption surveys used?

- Consumption surveys used when available
- The Manufacturing Energy Consumption Survey (MECS) is conducted every 4 years
- The survey is conducted by The Census Bureau and data are shared with EIA
- These surveys are used to confirm and enhance the annual supplier surveys
- Other consumption surveys include: Residential Energy Consumption Survey (RECS), Commercial Buildings Energy Consumption Survey (CBECS) and Transportation Surveys (RTECS -- discontinued)

Part II

- What is the relationship between EIA and the U.S. Environmental Protection Agency (EPA)?

Typical Annual Inventory Cycle



What's the relationship between EIA and EPA for the National Inventory?

- Memorandum of Understanding between EIA and EPA
- EIA provides energy consumption data
- Both agencies work on the carbon dioxide factors
- EIA's inventory serves as a "first draft" of the official submission
- EIA is less constrained by international protocol
  - EIA uses Global Warming Potentials (GWP) from the 4th Scientific Assessment (AR4), EPA from the 2nd
- EPA submits official U.S. inventory to United Nations Framework Convention on Climate Change (UNFCCC) in April of the data year + 2 (e.g. in April 2011 EPA will submit the 2009 inventory)

Part III

- How certain are the data, what stories do energy-carbon dioxide emissions tell and what can be applied to other countries?

How certain are the data? (Oil and Gas emission factors)

- Differing chemical compositions yield a range of emission coefficients for petroleum products
  - The petroleum products themselves are relatively stable
  - Motor gasoline varied over time when reformulated gasoline was being introduced
  - Ethanol adjusted at the Btu level
- Natural gas factors are relatively stable over time
  - Content of liquids causes any variability

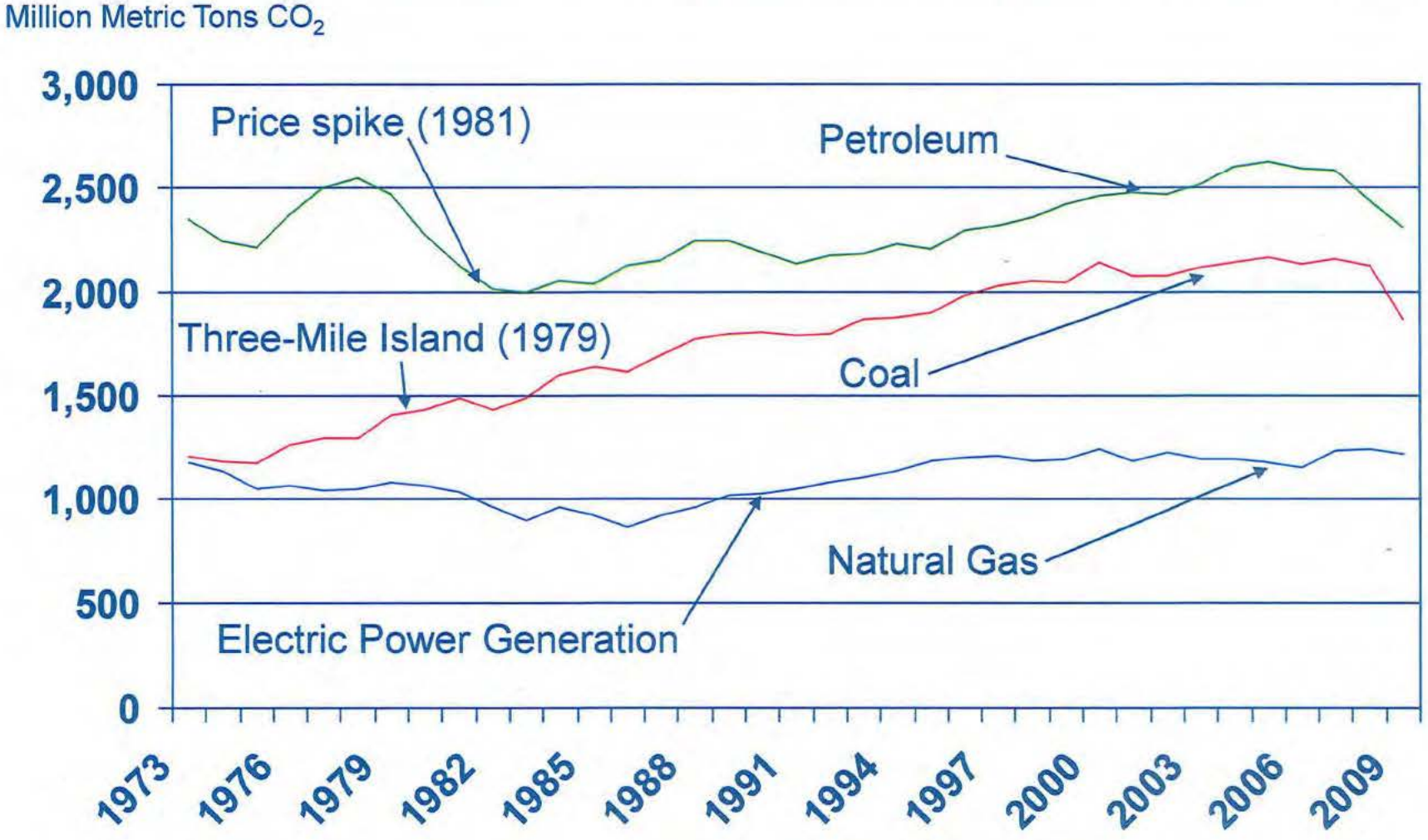
How certain are the data? (Coal emission factors)

- Coal varies by type and state of origin, but consumption patterns tend to be consistent over time – or change comes slowly
- Total variation in coal emission factors is as much as 17 percent (90.9 to 106.5 kg/10^6Btu)
- However, those represent outliers with very little production
- Most U.S. coal is in the range of 93.4 to 97.4 kg/10^6Btu (4.3 percent) and its consumption is well documented

How certain are the data? (Types of errors)

- Two types of errors for the activity data (Btu values) and emission factors (kg/10^6 Btu)
  - Bias error
  - Random error
- Bias error assumed to be non-normal distribution with a negative bias (i.e. undercounting) for the activity data
- Random error is normally distributed for the activity data
- Carbon dioxide emission factor errors are normal for both random and bias errors
- Uncertainty for CO_2 as a percent of total estimated emissions based on EIA's Monte Carlo simulations performed on 1999 data is -0.6 % to +1.7 %

Energy-Related Carbon Dioxide Emissions Tell a Story Over Time



Perry Lindstrom, Energy-Related CO_2, Center for Climate Strategies, Chinese Delegation. July 28.2010

What can be applied to other countries?

- The general method is appropriate to all countries
- Measurement at large facilities along the supply chain
  - Energy production facilities
  - Domestic transportation hubs
  - Import/export facilities
  - Large consumption facilities such as coal-fired electric power plants
  - Refineries
  - Pipelines
- Basic understanding of the fuels to determine carbon factors
  - Example: types of coal

What are the limitations of this method to other countries?

- Where there are less formal markets, it is more difficult to apply this method – example a coal mine selling directly to small businesses
- For nonfuel uses of fossil fuels: how does the chemical industry and its inputs differ from the United States?
- Future technologies such as carbon capture and storage may pose new challenges

For more information

U.S. Energy Information Administration home page	www.eia.gov
Environment page	www.eia.gov/environment.html
Short-Term Energy Outlook	www.eia.gov/emeu/steo/pub/contents.html
Annual Energy Outlook	www.eia.gov/oiaf/aeo/index.html
International Energy Outlook	www.eia.gov/oiaf/ieo/index.html
Monthly Energy Review	www.eia.gov/emeu/mer/contents.html
EIA Surveys	www.eia.doe.gov/oss/forms.html#env_forms

National Energy Information Center (202) 586-8800
Live expert from 9:00 AM – 5:00 p.m. EST
Monday – Friday (excluding Federal holidays)
email: InfoCtr@eia.doe.gov

My Contact Information

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The potential scale of the CO_2-EOR pipeline network with implications for CCS

Transatlantic Infraday Conference

November 05, 2010

Washington, DC

Matthew Tanner, Ph.D.

Office of Energy Analysis

U.S. Energy Information Administration

Independent Statistics and Analysis

Disclaimer

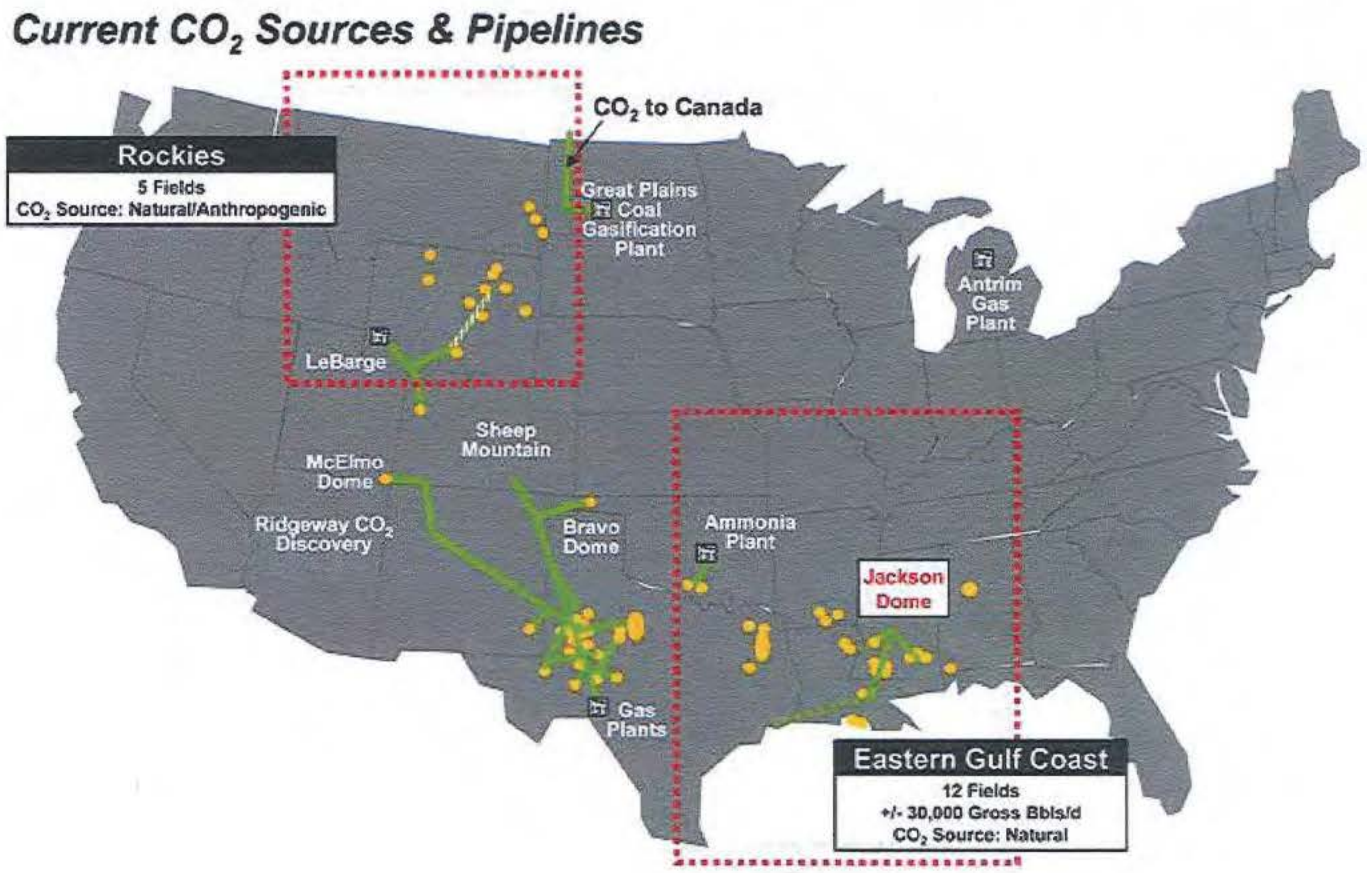
The analysis and conclusions expressed here are those of the author and not necessarily those of the U.S. Energy Information Administration

Agenda

1. Existing CO_2-EOR activity
2. CCS under a carbon policy
3. Modeling CO_2-EOR with NEMS
4. Results
5. Conclusions

Existing and planned CO_2 pipelines

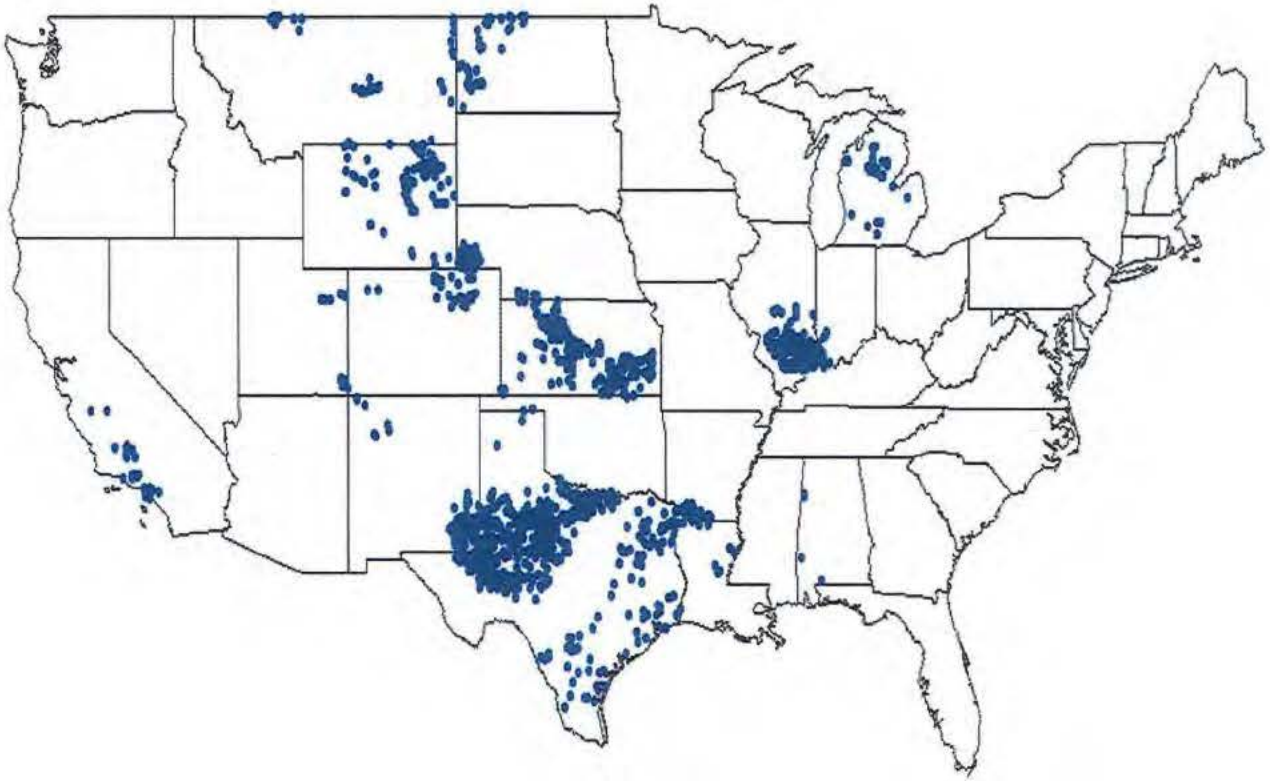
~50 million tons CO_2 injected to produce ~400,000 barrels oil/day



Source: Denbury Resources

Potential for CO_2-EOR

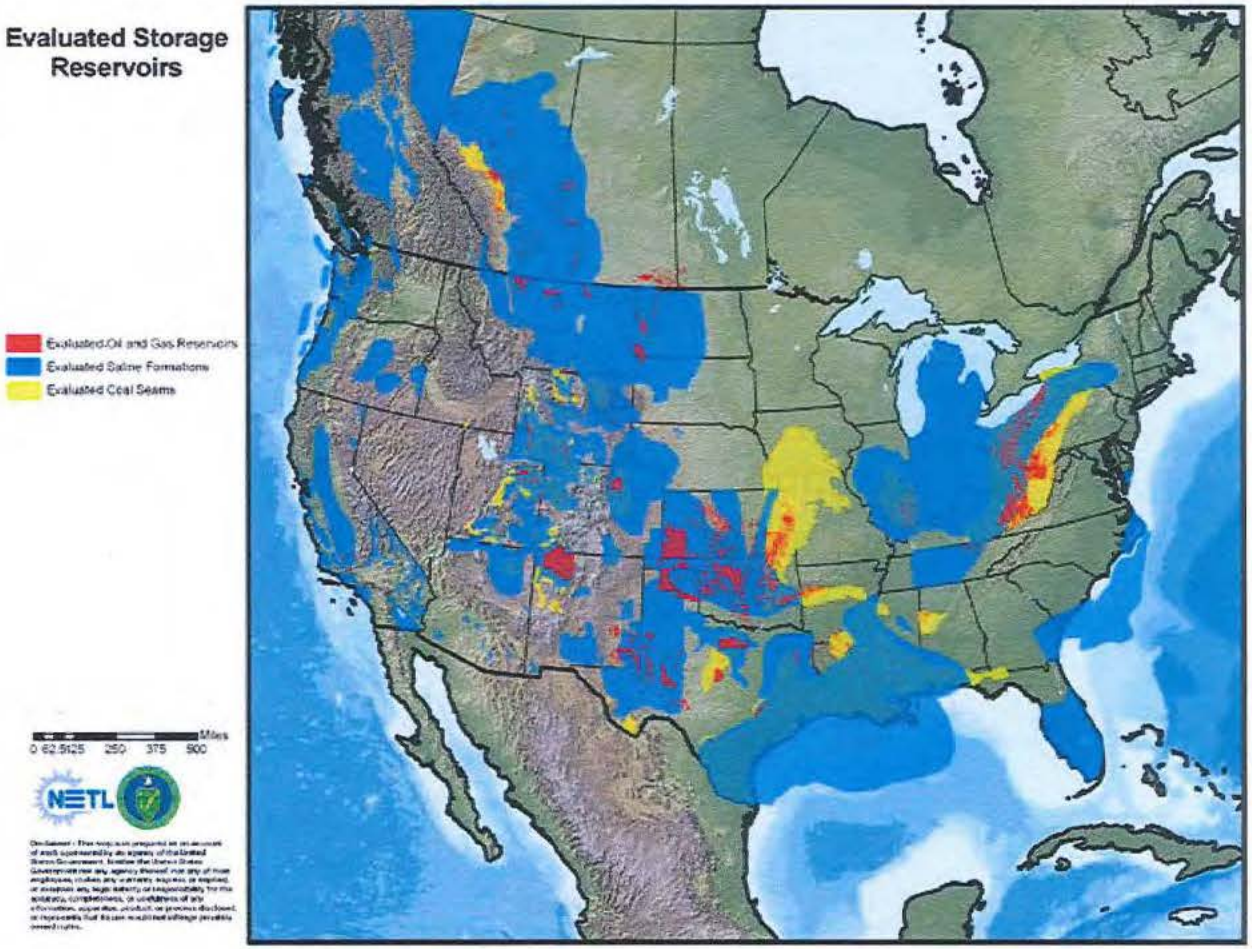
- NETL report[1] estimates 84.1 billion barrels oil technically recoverable with CO_2-EOR
- implies 10-13 billion tons CO_2 injected
- Economic CO_2-EOR potential is lower



Source: DOE/NETL COGAM database

Sequestration under a carbon policy

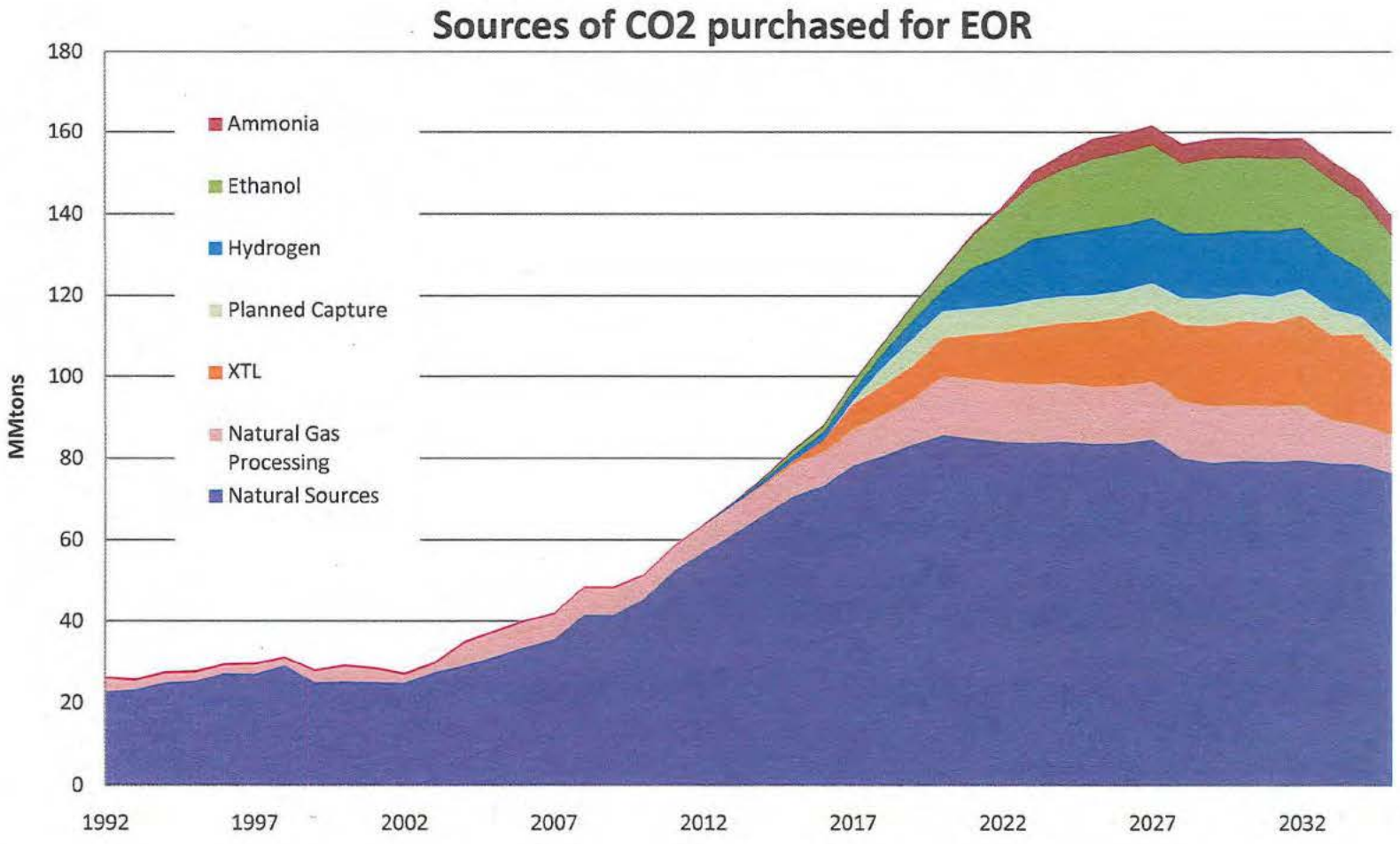
In EIA analysis of APA[2], 500 mmtons/year CO_2 are sequestered by 2035



Modeling CO_2-EOR in NEMS

- Domestic oil production is projected by the oil and gas supply module (OGSM) assuming an oil price path
- CO_2-EOR is one of several EOR technologies considered
- Choice of which technology to apply to a particular field depends on economics specific to that field
- CO_2 availability and price over time are model assumptions
- CO_2 can be transported both intra-regionally and inter-regionally

CO_2 purchased



Implied CO_2 pipeline network

- Nationally in 2025
  - 145 mmtons CO_2 purchased
  - 35.3 mmtons CO_2 transported inter-regionally
  - 1.1 million barrels oil/day produced
  - By 2050, declines to 130 mmtons CO_2 producing 0.9 million barrels oil/day
- Inter-regional transport
  - 24 mmtons CO_2 to Southwest
  - 11 mmtons CO_2 to Midcontinent
  - New transport capacity connecting anthropogenic sources on Gulf Coast to fields

Implications for CCS

- Little overlap between likely sequestration sites and CO_2-EOR fields
- Limited potential for long-distance CO_2-EOR pipelines to be adapted for CCS
- Intra-regional pipelines do not connect regions that CCS pipelines would likely need to connect
- Distribution infrastructure does overlap with potential CCS infrastructure needs

Sensitivities and uncertainties

- Results assume persistent high oil prices
  - Low oil price sensitivity case
  - High oil price sensitivity case
- CO_2 availability assumptions are highly uncertain
- A carbon price would change investor decisions and might relax CO_2 resource constraints
- Transportation is assumed to have a fixed rate per ton CO_2

Conclusions

- Projected scale of CO_2 infrastructure sufficient to play a role in CCS infrastructure development
- Limited overlap between the projected CO_2-EOR infrastructure and likely CCS infrastructure requirement
- Highest potential for adaptation of CO_2-EOR infrastructure in distribution lines
- CO_2-EOR still has a likely role in the funding of CCS for early adopters

Questions?

A white paper on this subject can be found at http://www.eia.gov/discussionpapers

References

1. NETL, "Storing CO_2 with Enhanced Oil Recovery", retrieved from www.netl.doe.gov, 2008.
2. EIA, "Energy Market and Economic Impacts of the American Power Act of 2010", retrieved from www.eia.gov, 2010.