AFF CCS REGULATIONS CP

Federal Lands DA

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**Private sector eminent domain authority doesn’t extend to federal lands**

**CLC 8** – Conservation Law Center (“PROTECTING CONSERVATION EASEMENTS FROM EMINENT DOMAIN IN NATIONAL INTEREST ELECTRIC TRANSMISSION CORRIDORS” Conservation Law Center and Indiana University School of Law, Conservation Law Clinic, March 2008, http://www.conservationlawcenter.org/files/CLC\_Condemnation\_in\_NIET\_Corridors\_Memo\_POST\_6\_2\_08.pdf)//MR

Once an NIETC has been designated, the Federal Energy Regulatory Commission¶ (“FERC”) may issue permits to private sector utility companies for the construction or¶ modification of electric transmission facilities within the designated corridor.4 This regulatory¶ authority may be exercised only when a state in which the facilities are to be located cannot or¶ will not issue a permit to site such facilities, and the electricity will be used in interstate¶ commerce.5 According to the statute, the likelihood of permit approval will be determined at an¶ “expeditious pre-application” meeting between the applicant and relevant agencies.6 Most critically for land trusts and other conservation organizations, Congress, in¶ Subsection 824p(e), has delegated to the holder of a FERC permit the right to acquire a utility¶ right-of-way by the exercise of eminent domain when other efforts to obtain the property have¶ failed.7 This eminent domain authority, however, may not be exercised on “property owned by¶ the United States or a State” (this exclusion is henceforth referred to as the “824p(e)¶ exception”).8 The 824p(e) exception is the first line of defense against condemnation within¶ NIETCs. Unfortunately, Congress provided no explanation of what constitutes property owned¶ by the United States or a state in the context of the statute.

**Only the federal government solves the use of federal lands – private sector eminent domain only extends to private property**

**Volz 11** – AP Analyst

Lawmaker Seeks Eminent Domain Over Federal Land, http://www.flatheadbeacon.com/articles/article/lawmaker\_seeks\_eminent\_domain\_over\_federal\_land/21886

Senate Bill 254 would give the state the ability to reclaim some of that land that's been protected or being considered for protection and unlock it for resource development, Hutton said. "We're allowing future legislatures in Montana to identify federally owned land in our state that could be put to better use," Hutton said. Opponents of the proposal said the state's ability to use eminent domain **against the federal government** is a long-shot legal theory at best — and **unconstitutional** at worst — but is unlikely to benefit Montana in any case. "The reason this is a novel approach and has never been tried before is because this is **unconstitutional**," said Anne Hedges of the Montana Environmental Information Center. Hedges cited Article 4, Section 3 of the U.S. Constitution, which says only Congress has the power to dispose of any territory or property belonging to the U.S. Eminent domain is the right of a **government** to take private property. Utah passed a law last year allowing the state to claim federal lands through eminent domain, and also backed up that legislation with a $3 million defense fund to fight any legal challenge to the new law.

**Federal lands are key**

**Grant 9** - Physical Scientist Office of Systems, Analyses, and Planning @ DoE

Tim, “Storage of Captured Carbon Dioxide Beneath Federal Lands,” Dept of Energy, http://www.netl.doe.gov/energy-analyses/pubs/Fed%20Land\_403.01.02\_050809.pdf

An important initial step in developing a CO2 storage field is to acquire control of surface acreage that also provides control of the subsurface geologic sink. In assembling an acreage block, Federal lands present two **unique advantages**, single ownership, and large tracts of land. Trying to secure leases from multiple landowners who may have various opinions and expectations regarding CO2 storage operations may be quite a challenge. Negotiating with a single landowner to secure the rights to large tracks of land can provide an advantage here, not only for potential future operations but also for early large-scale demonstration projects that will help **accelerate** commercial deployment of CCS technology. Clear ownership of the storage reservoir pore space is critical to a successful CO2 storage project. Surface access for injection facilities and field pipelines as well as for MVA activities is equally important. The area of a CO2 plume in the subsurface will expand with time and continued injection. Upon cessation of injection, the natural flows of formation waters in saline reservoirs will impart an influence on the plume. These physical attributes must be taken into account when assembling an acreage block many decades before field operations are closed down. Clear ownership of the surface and subsurface establishes the ability to transfer rights for access to a potential storage field operator. This is one advantage Federal lands present to the CCS industry. To facilitate transportation of captured CO2, EPACT05 required BLM to perform preliminary work in the area of designating energy corridors on Federal lands for subsurface pipelines. This work includes the preparation of a preliminary EIS. These designated energy corridors will allow placement of CO2 pipelines and save time and costs for such projects. The timeliness of pipeline projects will be enhanced by the designation of ROW [right of way] corridors as required by EPACT05 Section 368 and their subsequent inclusion in Federal and state land management plans. The development of CO2 pipelines will be adversely impacted by a lack of designated ROW corridors or the absence of ROW needs in State and Federal land-use plans. The ROW permitting process is of concern to getting demonstration and early commercial CCS projects underway because it often requires years to complete and results in high costs. As stated earlier, Federal lands have two strong advantages, a single owner combined with the availability of large tracts of land, but they come with their own conditions, stipulations, covenants, restrictions, and other obligations. The NEPA requirement is a critical factor in leasing Federal lands. Of the four filing categories under NEPA, an EIS is the most thorough analysis of the proposed situation. Gaining a pipeline ROW through Federal lands requires an EIS and this may become the situation in utilizing a Federal lease for carbon dioxide storage. A National Petroleum Council analysis on the impacts of EIS related surveys on exploration and development drilling activity found that they can add between 1 and 22 months and cost $15,000 to $250,000 for a project. 85 In addition to EIS, Federal leases may carry seasonal access restrictions due to the effort to protect wildlife and habitat. These restrictions could range from no lease to a time restriction of 3–9 months during which the operator is not allowed access. Furthermore, Federal land leases simply might not be available due to statutory, executive, or administrative actions. Each department or agency might restrict access to all of its managed land or only specific tracts, and therefore the lease for a Federal land parcel would be unavailable. Federal lands are held for the benefit of the public and leases are available to the public for resource development. For an annual fee, Federal land leases are awarded to the high bidder at a competitive oral auction and Federal land not acquired at the competitive oral auction becomes available afterwards for lease by noncompetitive bidding. Most of these leases convey surface and subsurface rights but in some situations, these rights are severed. Stipulations for use of the land are included in the lease terms and conditions. Use of the Federal land under the lease will involve compliance with applicable Federal, State, and local regulations that are intended to protect the environment and human health. These stipulations may place additional restrictions on access, further reducing net storage potential. Another barrier that impairs the use of Federal land for CCS activities is the location of major emissions in comparison to the majority of Federal land. Most CO2 point sources are located east of the Mississippi River, whereas the majority of storage potential beneath Federal land is located west of the Mississippi River. Because no CCS projects have been permitted on Federal land, no current lease terms and conditions address the ownership of the pore space and storage of CO2 on the Federal lands. Because Federal land is held in fee simple (except for split estate), the United States owns the surface, subsurface, and any minerals found in either location, including the pore space within which those minerals reside. Federal leases are designed for mineral extraction. Oil and gas leases provide for production of hydrocarbons that occupy the subsurface pore space. Injecting CO2 for EOR is one method of production. This will also be the situation for non-Federal leases. Sequestration of CO2, although similar in many respects to oil and gas operations, is not a production process. Leases that will be used for CCS projects will need to address ownership of the injected CO2 occupying the subsurface pore space. This is especially important with respect to long-term liability. The EPA is currently working on CO2 injection regulations for sequestration. These regulations are currently in draft, and are projected to be in final form in 2011. The rules currently provide an idea of what an operator will be responsible for during injection and post-injection; however certain issues, such as long-term liability, are yet to be addressed and most likely need to be addressed through other regulations. Currently there are no CO2 storage laws for Federal land. Existing laws and regulations have analogous requirements for projects, such as those for natural gas, but they require modificatio and/or additions to accommodate CO2 projects. Large-scale demonstration projects are necessary to provide additional information and data for development of CO2 laws and regulations. States have performed studies to review the effect of modifying analogous laws and regulations to encompass CCS. Studies have also reviewed the effect of new CCS laws and regulations on existing analogous laws and regulations. Currently, states are at different levels when addressing CCS legislation. Some are further along than others, such as Washington and Wyoming. The long-term storage of CO2 will pose challenges that are new and have uncertainty. In addition to the laws and regulations, short-term and long-term liabilities must be clearly defined before permanent CO2 storage beneath Federal lands can be broadly deployed. Shortterm liabilities occur during site characterization, construction, injection, closure, and postclosure monitoring and verification phases. The storage field operator (the lessee) would be responsible for operational and environmental liabilities that occur during this period of time. These liabilities are essentially the same as those of oil and gas field operations; however, a major difference will be the level of scrutiny and regulatory oversight. The purpose of storing captured CO2 is to permanently prevent it from entering the atmosphere, a goal that represents a very long period of time. Long-term, post-injection liabilities involve leakage and/or migration, which may occur many years or decades (centuries) after cessation of the injection. This issue is tied to the long-term stability of the sequestered CO2 plume or, as noted earlier, the EPA would define this as a state of non-endangerment. Perhaps even more important here is determining who will be responsible for long-term liability, an intergenerational challenge. A resolution for long-term liability has yet to be agreed upon, although there are several models available from other industries to draw upon. Regardless, either State or Federal involvement is likely. Some options include financial guarantees of performance via surety bonds, collateral bonds, and government- or industry-funded bond pools. Without a transfer of liability upon conclusion of active injection operations, prior to long-term storage, many believe that potential operators will not be willing to enter into a situation from which there is no release. Long-term storage of CO2 beneath Federal lands will require long-term monitoring for potential subsurface and surface leakage. Various methods may be utilized for a monitoring system that could be designed for a range of detection levels at a predetermined number of monitoring locations. Currently, no laws or regulations exist to detail these requirements. Without this regulatory framework for long-term monitoring, a CCS project developer would have difficulty in developing proper specifications to ensure long-term injection well integrity and a reliable monitoring system. This also adds to the difficulty of estimating the maintenance and monitoring costs that will need to be provided for in the overall project planning and implementation stages. Without definition of the long-term monitoring requirements, this area of uncertainty raises concern for a prospective CCS project developer. The long-term MVA may have to endure a time range of hundreds to thousands of years. The absence of regulations governing CO2 storage operations is the primary obstacle in utilizing the storage potential beneath Federal land. Once regulations are established, the single owner aspect of Federal land will provide an incentive to develop the storage potential beneath these lands. The presence of significant storage potential in Wyoming, Montana and the western Dakotas, in conjunction with a CO2 pipeline network provides two significant links of the CCS chain. Oil and gas reservoir storage potential in these states represent about 30 percent of the onshore capacity in the Untied States, providing opportunity for CO2-EOR projects. There are plenty of sources in this area, the third link in the CCS chain, that can utilize this storage potential. Also present is significant coal, oil and natural gas resource potential. Local utilization of these resources, either for electric power generation, CTL/CBTL or natural gas processing can in turn take advantage of the potential storage capacity found in this area. Prudent use of Federal land in this area of the United States can provide coal base load power generation and CTL/CBTL plants, crude oil for refining, natural gas for home and industry and in turn storage of captured CO2 from these operations. But much sooner, once regulations are sorted out, **Federal land** can provide the **necessary acreage** and **associated storage potential** for early deployment of CCS technology.

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**Unconstitutional and links to politics**

**Romboy 12**

Dennis, “Herbert signs legislation demanding feds give public land to Utah,” http://www.ksl.com/?nid=960&sid=19706081

Democratic legislators **opposed** the legislation, calling it unconstitutional and a waste of time and money. Legislative attorneys have told lawmakers any attempt to enforce the measure would have a high probability of being declared unconstitutional. "Eminent domain of federal lands is **not a viable solution** to anything other than padding Republican egos. These are meaningless message bills, and they make Utah state government look silly," Utah Democratic Party chairman Jim Dabakis said.

**Only the federal government has eminent domain authority over federal lands**

**McCormick 82** – Environmental Policy Center (John L., “Coal slurry pipelines hearings before the Subcommittee on Surface¶ Transportation of the Committee on Commerce, Science, and¶ Transportation, United States Senate, Ninety-seventh Congress,¶ second session, on impact of federal power of eminent domain¶ legislation for coal slurry pipelines” US Government Printing Office, September 1982, Serial No. 97-133, ProQuest)//MR

Eminent domain has been defined as the power of the sovereign to take property for public use without the owner’s consent upon making just compensation available to the owner. The predominate concept of eminent domain is that it is an inherent power necessary to the very existence of the government. It exists in absolute and unlimited form but there are jurisdictional, constitutional, and statutory limitations upon its use. The Federal government can exercise eminent domain powers against State lands but the states cannot exercise such powers against federal lands without the consent of the US government. Two basic limitations upon the use of the powers of eminent domain are that the owner of the condemned land must be paid a just compensation and the power must be exercised for a public purpose.

Buy American DA

2AC

-stimulus

**Any federal monetary investment in transportation projects requires Buy American**

**US Foundry 3** (“Buy American Provisions” US Foundry and Manufacturing Corps, August 24 2003, <http://www.usfoundry.com/usf/GeneralInfo/BuyAmerican.aspx)//MR>

By law, American-made iron and steel foundry products must be used in all federal transportation projects and state and local government projects that use federal transportation dollars. Products covered by the law include manhole frames and covers, catch basin frames and grates, iron and steel inlet grating, and various miscellaneous iron products. ¶ The Buy American provision of the law, known as the Intermodal Surface Transportation Efficiency Act of 1991, explicitly requires that iron castings manufactured in U.S. foundries be used for federal transportation infrastructure projects. Such a provision first appeared in the Surface Transportation Assistance Act of 1982. Then, however, the law required that only U.S.-made "steel and manufactured products" could be used in transportation projects funded by the federal government.

**Buy America provisions are critical to revitalizing American jobs and the economy**

**Lynch, 9** ([David J. Lynch](http://www.usatoday.com/community/tags/reporter.aspx?id=142), USA Today, 2/6/9, “Buy American' clause stirs up controversy”, <http://www.usatoday.com/money/economy/trade/2009-02-03-economic-stimulus-buy-american_N.htm)//EM>

To supporters, including labor unions that helped the Democrats retake the White House last year, a "Buy American" requirement is just common sense at a time of economic crisis and rising unemployment. Factories have been hemorrhaging jobs for years; manufacturing employment is now 12.9 million, down from 17.2 million at the end of 2000. If Congress doesn't insist upon the use of U.S.-made materials, taxpayer funds could line the pockets of European or Chinese workers rather than hard-hit Americans. "If we're gonna spend many billions of taxpayer dollars in an effort to get the economy up and moving again, it's obvious that money should be spent in our economy," said Jim Robinson, a United Steelworkers (USW) official in Gary, Ind.

-steel industry

**Any federal monetary investment in transportation projects requires Buy American**

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**Buy America is critical to the American steel industry**

**Cravaak 3/14**/12 – US Representative (Chip, “Cravaack ‘Buy America' Steel Amendment Passed in Senate” March 14 2012, http://cravaack.house.gov/press-releases/cravaack-buy-america-steel-amendment-passed-in-senate/)//MR

Yesterday, the Senate passed the Cravaack ‘Buy America’ steel amendment that will create U.S. jobs, increase U.S. steel production, and ensure that more American steel product is used in federal transportation construction projects. View the Cravaack amendment here.¶ Previously, after the House Transportation Committee agreed to the Cravaack amendment, Rep. Cravaack was forced to defend ‘Buy America’ from attempts to gut two-thirds of existing ‘Buy America’ requirements and kill the jobs of the 3900 people directly employed by iron ore operations on Minnesota’s Iron Range. Watch Rep. Cravaack’s defense of ‘Buy America’ here.¶ Congress is working to produce a long-term reauthorization and reform of federal surface transportation programs.¶ “I’m pleased with the progress we’ve made toward securing these ‘Buy America’ provisions. At a time when other countries give massive subsidies to their steel makers, we should at the very least give our steel producers the first opportunity to supply steel for our transportation projects. Minnesota will not tolerate the importing of cheap and inferior Chinese and Brazilian product at the expense of its workers,” said Rep. Cravaack.¶ The Cravaack ‘Buy America’ amendment closes loopholes which are exploited by other countries. Specifically, the amendment prohibits the ‘segmentation’ of projects, a tactic used to avoid the ‘Buy America’ preference. Closing these loopholes ensures that ‘Buy America’ will be followed and that American jobs and industry will be protected.¶ Transparency: Requires agencies to provide notification on a public website and a 15 day comment period before proposed waivers of ‘Buy America’ preferences are granted¶ ¶ Reporting: Requires an annual report on the use of ‘Buy America’ waivers for transportation projects, including justification for each waiver and the monetary value for each waiver¶ ¶ Closes the ‘Segmentation’ Loophole: Ensures that public works projects receiving federal aid cannot be ‘segmented’ to evade ‘Buy America’ preferences.

**The steel industry is key to every sector of the economy—economic analysis proves**

Considine, 12 – is an SER Professor of Economics in the Department of Economics and Finance. He received his Ph.D. from Purdue University. His research on petroleum market analysis has been published in the top economics journals. Recently, The Cato Institute published his paper exploring management policy issues facing the U.S. Strategic Petroleum Reserve, and the U.S. Department of Energy's Office of the Strategic Petroleum Reserve currently uses his econometric model of world crude oil markets to estimate the market impacts of various management policies. Dr. Considine also worked as an economist at Bank of America, and as the lead analyst for natural gas deregulation on the U.S. Congressional Budget Office (Timothy J. Considine, “Economic Impacts of the American Steel Industry”, Legacy Steel, March 2012, <http://legacy.steel.org/news/NewSteelNews/images/PDFs/Considine_March%202012.pdf> | AK)

This study estimates the contributions of the American steel industry to the U.S. economy. The steel industry is defined here to include two sectors: iron and steel mills and ferroalloys and steel product manufacturing from purchased steel. Based upon data compiled by MIG, Inc. from U.S. Department of Commerce data, the American steel industry directly employed more than 139,000 workers and contributed $17.5 billion in value added or gross domestic product during 2010. The economic contribution of the steel industry to the U.S. economy, however, goes beyond these sector specific measures because steel companies purchase inputs from many other sectors of the U.S. economy. Moreover, the steel industry contributes to household income, which then induces additional rounds of stimulus to the economy as households spend this income on goods and services. For instance, during 2010 the steel industry purchased more than $20 billion of materials produced in other industries, $8 billion of services, $5 billion of energy products, $4.5 billion of machinery, $4.4 billion from wholesale and retail trade sectors, more than $4 billion of transportation services, and generated $12.4 billion in labor income. Clearly, the steel industry supports businesses and jobs in many sectors of the U.S. economy. To map these interdependencies**,** this study employsan input-output table of the U.S. economy with the IMPLAN systemfrom MIG, Inc. to estimate these indirect or supply chain impacts as well as the impacts induced by the spending of household income contributed directly and indirectly by the steel industry. Our economic impact analysis indicates that the steel industry directly contributed $17.5 billion of value added, $40 billion indirectly via supply chain spending, and induced another $35.8 billion as households spent their income generated from these activities. So in terms of net contribution to the U.S. economy the American steel industry contributed $93.4 billion to gross domestic product during 2010. Likewise, the steel industry directly employs over 139,000 workers, supports another 360,986 workers indirectly through the supply chain, and induces spending by households that supports another 443,002 jobs in other sectors of the economy**.** In total the steel industry supported 943,045 jobs in the U.S. economy during 2010. With higher levels of steel sales during 2011, the American steel industry contributes $101.2 billion to gross domestic product, and generates $22.9 billion in tax revenues at the federal, state, and local level, for a gross economic output of over $246 billion. Since steel is the most prevalent material in our economy, the steel industry is highly interrelated with other economic sectors, as reflected in the ripple effect on employment**.** Every one job in the U.S. Steel industry creates seven jobs in the U.S. economy. For 2011, the industry directly employs 150,700, and given the multiplier effect, supports more than 1,022,009 jobs.

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-outsourcing now

**Private companies inevitably use foreign steel**

**Barlett and Steele 11** – one of the most widely acclaimed investigative reporting teams in American journalism, winners of two Pulitzer Prizes and two National Magazine Awards, the first journalists to win both the Pulitzer Prize for newspaper work and its magazine equivalent for magazine reporting (Donald L. and James B., “American Steal: How U.S. steelworkers lost to China” October 15 2011, http://americawhatwentwrong.org/story/american-steal-how-us-steelworkers-lost-china/)//MR

That worked out well because Robert H. Luffy, the president and chief executive officer of American Bridge, also favored the Chinese. In the past, he had worked with Korean and Japanese steelmakers, among others, and found the Chinese to be cheaper. He also didn't believe any U.S. companies were capable of handling such a big job. As he explained to a congressional subcommittee during a 2007 hearing:¶ "The largest steel fabricating facility in the United States for bridges ... is probably 300 or 400 people on the floor working. I was in a facility that is going to fabricate the steel for the Oakland Bay Bridge ... They have 32,000 people in that facility. It is not even a contest. It is not even a contest."

**Boeing proves—private industry inevitably outsources jobs and materials**

**Barlett and Steele 11** – one of the most widely acclaimed investigative reporting teams in American journalism, winners of two Pulitzer Prizes and two National Magazine Awards, the first journalists to win both the Pulitzer Prize for newspaper work and its magazine equivalent for magazine reporting (Donald L. and James B., “American Steal: How U.S. steelworkers lost to China” October 15 2011, http://americawhatwentwrong.org/story/american-steal-how-us-steelworkers-lost-china/)//MR

The Boeing Company, the aircraft manufacturer, employs more than 6,000 Chinese in China, where they make parts for essentially every Boeing plane. The China Aviation Industry Corp., for example, produces components and parts for the Boeing 737, 747, 767, 777, and the 787 Dreamliner.¶ Earlier this year Boeing announced that the company and one of its Chinese venture partners would expand an existing composites production plant in Tianjin, adding 300 jobs and bringing total employment to 1,000. "It is win-win cooperation," said Ray Conner, vice president and general manager of supply chain management and operations for Boeing Commercial Airplanes. "Our Chinese partner will provide high-quality components to increase Boeing's capacity, which in turn boosts our employment in China."¶ That was just after Boeing announced it was terminating 900 jobs in Long Beach, Calif.

-buy american required

**All transportation infrastructure projects invested in by the DOT are subject to Buy American**

**Department of Transportation 9** (“Buy America” United States Department of Transportation, 2009 (last date mentioned), http://www.dot.gov/buyamerica/index.html#1605)//MR

Buy America provisions ensure that transportation infrastructure projects are built with American-made products. That means that Department of Transportation investments are able to support an entire supply chain of American companies and their employees.

**The steel for federal transportation projects is legally required to come from the U.S.**

**Department of Transportation 10** (Current list of provisions of the Buy America Act, 14 December 2010, <http://www.dot.gov/buyamerica/buy_america_.pdf>)//MR

**American Recovery and Reinvestment Act of 2009**, Section 1605 – **Buy American** (100% Domestic Content of items below) Buy American **The Recovery Act prohibits use of recovery funds for a project for** the **construction, alteration, maintenance, or repair** of a public building or public work **unless all of the iron, steel, and manufactured goods used in the project are produced in the United States.**

**Buy America required for all taxpayer-financed infrastructure projects—boosts jobs by 33%**

**Casey 11** – US Senator (Robert P, “Casey Unveils Buy America Bill – New Effort Will Dramatically Increase Investment in U.S.-Made Goods” December 19 2011, http://www.casey.senate.gov/newsroom/press/release/?id=7f81c9ed-fce2-4d4d-841f-a212e53838c7)//MR

Today, U.S. Senator Bob Casey (D-PA) unveiled a new bill that would help ensure that taxpayer dollars are used to buy American-made goods. The Invest in American Jobs Act would give preference to American-made steel, iron, and manufactured goods used to construct projects financed by taxpayers.¶ Standing with manufacturing workers in Pittsburgh, Senator Casey made the case that having the federal government buy American goods will create jobs and boost Pennsylvania’s economy.¶ “Any time the federal government lays down a new piece of infrastructure it should be stamped with the words ‘Made in America,’” Senator Casey said. “Buying American-made goods will help rebuild our crumbling infrastructure and create jobs in Pennsylvania instead of China.”¶ Don Foster of L.B. Foster said, “Our state’s manufacturing segment and our nation’s steel sector should applaud Senator Casey’s efforts to increase investment in U.S. made goods. Here in Pennsylvania, we have globally competitive companies producing quality world-class products with an outstanding dedicated workforce. Our Bedford, Pa. Bridge facility is a prime example of this. Our success is shared by our key Pennsylvania supply partners such as Gautier Steel in Johnstown, Pa. This is a proactive jobs bill.”¶ Darryl DiOrio, President of Gautier Steel, said, “Gautier and the employees of Gautier strongly support Senator Casey’s effort to enact ‘Buy American Legislation’ for infrastructure. One of Gautier’s primary product lines is bridge decking. This is a Pennsylvania based industry.” ¶ Senator Casey introduced the legislation with Senator Sherrod Brown (D-OH). Specifically, the Invest in American Jobs Act:¶ Strengthens existing Buy America requirements for investments in highway, bridge, public transit, rail, and aviation infrastructure and equipment to ensure that all of the steel, iron, and manufactured goods used in these projects is produced in the United States;¶ Applies Buy America to other transportation and infrastructure investments, including rail infrastructure grants, loans, and loan guarantees, and Clean Water State Revolving Fund grants; and¶ Requires Federal agencies to justify any proposed waiver of the Buy America requirements and ensures that the American public has notice of and an opportunity to comment on any proposed waiver prior to it taking effect.¶ A recent University of Massachusetts study found that a 100 percent domestic preference on infrastructure spending increases job creation by 33 percent.

**-key to economy**

**Buy American provisions stimulate the economy and aren’t protectionist**

**Scott, 9** (Robert E. Scott, the [senior international economist](http://www.epi.org/pages/economist/#scott) at the Economic Policy Institute, 2/11/9, “That ‘Buy American’ Provision”, <http://roomfordebate.blogs.nytimes.com/2009/02/11/that-buy-american-provision/)//EM>

The buy-American rule in the stimulus bill is smart policy that won’t run afoul of any of our trade treaties. When the government buys steel for a bridge, for example, it has several objectives. Minimizing costs is one, but when the economy is in recession, there is added incentive to stimulate domestic employment. And when steel is purchased from a domestic producer the workers’ wages generate further spending, which supports yet more jobs in the domestic economy. When domestic industries have been injured by unfair trade practices, protecting them is good policy. Although the United States and 38 other countries have signed World Trade Organization procurement codes prohibiting restrictions on government purchases [between member countries](http://www.wto.org/english/tratop_e/gproc_e/memobs_e.htm), the act does not violate these commitments. Indeed, the House version of the act implicitly exempts these countries from the buy-American clause, and the Senate version does so explicitly. Some of the loudest protests about buy-American provisions have come from [self-interested American companies](http://www.epi.org/analysis_and_opinion/entry/big_business_lobbies_for_importers/) like Caterpillar and General Electric that manufacture overseas. Foreign ministers from China and Russia, which haven’t signed the procurement codes, have also complained, but these countries simply want something for nothing. Giving them access to stimulus spending will dilute the impact of the recovery bill and eliminate all incentives for them to sign the codes. When domestic industries have been injured by unfair trade practices, protecting them is good policy. For example, China spent more than [$15 billion on energy subsidies](http://www.americanmanufacturing.org/wordpress/wp-content/uploads/2008/01/energy-subsidies-in-china-jan-8-08.pdf) for its steel industry in 2007 alone. These subsidies were illegal under World Trade Organization rules, and the United States has an obligation to protect domestic steel producers in such cases.

Key to stimulate the economy—empirically proven

AAM 9 (“Buy America... or Bye, Bye American Jobs” Alliance for American Manufacturing, February 11 2012, http://assets.usw.org/action\_center/economy/PDFs/buy-america-ad.pdf)//MR

Opponents of Buy America provisions in the economic recovery¶ package apparently are more interested in stimulating the¶ economies of China and other nations than the economy here at¶ home. Research shows that 33 percent more manufacturing jobs¶ will be created by including domestic sourcing provisions. Without¶ these provisions, those manufacturing jobs will go overseas, at U.S.¶ taxpayers’ expense. Congress must preserve Buy America rules in¶ the economic recovery package to stop the tragic loss of jobs—¶ manufacturing shed 800,000 jobs last year, 200,000 last month alone.¶ Buy America is an American Tradition¶ For over 70 years, the United States has had Buy America laws,¶ beginning with the Buy American Act of 1933. Why? Because¶ they guarantee we can build and rebuild our infrastructure with¶ high-quality American-made materials. This isn’t a trade issue…¶ it’s a jobs issue. That’s why Ronald Reagan signed legislation¶ expanding Buy America laws in 1982 in the midst of a recession,¶ to spur employment.

-key to steel industry

**Buy America is key to the steel industry—new legislation avoids loopholes**

**Brown 3/13** – US Senator (Sherrod, “Senate Passes Brown Amendment To Strengthen “Buy America,” Support Ohio-Made Steel” March 13 2012, <http://www.brown.senate.gov/newsroom/press/release/senate-passes-brown-amendment-to-strengthen-buy-america-support-ohio-made-steel)//MR>

“Buy America” provisions support American companies and workers by giving a preference to domestically-produced iron, steel, and other manufactured goods in infrastructure projects that receive federal aid. They are administered by several Department of Transportation agencies, with common-sense exceptions that permit waivers to allow the procurement of foreign-made products when there is insufficient domestic capacity, if the cost of the domestic product is unreasonable, or when the administering agency deems the waiver to be in the public interest.¶ However, over time, the effectiveness of “Buy America” preferences has been compromised by various loopholes to avoid sourcing goods and materials domestically. One of the most egregious examples is “segmentation,” whereby a project is split into various contracts and federal aid is not used on those where the contractor intends to use foreign iron, steel, and manufactured goods – bypassing American workers and evading the law. This loophole allowed Chinese-made steel to be used in the new Oakland, California Bay Bridge. Closing this loophole helps to ensure that Buy America is effectively enforced.¶ Brown’s legislation would require the Department of Transportation to improve transparency and reporting of proposed Buy America waivers, without unnecessary project delays, and ensure an annual accounting of federal funds used to purchase foreign-produced iron and steel. It also closes a loophole that permits the evasion of “Buy America” in some public works projects. The legislation also explicitly requires that Buy America preferences be carried out in a manner consistent with the United States’ international trade agreements.¶ “Today’s Senate action is a positive step in closing the loopholes in existing law and ensuring that “Buy America” standards are upheld in transportation projects. We are thankful for Senator Brown’s leadership in ensuring that U.S. taxpayer dollars buy American-made steel, helping to protect ArcelorMittal’s operations, our 1,700 hardworking Cleveland employees, and the local and regional economies that the steel industry supports,” said Eric Hauge, Vice President and General Manager, ArcelorMittal Cleveland.

**Investment in new transportation infrastructure reverses the current decline of the steel industry**

Tweh 7/7 – Business Reporter at The Times of Northwest Indiana, citing John Surma, CEO and Chairman of the United States Steel Corp. (Bowdeyah Tweh, “U.S. Steel chief calls for U.S. to invest in its infrastructure”, Northwest Indian Times,, 7/7/12, <http://www.nwitimes.com/niche/inbusiness/u-s-steel-chief-calls-for-u-s-to-invest/article_fc707d65-f9e7-57ee-8567-4d4d5954f696.html> | AK)

Nearly three weeks before Congress reauthorized a federal transportation bill, steel executives clamored for leaders in Washington to make a substantial commitment to upgrading the nation's infrastructure. One of those executives was United States Steel Corp. Chairman and CEO John Surma. In a speech and brief interview June 19 at the Steel Success Strategies XXVII Conference in New York, Surma said politicians on both sides of the aisle understand a long-term infrastructure investment should be made. He said that for political reasons, he doubted anything would happen until after the November elections. Industry leaders have been vocal since the recession in lobbying for a long-term infrastructure support plan to boost activity in the sector and employment by funding pipeline and bridge projects. Surma said the company was making its own long-term investment at its Gary Works complex, which is the company's largest in terms of raw steel-production capacity. He said construction of two modules to produce a substitute to coke to use in blast furnaces is "well under way" and start-up is expected this year. "It's environmentally a very positive development" because it has lower emissions compared to the traditional coking process and can generate steam and electricity, Surma said. Surma declined to discuss progress of negotiations with the United Steelworkers on a new labor contract, which expires Sept. 1. He said U.S. facilities have had good productivity levels and the union workers have reasonable profit-sharing levels. He said specifics on negotiations will be left to the conference room with the union, but “I'm confident we'll come to a good solution.” There has yet to be a good solution to help the company's beleaguered perception in the eyes of Wall Street. Shares of U.S. Steel stock closed Friday near $21 per share, which is down nearly 90 percent from the January 2008 peak. Macroeconomic conditions facing the industry and concerns about the company's cost structure are among the reasons analysts have provided for their decisions, but Surma said he tunes out the distractions. “We try to take somewhat of a longer view,” Surma said. He said it's a fact he can't escape, but “I don't obsess over it. If I did, I wouldn't get any work done.” The company's second quarter ended June 30 and will release its financial results in the coming weeks. New hire: Last week, U.S. Steel hired former Gerdau Ameristeel Corp. executive Mario Longhi to be the company's executive vice president and chief operating officer. Longhi, 58, was president and CEO of Gerdau from 2006 to 2011. Environmental progress: Surma said between 1990 and 2009 the domestic steel industry reduced its energy intensity and greenhouse gas emissions by more than 30 percent.

**New federally-funded transportation infrastructure projects are key to the steel industry**

King 3/25– political writer for the Wheeling News-Register and the Intelligencer (Joselyn King, “’Future Of Steel’ Topic In D.C”, Wheeling News-Register, 3/25/12, <http://www.theintelligencer.net/page/content.detail/id/567562/Future-Of-Steel-Topic-In-D-C.html?nav=515> | AK)

WHEELING - Congress must take action to protect American manufacturing - and along the way make certain the U.S. steel industry survives, said U.S. Rep. David B. McKinley. McKinley, R-W.Va., last week attended the annual "State of the Steel Industry" hearing in Washington, D.C., where steel leaders discussed issues affecting their business. "We have seen the chilling affects that over regulation by the Federal government, Chinese currency manipulation and illegal dumping of manufactured goods - as well as irrational court decisions in the World Trade Organization courts and the U.S. Court of International Trade - have caused ..." McKinley said. "What we heard ... is that Congress must take action to protect America's manufacturers and their employees who continue to suffer due to unfair policies and decisions. At a time when 23 million Americans are unemployed or underemployed, Congress must put partisan politics and bickering aside to do what is right for our nation." McKinley was among the co-sponsors of House Resolution 4105, which allows for duties on imports into the United States from countries that subsidize manufacturing. The bill was passed by the House and Senate earlier this month, and has since been signed into law by President Barack Obama. A second bill clarifies that additional duties may be imposed to address subsidies relating to a fundamentally undervalued currency of any foreign country. The bill has not moved in the House. In the Senate, Sen. Sherrod Brown, D-Ohio, introduced the Currency Exchange Rate Oversight Reform Act of 2011 that passed into law late last year. The measure requires the U.S. Commerce Department to investigate if a country is undervaluing its currency, while releasing the findings to the public. "But we continue to leave this vital American industry at risk when we buy steel - whether for military armor plates or for transportation infrastructure - from foreign countries," he said. "Taxpayer dollars should be spent on American-made steel, the very best available to protect our service members, and to reinforce our highways and bridges. "We know how to make steel from start to finish right here in America. There's no reason why countries like China, Russia, and Brazil should be doing it for us." Sen. Rob Portman, R-Ohio, said the steel industry in the Ohio Valley is doing better and can have a bright future, "so long as the federal government does a better job creating the right business environment." "This means more sensible regulations, trade policy that ensures other countries comply with the rules, and other pro-growth policies including more development of domestic sources of energy on private and public lands," he said. "If we encourage a continued growth of oil and natural gas production in shale formations like the Marcellus and the Utica, we will stabilize energy costs for manufacturers, increase demand for products and fortify the nation's economy." Jay Rockefeller, D-W.Va., noted a thriving manufacturing base in the U.S. is essential for our future. "Our steelworkers are second to none, and they continue to make products every day that we can all be proud of," he said. "I have continued to work to bring new investors for steel companies in the state, fought for a tax credit that would help support our steel and coal communities and the jobs that depend on them, and make sure that **American steel is used to build our roads and bridges**." A decline in the steel industry makes America vulnerable, according to Sen. Joe Manchin, D-W.Va. "This leaves us in a dangerous position of not being able to manufacture critical products, therefore eroding our economy and leaving us dependent on other countries," he explained. This is why it is so important that we must start rebuilding America and the first step is to focus on our infrastructure and our steel and manufacturing sectors."

**Investment in transportation infrastructure key to reinvigorate the steel industry**

Prentice, 3/22, Senior writer Metal Bulletin (Chris, “Infrastructure, fair trade said key to recovery”, Metal Bulletin, 3/22/12, Lexis Nexis)//AKramer

U.S. spending on transportation and infrastructure and increased protection from trade imbalances will help the recovering domestic steel sector stay on track, industry leaders told the Congressional Steel Caucus in Washington. John P. Surma, chairman and chief executive officer of U.S. Steel Corp. and chairman of the American Iron and Steel Institute, said the industry is recovering, but the recovery has been slow. "Apparent steel demand in the U.S. continues to increase, but even after the expected gains of 6 percent this year and another 6 percent next year, demand in the U.S. would still only be at 88 percent of the four-year annual average preceding the recession," he told the steel caucus hearing. The major exception to moderate year-on-year growth in steel market segments this year is construction, which continues to be a drag on U.S. economic and steel market growth, particularly in terms of public sector construction, Surma said. In order to stimulate further growth, domestic spending on transportation and infrastructure is a must, industry executives said. "The steel industry urges Congress to provide a dedicated source of revenue on a long-term basis sufficient to meet the growing infrastructure needs of this economy," ArcelorMittal USA Inc.'s president and chief executive officer, Michael G. Rippey said, adding, that the House of Representatives should follow the Senate's lead in passing a transportation funding bill. The Senate last week approved a two-year, $109-billion surface transportation funding bill ahead of a March 31 deadline. The House is still considering its own five-year, $260-billion transportation bill (AMM, March 15). Executives said that legislators also need to address **state-owned enterprises**, notably in Russia and China, that make it difficult for U.S. mills to compete. Some 80 percent of all Chinese outward investment-which totaled $73 billion in 2011, up from $10 billion in 2005-has been funded by state-owned enterprises, Nucor Corp. chairman and chief executive officer Dan DiMicco said, citing data from The Economist. The steel industry would support legislation against Chinese currency manipulation as one way to create a fairer balance with foreign competitors, he said. "We have let China manipulate its currency for far too long. Our trade deficit in goods with China-if these numbers don't blow your mind, I don't know what could-was $295 billion last year alone and over $2.4 trillion since 1999."

-steel key to the economy

**American steel is vital to the economy**

Gibson et al. 12 – Thomas Gibson, President and CEO, American Iron and Steel Institute; Thomas Dancjek, President, Steel Manufacturers Association; Roger Ferch President, American Institute of Steel Construction (“Blog: Rebuilding America With US - Not Chinese Steel” CNBC.com, January 23 2012, http://www.cnbc.com/id/46101163/Blog\_Rebuilding\_America\_With\_US\_Not\_Chinese\_Steel)//MR

In his recent blog post,“To Make the U.S. Stronger, You're Going to Need Some Chinese Steel,” Dan McNichol is simply wrong in asserting that rebuilding America’s infrastructure will require Chinese steel. America’s infrastructure can and should be built with American steel. That is why current Buy America provisions are so important, and why efforts to circumvent these provisions, such as California used in the Bay Bridge project, need to be stopped.¶ Mr. McNichol omits some pretty significant facts about global steel trade and the Bay Bridge project in his post.¶ The capacity that he argues is driving the use of Chinese steel is not caused by natural market forces. Instead, it is the result of 30 years of trade violations, well-documented Chinese government subsidization of its steel industry and an unwillingness by both political parties in this country to meaningfully enforce our trade laws.¶ The lack of a level competitive playing field in global steel trade has led to many U.S. steel companies going out of business. Consequently, America now has less steel production capacity and fewer good paying jobs. In 2011, overall US steel capacity utilization was under 75%.¶ China was not the first country to illegally dump subsidized steel in the U.S., but the ruthless trade tactics employed by its state-owned companies have taken these trade violations to a new level. China is not naturally the low cost producer of steel; the U.S. is. Steel production is energy and raw material intensive, so China’s low labor costs do not provide an advantage. (In some US mills labor accounts for less than 10% of the cost). China has to import most of its iron ore, making it one of the highest cost steelmakers in the world. China offsets its high energy and raw materials costs through massive government subsidies, as well as by providing free land and low-interest loans from state-owned banks, not to mention the environmental differences.¶ Mr. McNichol is also wrong in asserting U.S. steel producers were unable to produce the quantity of steel needed for the Bay Bridge project. A consortium of U.S. steel fabricators was willing to build a new facility and steel mills around the country could have supplied the steel. The U.S. has plenty of steel capacity for this type of project. At a time of high unemployment, the Bay Bridge project could have been a much needed job creator for American workers.¶ Mr. McNichol also failed to mention the quality and delivery problems that occurred with the Chinese steel. The Chinese company selected had no bridge building experience prior to this project. Part of the rationale for choosing the Chinese company was that it would save $400 million, but that was before moving hundreds of employees and consultants to China. While still in progress, a third quarter 2011 report shows the contract that contains the Chinese steel has already increased by $293 million and the contractor has been given 29 months of extended time.¶ With the real rate of U.S. unemployment at 15.6% (those unemployed, underemployed, settled for part-time jobs or gave up looking), outsourcing high-value jobs to China for a large-scale U.S. project like this defies common sense. Our state and federal governments should be embracing opportunities and projects that will stimulate the economy and create valuable U.S. jobs.¶ The choice by the California Department of Transportation to use Chinese steel was also a poor environmental decision. Levels of particulate matter pollution alone from the Chinese steel industry are nearly 20 times higher per ton of steel than in the U.S., according to recent study.¶ In light of these facts, it is hard to believe most Americans would find this a good use of their tax dollars. That is why we have had domestic sourcing provisions like Buy America in law for 70 years. They ensure that infrastructure projects are built using the highest quality American-made products creating both jobs and demand for domestic material. The Department of Transportation estimates that every $1 billion invested in federal highways supports 35,000 American jobs. Until we seriously deal with trade law violations, Buy America provisions will be needed.¶

**The steel industry is key to every sector of the economy**

Considine, 12 – is an SER Professor of Economics in the Department of Economics and Finance. He received his Ph.D. from Purdue University. His research on petroleum market analysis has been published in the top economics journals. Recently, The Cato Institute published his paper exploring management policy issues facing the U.S. Strategic Petroleum Reserve, and the U.S. Department of Energy's Office of the Strategic Petroleum Reserve currently uses his econometric model of world crude oil markets to estimate the market impacts of various management policies. Dr. Considine also worked as an economist at Bank of America, and as the lead analyst for natural gas deregulation on the U.S. Congressional Budget Office (Timothy J. Considine, “Economic Impacts of the American Steel Industry”, Legacy Steel, March 2012, <http://legacy.steel.org/news/NewSteelNews/images/PDFs/Considine_March%202012.pdf> | AK)

This study estimates the contributions of the American steel industry to the U.S. economy. The steel industry is defined here to include two sectors: iron and steel mills and ferroalloys and steel product manufacturing from purchased steel. Based upon data compiled by MIG, Inc. from U.S. Department of Commerce data, the American steel industry directly employed more than 139,000 workers and contributed $17.5 billion in value added or gross domestic product during 2010. The economic contribution of the steel industry to the U.S. economy, however, goes beyond these sector specific measures because steel companies purchase inputs from many other sectors of the U.S. economy. Moreover, the steel industry contributes to household income, which then induces additional rounds of stimulus to the economy as households spend this income on goods and services. For instance, during 2010 the steel industry purchased more than $20 billion of materials produced in other industries, $8 billion of services, $5 billion of energy products, $4.5 billion of machinery, $4.4 billion from wholesale and retail trade sectors, more than $4 billion of transportation services, and generated $12.4 billion in labor income. Clearly, the steel industry supports businesses and jobs in many sectors of the U.S. economy. To map these interdependencies**,** this study employsan input-output table of the U.S. economy with the IMPLAN systemfrom MIG, Inc. to estimate these indirect or supply chain impacts as well as the impacts induced by the spending of household income contributed directly and indirectly by the steel industry. Our economic impact analysis indicates that the steel industry directly contributed $17.5 billion of value added, $40 billion indirectly via supply chain spending, and induced another $35.8 billion as households spent their income generated from these activities. So in terms of net contribution to the U.S. economy the American steel industry contributed $93.4 billion to gross domestic product during 2010. Likewise, the steel industry directly employs over 139,000 workers, supports another 360,986 workers indirectly through the supply chain, and induces spending by households that supports another 443,002 jobs in other sectors of the economy**.** In total the steel industry supported 943,045 jobs in the U.S. economy during 2010. With higher levels of steel sales during 2011, the American steel industry contributes $101.2 billion to gross domestic product, and generates $22.9 billion in tax revenues at the federal, state, and local level, for a gross economic output of over $246 billion. Since steel is the most prevalent material in our economy, the steel industry is highly interrelated with other economic sectors, as reflected in the ripple effect on employment**.** Every one job in the U.S. Steel industry creates seven jobs in the U.S. economy. For 2011, the industry directly employs 150,700, and given the multiplier effect, supports more than 1,022,009 jobs.

Point-to-Point DA

2AC

**Absent government incentives, developers will build point-to-point**

**Bohm 10 –** Climate Change Engineering Specialist with Suncor Energy, a CO2 Capture Project member company (“The economics of transportation of CO2 in common carrier network pipeline systems” Carbon Capture Journal Feature Articles, March 4 2010, <http://www.carboncapturejournal.com/displaynews.php?NewsID=523)//MR>

It is clear that **without government incentives for the development of optimized networks, project developers are likely to build point-to-point pipelines.** Other forms of **financial support may be needed which overcome commercial barriers and ensure optimized development of CO2 pipeline networks**¶ So what is the way forward? Guaranteed capacity utilization is essential for integrated backbone pipeline networks to become economically viable. **Public policy is needed that provides** some **guarantees as to capacity utilization. Government incentives** or loan guarantees **are** also **needed to support a backbone infrastructure and encourage the development of optimized networks. Government support in the first years, when capacity is ramping up, will be essential for** eventual **commercial viability.**

**That quickly streamlines development and connects small emitters—key to solve**

**Global CCS Institute 11** (“TRANSPORT OF CO2” November 24 2011, [http://cdn.globalccsinstitute.com/sites/default/files/publications/25906/fact-sheet-1b-transportv4-2.pdf)//MR](http://cdn.globalccsinstitute.com/sites/default/files/publications/25906/fact-sheet-1b-transportv4-2.pdf)/MR)

**A clustered transport system could** potentially **save over 25 per cent of expenditure compared to a point-to-point system**, depending on the scale of the cluster. **Developing such a network can** also **significantly reduce barriers to future investment.**¶ **Large-scale deployment of CCS should result in the linking of clusters of proximate CO2 sources**, through a hub, **to clusters of sinks by trunk pipelines**. Then shorter collection, feeder or distribution pipelines would link the individual sources and sinks into the network. **A simple network would consist of a ‘tree’ where each of the branches represented feeder pipelines from sources of CO2, the trunk of the tree would be the main CO2 pipeline and the roots would be the distribution pipelines** linking to the various sinks. The **participation of multiple stakeholders and industries has the potential to develop business and financing structures to underpin future commercial CCS markets. Networks** can also **encourage and increase the speed of deployment in the region**, for example, **by reducing the** total **number of permits that would need to be issued for pipelines.**¶ **Networks** also **provide the opportunity to connect small emitters for whom point-to-point solutions may be too expensive and to build up regional employment and expertise in the** necessary **technologies**.

**1AR Investment Key to Backbone**

**Financial support from the government is key to prevent point-to-point construction**

**Chrysostomidis et al. 9** – Ioannis Chrysostomidis and Paul Zakkour, Environemtal Resources Management; Mark Bohm and Eric Beynon, Suncor Energy; Renato de Filippo, Eni SpA; Arthur Lee, Chevron Corporation (“Assessing issues of financing a CO2 transportation pipeline infrastructure” Energy Procedia Volume 1, Issue 1, Pages 1625–1632, February 2009, http://www.sciencedirect.com.proxy.lib.umich.edu/science/article/pii/S1876610209002148)//MR

¶ Future strategies for private business and policy-makers should take account of the following:¶ 􀁸 That **while point-to-point pipelines may be readily funded on a project-by-project basis by individual**¶ **developers, there may be a need for public policy that encourages the development of optimized**¶ **networks. Development on this basis can** help to **reduce costs, broaden participation and deepen**¶ **deployment of CCS;**¶ 􀁸 **The incremental cost of building optimized networks ahead of point-to-point pipelines may not pass**¶ **project-specific commercial evaluation criteria**;¶ 􀁸 Consequently, other **forms of financial support which overcome commercial barriers may be needed to**¶ **ensure optimized development of CO2 pipelines networks.**

**Government support is key to ensure commercial-scale backbone CCS**

**Chrysostomidis et al. 9** – Ioannis Chrysostomidis and Paul Zakkour, Environemtal Resources Management; Mark Bohm and Eric Beynon, Suncor Energy; Renato de Filippo, Eni SpA; Arthur Lee, Chevron Corporation (“Assessing issues of financing a CO2 transportation pipeline infrastructure” Energy Procedia Volume 1, Issue 1, Pages 1625–1632, February 2009, http://www.sciencedirect.com.proxy.lib.umich.edu/science/article/pii/S1876610209002148)//MR

**Point-to-point pipelines will be funded on project-by-project basis by individual developers because of certainty**¶ **over capacity utilization**. The **study found that integrated backbone pipeline networks may be the most efficient**¶ **long-term option**. At the same time, **such integrated backbone pipeline networks will need "guaranteed" capacity**¶ **utilization** in order **to be economically viable**. Therefore, **public policy that encourages development of optimized**¶ **networks with** some **support of capacity utilization will be needed. Government support in the first years when**¶ **capacity is ramping up will be important to commercial viability.** Government incentives or loan guarantees are also¶ needed **to support a backbone infrastructure.**

**1AR Backbone Good**

**Backbone pipelines are comparatively the most cost effective**

**Chrysostomidis et al. 9** – Ioannis Chrysostomidis and Paul Zakkour, Environemtal Resources Management; Mark Bohm and Eric Beynon, Suncor Energy; Renato de Filippo, Eni SpA; Arthur Lee, Chevron Corporation (“Assessing issues of financing a CO2 transportation pipeline infrastructure” Energy Procedia Volume 1, Issue 1, Pages 1625–1632, February 2009, http://www.sciencedirect.com.proxy.lib.umich.edu/science/article/pii/S1876610209002148)//MR

In this section **we compare the two options using** as metrics **the cost of service associated with their use and the**¶ **capital investment required for their development.**

[table omitted]

Key findings of the research can be summarized as:¶ 􀁸 **The cost of service for** Option 2 (i.e. **backbone pipeline**) **presents the cost effective scenario for the system**.¶ 􀁸 Cost of service for the system is higher for Option 1 than Option 2 **because additional smaller pipelines are**¶ **developed separately** for Tranches 2, 3 and 4.¶ 􀁸 From a first mover perspective the reduction to the cost of service for the operator of Tranche 1 (cost of¶ service in year 1) that follows Option 2 is small $0.4 ($8.1 vs. $7.7).¶ 􀁸 **There is a risk that if the first mover opts for Option 1 then additional tranches may not be able to carry out**¶ **CCS due to prohibitive costs, absent of a backbone pipeline** (i.e. Option 2).

**Backbone pipeline saves costs and has extra storage capacity—connects small business emitters**

**National Grid 12** – international electricity and gas company and one of the largest investor-owned energy companies in the world (“The benefits of a clustered carbon capture and storage system over point-to-point” National Grid, 2012, <http://www.nationalgrid.com/uk/EnergyandServices/NonRegs/CCS/ClusteringBenefits/#header)//MR>

The diagram below illustrates **a cluster of emitters being served by point to point** pipelines going to dedicated stores. In the long run, there will be four parallel pipelines and four storage sites. **Each chain will require transportation and storage to be developed and sanctioned, making for complicated and expensive projects.**¶ ¶ The next diagram illustrates **a 'shared infrastructure' model** which is similar to what we have on our electricity and gas networks. It **delivers a number of benefits:**¶ ¶ **It offers cost-saving as a given storage site can serve multiple emitters and only one backbone pipeline is needed.**¶ **The main transportation line allows extra capacity which will reduce barriers to future investment and speed deployment.**¶ **Reliability and availability increase as network develops.**¶ **It also opens up opportunities to connect small emitters for whom point-to-point solutions could be too expensive.**

**Most efficient in the long term and encourage fast transition—studies prove**

**Carbon Capture Journal 10** (“The economics of transportation of CO2 in common carrier network pipeline systems” Feature Articles, March 4 2010, <http://www.carboncapturejournal.com/displaynews.php?NewsID=523)//MR>

The CO2 Capture Project (a partnership of seven oil and gas majors to advance CCS) has been looking at the issues surrounding the economics of transportation of CO2 in common carrier network pipeline systems. **The CCP commissioned a study to examine different approaches to infrastructure development**. In the study **two approaches have been evaluated.**¶ **The first would see the development of a point-to-point system, the second the development of common carrier pipeline networks, including backbone pipeline systems.** This study has helped our understanding of the challenges involved; shedding light on what would be the best scenario and how in practical terms CO2 infrastructure might evolve. The results of this study were presented in a paper - Assessing issues of financing a CO2 transportation pipeline infrastructure commissioned by the CCP, and completed by Environmental Resources Management (ERM).¶ Results of the Study¶ **The study confirmed that an integrated backbone pipeline network is** likely to be **the most efficient long-term option. It offers the lowest average cost** on a per tonne basis for operators over the life of the projects if sufficient capacity utilization is achieved relatively early in the life of the pipeline.¶ Crucially, **integrated pipelines reduce the barriers to entry and** are more likely to **lead to the faster development and deployment of carbon capture and storage**. Particularly in situations where government money is being used to finance CO2 transportation it makes sense to pursue **an integrated approach that provides equitable, open access to other large final emitters**. This **will reduce the barriers to entry and will encourage faster adoption of CCS**. However, point-to-point pipelines offer lower costs for the first movers and do not have the same capacity utilization risk.

**Trunkline approach solves environmental damage and greater storage**

**DECC 12** (“Building networks: transport and storage infrastructure” Department of Energy and Climate Change, April 2012,

[http://www.decc.gov.uk/assets/decc/11/cutting-emissions/carbon-capture-storage/4905-ccs-roadmap--transport-and-storage-infrastructure.pdf)//MR](http://www.decc.gov.uk/assets/decc/11/cutting-emissions/carbon-capture-storage/4905-ccs-roadmap--transport-and-storage-infrastructure.pdf)/MR)

2.5. **In addition to** these prospective **economic benefits, other** less tangible **benefits** are also likely to **emerge from a networked approach. It** obviously **makes sense in terms of reducing environmental damage and public inconvenience to avoid the construction of multiple pipelines along the same or similar routes** within a relatively short period. It is also likely to be the case that **businesses would be more likely to capture and permanently store CO2 if transport infrastructure were readily available than if they were required to develop and install an infrastructure from scratch. A readily available CO2 transport and storage network is** therefore **likely to provide an attractive mitigation option for high emitting industries** looking to reduce emissions. **This** in turn **is likely to have implications for the make-up of the economy in** those **areas of the country with** a high concentration of **carbon intensive industries.**

AT CP Solves

-AT “Wilcox”

**just says that regulations reduce *“permitting time”*—doesn’t solve insufficient capacity or small emitters**

**plan *also* establishes regulated pipelines**

-AT “Mikunda”

**says that only the *demo* should be point-to-point**

**concedes that it takes 10 years to switch—*that* happens because of demo, *not* regulations**

**concludes investment key**

**Mikunda et al., 11** – junior researcher at the Energy Research Centre of the Netherlands (Tom, “Towards a CO2 infrastructure in North-Western Europe: Legalities, costs and organizational aspects,” Energy Procedia 4 (2011) 2409-2416)//MR

Government intervention in the form of regulations and**/**or direct investment in CO2 transport infrastructure has been¶ widely commented on in recent literature [2] [7] [9]. From a broad perspective, unlike the existing utility and service¶ transport networks, market-led investments into CO2 infrastructure are currently unfeasible due to the low price of¶ carbon, and the lack of demand from CO2 utilising industries (horticulture, carbonated beverages). Furthermore,¶ with the average lead time for the permitting and construction of a new coal power plant in Europe estimated at¶ approximately 6 years [10], demand for a CO2 transport network will develop over a large time scale. Assuming¶ greater incentives for CCS deployment in the future, individual project developers will likely focus on investing in¶ point-to-point pipelines at high capacity utilization**,** assuring short term economic efficiency. In some cases**,** this¶ may not lead to an optimized transport network. An argument exists for government investment to overcome high¶ discount factors intrinsic to commercial pressures in most industries, spreading the burden of risk between private¶ and public entities and promote long term economic efficiency.

-AT “Apotheker”

**says that the CP necessitates bureaucracy – proves the CP links to politics**

**Concludes that government investment key**

**Apotheker 7** – master of science from Delft University of Technology (Diederik Frans, “The Design Of A Regulatory Framework For A Carbon Dioxide Pipeline Network,” 8/17/2007, http://tbm.tudelft.nl/fileadmin/Faculteit/TBM/Over\_de\_Faculteit/Afdelingen/Afdeling\_Infrastructure\_Systems\_and\_Services/Sectie\_Energie\_en\_Industrie/Afstuderen/

Jaaroverzichten/2007/doc/Apotheker.pdf)//MR

The DCMR, together with the Rotterdam municipality, Deltalinqs and the Rotterdam Port¶ Authority have joined the Clinton Climate initiative. Together, they have committed themselves to¶ 50% emission reduction in 2025 compared to the 1990 level (Rotterdam Climate Inititiative,¶ 2007). The DCMR has a large role in this. More specifically, they are involved in setting up a CO2¶ pipeline project in close cooperation with the Rotterdam Port Authority (Hanegraaf, 2007). In the¶ opinion of the DCMR it is a possibility that the government can participate in a pipeline venture.¶ When private companies alone start up the investment, the DCMR fears that they might make an¶ adequate consideration on the scale of the pipeline, resulting in a pipeline with too small scale to¶ transport all the required CO2. To avoid this economically suboptimal lock-in, the DCMR finds it¶ important that a public authority participates in the investment (Hanegraaf, 2007).

-AT “Element-Energy”

**plan solves all the warrants – it also regulates pipelines**

**concludes that federal investment is a pre-requisite to CCS – their article**

**Element-energy 10** (“Co2 Pipeline Infrastructure: An Analysis of Global Challenges and Opportunities”, Final Report International Energy Agency Greenhouse Gas Programme, 4/27/10, <http://www.canadiancleanpowercoalition.com/pdf/CTS16%20-%20IEA_Pipeline_final_report.pdf>)//MR

Investment in the energy industry, and including the largest oil and gas pipelines is frequently¶ procured through project finance. Project finance is a highly structured source of finance,¶ where projects have limited or no recourse to owners. As such revenues from the project are¶ fully expected to pay back debts and provide dividends to equity partners. The debt structure¶ and contractual arrangements are carefully tailored for the risks associated with each specific¶ investment. Oil and gas pipelines represent a relatively small but stable part of the overall¶ market for project finance. Notable themes for project financing of large oil and gas pipelines¶ have been:¶ • Investment of several US$ billion have been arranged for a number of pipelines,¶ including pipelines spanning thousands of kilometres and/or crossing national¶ borders or difficult terrains.¶ • A wide mixture of debt:equity ratios are possible. Debt financing, being cheaper, is¶ preferred but lenders rely on higher levels of commercial certainty. Equity sponsors¶ always bear first risk of loss. For both equity and debt sources, funding is usually¶ arranged through a consortium. This helps to reduce the risk for any individual¶ investor and can also ensure the interests of different stakeholders are represented.¶ • National governments, or international organisations such as the World Bank and¶ partners, frequently facilitate financing. This can be either through direct investment¶ (possibly through state-owned industries which take an equity share) or by providing¶ guarantees. This occurs where the state has a compelling strategic interest in the¶ pipeline or in emerging markets where business risks are higher.

**Private companies won't share innovation – bars a backbone transition**

**van Alphen et al. 9 – their author**

[Klaas, Department of Innovation Studies, Copernicus Institute for Sustainable Development and Innovation, Utrecht University, Marko Herrket, Department of Innovation Studies, Copernicus Institute for Sustainable Development and Innovation, Utrecht University, Wim Turkenberg, Department of Science, Technology and Society, Copernicus Institute for Sustainable Development and Innovation, Utrecht University, "Accelerating the deployment of carbon capture and storage technologies by strengthening the innovation system," 11/3/9, http://ac.els-cdn.com/S1750583609001078/1-s2.0-S1750583609001078-main.pdf?\_tid=1ce37ebddefc4d47bec86f7b5d2cc5c5&acdnat=1343326155\_b9bf787a3bd09770827339e168ee2684]//SH

The vast majority of the interviewees recognized that **the increasing amount of** (inter)national **CCS** platforms and conferences **have contributed significantly to the optimization of CCS knowledge networks. However, it was also noted that this is not always the case** for knowledge networks around capture technologies. **A number of these experts argue that R&D on capture technologies in private companies often occurs behind ‘‘closed doors’’, since this knowledge can create a competitive advantage**. It is argued by experts in all countries that **commercial interest and the protection of intellectual property hinder an optimal flow of information between the actors involved in CCS R&D. This is** mentioned as **the most important barrier for the performance of this function, which could hamper the implementation of integrated CCS projects**

AT PTP First Step

-AT “Wellenstein”

**The un-underlined parts say point-to-point is inefficient and expensive—concludes that backbone solves best**

**This is *their ev—*concludes backbone key**

**Wellenstein and Slagter, 11 –** Permanent Representative of the Netherlands to the Organization for Economic Cooperation and Development AND business advisor at Energy Management Netherlands, “Strategies for CCS-chain development. A qualitative comparison of different infrastructure configurations,” Energy Procedia 4 (2011) 2778-2784)//HK

3. Comparing different transport configurations¶ The main advantages of a point-to-point pipeline connection have to do with its simple nature. Firstly, it is often the most cost-effective option, which is important because cost control is crucial in the early phases of CCS development. Secondly, the straightforward nature of a point-to-point connection implies that it is relatively easy to manage capacity and flows. Thirdly, as long as the connected storage field is big enough, the point-to-point pipeline guarantees its owners a stable and low-risk source of returns for the lifetime of the pipeline. ¶ The disadvantages of a point-to-point connection are that it is inflexible in terms of scaling up or diverting CO2 streams. When bigger volumes of CO2 are expected in the future, its owners must either oversize the initial pipeline and accept ullage in the first period, or lay a second pipeline in the future when flows increase and accept higher total capital expenditure (CAPEX). The choice between these two options will depend on the difference between the additional CAPEX required for oversizing and the (discounted) future CAPEX for a second pipeline. If the former is lower than the latter, oversizing is an attractive option and vice versa [3]. In any case, the high initial CAPEX associated with pipelines constitutes a risk when future flows are not guaranteed, which is the case with most current CCS initiatives. Also, connecting one source of CO2 with one reservoir makes the supply chain vulnerable to disruptions at the CO2 source or the injection site because flows cannot be redirected [4]. ¶ A large-scale network has the advantage of economies of scale. Because its pipelines can combine CO2 flows from different sources and direct them to various sinks, this network can both reap economies of scale and offer flexibility in terms of destination. It should be noted that this advantage is limited by pipeline diameters and injection rates at the respective storage locations. The large-scale network has the potential to offer better risk coverage against (minor) flow disruptions at CO2 sources or storage sites, because CO2 flows can be re-routed to other storage locations.

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[Klaas, Department of Innovation Studies, Copernicus Institute for Sustainable Development and Innovation, Utrecht University, Marko Herrket, Department of Innovation Studies, Copernicus Institute for Sustainable Development and Innovation, Utrecht University, Wim Turkenberg, Department of Science, Technology and Society, Copernicus Institute for Sustainable Development and Innovation, Utrecht University, "Accelerating the deployment of carbon capture and storage technologies by strengthening the innovation system," 11/3/9, http://ac.els-cdn.com/S1750583609001078/1-s2.0-S1750583609001078-main.pdf?\_tid=1ce37ebddefc4d47bec86f7b5d2cc5c5&acdnat=1343326155\_b9bf787a3bd09770827339e168ee2684]//SH

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-AT “Element-Energy”

**says the transition takes over a decade**

**point-to-point can’t be integrated into a backbone—it would take twice the work and funding**

**Impact to delay**

**Zarraby 12** - chemical engineer for the Federal Energy Regulatory Commission, JD expected from GWU in 2012

Cyrus, “Note: Regulating Carbon Capture and Sequestration: A Federal Regulatory Regime to Promote the Construction of a National Carbon Dioxide Pipeline Network,” 80 Geo. Wash. L. Rev. 950, Lexis

The natural gas model, however, does not ideally fit the needs of CO<2> pipelines. First, requiring the pipeline to operate at a fixed rate of return limits immediate investment because pipelines cannot maximize their profits, particularly when the pipeline is first starting up. 208 Even if FERC can establish a rate of return that is high enough to spur investment, the most effective means to determine what the precise rate of return should be is through direct negotiation between pipelines and customers (CO<2> shippers). 209 Further, because CO<2> pipelines would be located throughout the country and would vary in length and size, a single, fixed rate of return for all pipelines may be inadequate for particular projects. 210 [\*977] Unlike the natural gas pipeline system, which has been built over many decades, 211 reduction in greenhouse gas emissions must occur in the **very short term** given EPA's recent commitment to regulate greenhouse gases under the Clean Air Act. 212 Limiting the return on investment with a cost-based rate will not promote the immediate investment in new CO<2> pipelines that is needed. 213 Second, the flexibility that FERC's regulations allow with respect to responding to different markets is not applicable to CO<2> pipelines. For CCS projects, prior to construction, transportation customers will know how much CO<2> will be transported and where it will be going because, unlike natural gas, the CO<2> shippers are not responding to changing market conditions. 214 The CO<2> shipper will be transporting a fixed amount of CO<2> every day to a particular sequestration reservoir. 215 Conversely, natural gas shippers often transport gas to various market areas depending on the demand and price of natural gas at a given location. 216 Regulatory rules that allow for short-term transportation contracts to respond to market demand would be burdensome and unnecessary.

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AT PTP Good

-AT “Ruff” (avoids inefficiency)

**Concedes inefficiency inevitable—long term solvency deficit**

**The article concludes aff**

**Ruff 2**—Independent Consultant, Senior Advisor, Market Reform (Larry E., “Rethinking Gas Markets—and Capacity”, Harvard Papers, July 12, 2002, <http://www.hks.harvard.edu/hepg/Papers/2012/LERuff%20EEEP%20Final%2002Jul12.pdf>)//MR

The analysis here shows that, on a complex pipeline with scarce capacity and dynamic gas supplies/demands, a market based on point-to-point (or any other) commercial capacity defined and configured in advance will produce inefficient outcomes virtually whenever the commercial capacity affects the market. Point-to-point capacity may have longer-run benefits that exceed the costs of the short-run inefficiencies, andif the longer-run benefits cannot be obtained any other way and exceed the short-run costs, point-to-point capacity is thebetter solution. But if not, not. Point-to-point capacity should not be used in the misguided belief that efficient trading of it among shippers will produce efficient market outcomes or that there are no other options.¶ 15 of 15¶ The most-frequently-cited long-run benefit of long-term point-to-point capacity is its alleged value in underwriting the financing of new capacity. This was a real and large benefit in the early days, when long-haul pipelines were being built to supply monopoly distribution systems that could safely sign long-term, take-or-pay contracts. But those days are long gone in many/most places. On an existing complex pipeline with a dynamic and competitive gas market, such as the Victorian system, a new point-to-point pipeline within the system is unlikely to be economic or to find many customers willing to contract long-term for its point-to-point capacity (except perhaps as a bypass threat during tariff negotiations). In such situations, both existing and new capacity will have to paid for through some combination of throughput charges and the (say) annual auction of capacity rights or FTRs

-AT “Ruff” (fixes solve)

**says that point-to-point won’t be adopted in the first place—terminal solvency takeout—proves investment key**

**Transitions happen long-term—there’s an immediate impact to delay**

**Zarraby 12** - chemical engineer for the Federal Energy Regulatory Commission, JD expected from GWU in 2012

Cyrus, “Note: Regulating Carbon Capture and Sequestration: A Federal Regulatory Regime to Promote the Construction of a National Carbon Dioxide Pipeline Network,” 80 Geo. Wash. L. Rev. 950, Lexis

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**Carbon Price DA**

2AC

**Sequencing DA**

**Absent federal funding, private sector won’t invest in CCS until a carbon price is set and emission regulations take effect**

**Element-energy 10** (“Co2 Pipeline Infrastructure: An Analysis of Global Challenges and Opportunities”, Final Report International Energy Agency Greenhouse Gas Programme, 4/27/10, <http://www.canadiancleanpowercoalition.com/pdf/CTS16%20-%20IEA_Pipeline_final_report.pdf>)//MR

By far the most important challenge facing developers of CO2 pipelines worldwide is the¶ absence, in most locations, of a long-term attractive value in abated CO2. A generic exception¶ is where CO2 transport is for enhanced hydrocarbon recovery3. The absence of sufficient¶ financial incentives is a systemic issue facing all aspects of CCS. The issue is well¶ documented elsewhere and is outside the scope of this report.¶ Where investors can fully capture the value of abated CO2, a fully competitive market should¶ promote efficient investment. Current CO2 prices in existing trading schemes are far from¶ sufficient to support the large investments required to adopt CCS. At the present time¶ investors have very low visibility as to the scope and price of abated CO2, and in many¶ regions there is no effective CO2 price. Uncertainties on CCS technology deployment are¶ large. Therefore where national governments have ambitious CO2 targets, but the market fails¶ to provide sufficient reward for private investors to invest, these governments may need to¶ step in to provide some support for pipeline investment. There are examples from elsewhere¶ within the low carbon energy sector where dispersed commercial actors required leadership¶ or co-financing from governments or other public institutions to develop critical supporting¶ infrastructure.

**Having infrastructure *first* solves delays and modeling**

**Hawkins and Peridas 7** – David Hawkins and George Peridas, Natural Resources Defense Council (“No Time Like the Present: NRDC’s Response to MIT’s ‘Future of Coal’ Report” March 2007, http://www.nrdc.org/globalwarming/coal/mit.pdf)//MR

Where a technology is already competitive with other emission control techniques, for example, sulfur¶ dioxide scrubbers, a cap and trade program like that enacted by Congress in 1990, can result in more rapid¶ deployment, improvements in performance, and reductions in costs. However, **a CO2 cap and trade program**¶ **by itself may not result in deployment of CCS systems as rapidly as we need. Many new coal plant design**¶ **decisions are being made literally today.** Depending on the pace of required reductions under an emissions¶ cap, **a firm may decide to build a conventional coal plant and purchase credits from the cap and trade market**¶ **rather than applying CCS** systems **to the plant.** Although this may appear to be economically rational in the¶ short term, **it is likely to lead to higher costs of CO2 control in the mid and longer term if** substantial amounts¶ of **new conventional coal construction leads to ballooning demand for CO2 credits.**¶Moreover, **delaying the start of CCS until a cap and trade system price is high enough to produce these¶ investments delays the broad demonstration of the technology that the U**nited **S**tates **and other countries¶ need if**, as seems likely, **we continue substantial use of coal. The more affordable CCS becomes, the more¶ widespread its use will be throughout the world, including in** rapidly gr**owing economies like China and**¶ **India. But** the **learning and cost reductions for CCS that are desirable will come only from the experience**¶ **gained by building and operating the initial commercial plants. The longer we wait to ramp up this**¶ **experience, the longer we will wait to see CCS deployed here and in** countries like **China**.

**Having infrastructure in place *first* is key to avert economic cost**

**EPA 10**

“Report of the Interagency Task Force on Carbon Capture and Storage,” http://www.epa.gov/climatechange/downloads/CCS-Task-Force-Report-2010.pdf

The timing and scale of CCS deployment are dependent on a carbon price and any other financial incentives for low-carbon technology, as well as the costs of CCS relative to other technologies. Figure II-1 shows carbon prices in the modeling of legislation with emissions targets that are largely consistent with the Administration’s climate change goals. 34,35 In the base case, allowance prices in 2020 are $24 and $31 per tonne CO2 equivalent 36 (CO2 e) for the U.S. Environmental Protection Agency (EPA) and the U.S. Energy Information Administration (EIA) analyses, respectively. If international offsets are unavailable or not allowed in the program, carbon prices are higher, at $52 per tonne CO2 e for both the EPA and EIA analyses. Finally, if international offsets are unavailable, nuclear and dedicated biomass electricity generation are unavailable beyond business-as-usual levels, and CCS deployments are limited 37 , allowance **prices rise** to $59 - $89 per tonne CO2 e in 2020 (EPA 2010; EIA 2010). These results reinforce the concept that availability of mitigation options (whether offsets or more cost-effective technologies) lowers the price of allowances, and thus the overall economic cost of averting climate change The policy shown above refers to a discussion draft (not yet introduced) of Senate legislation that includes bonus allowances to promote CCS deployment above and beyond what the market would support in response to a price on GHG emissions. To understand the effect of these bonus allowances, 38 EPA ran a comparison scenario without them. As Figure II-2 below shows, the bonus allowances are projected to shift CCS deployment 15–20 years ahead of when it would deploy in their absence. However, it is necessary to understand the broader implications of using additional financial incentives, such as bonus allowances, to promote **earlier** CCS deployment. The bonus allowances encourage firms to invest in CCS even though there are less costly means of achieving emissions reductions that do not receive bonus allowances. To the extent that such additional financial incentives distort the efficiency of the market, the overall economic cost of meeting the carbon target would be expected to rise. As with any technology, the increase in overall economic cost due to early deployment incentives would be reduced to the extent that early deployment lowers technical and commercial risk and enables CCS technology improvements that **lower the cost** of **later widescale deployment**. Figure II-3 shows the projected deployment of CCS as a result of the legislation under several different scenarios that were modeled by EPA and EIA. Consistent with the previous discussion, the bonus allowance provisions would drive deployment through 2030 in the cases where CCS technology is not delayed. The availability of international offsets does not significantly change the impact of bonus allowances on CCS deployment. However, by 2050, CCS deploys economically and in greater quantities in the “no international offset” scenarios due to higher allowance prices (i.e., more reductions must occur domestically and these have higher costs associated with them than opportunities available internationally). These scenarios provide reasonable bounds on the expected range of CCS deployment under a climate policy that caps emissions. These modeling exercises show that CCS may play an important role in helping the United States meet carbon reduction targets. The key to broad, cost-effective, commercial deployment of CCS is a climate policy that provides the right incentives to produce low-carbon energy, along with policies to promote RD&D in CCS and other potential low-carbon technologies. However, even with appropriate market signals from comprehensive energy and climate policy, non-economic barriers could prevent projected CCS deployment. To the extent that legal, regulatory, social, and economic barriers hinder the availability of CCS as a mitigation option, they would raise the overall cost of meeting the Administration’s climate goals. Thus, the Administration is committed to addressing these barriers to deployment.

1AR carbon price key

**Federal carbon pricing key to spur industry development**

**Chrysostomidis et al. 9** – Ioannis Chrysostomidis and Paul Zakkour, Environemtal Resources Management; Mark Bohm and Eric Beynon, Suncor Energy; Renato de Filippo, Eni SpA; Arthur Lee, Chevron Corporation (“Assessing issues of financing a CO2 transportation pipeline infrastructure” Energy Procedia Volume 1, Issue 1, Pages 1625–1632, February 2009, http://www.sciencedirect.com.proxy.lib.umich.edu/science/article/pii/S1876610209002148)//MR

¶ **In interviews with staff from** banks and **financial institutions2, the** key **conclusion is that CO2 pipeline projects, if**¶ **they can be reduced in terms of carbon price risks, will become the same in terms of risks similar to any other oil &**¶ **gas pipeline project**. At the same time, **these same banks and financial institutions view such projects as having**¶ **significant regulatory and market risks associated with the carbon price, in addition to** the **typical geopolitical and**¶ **commercial risks** associated with other oil and gas projects.

**Sequencing – private industry won’t invest before a carbon price**

**Insight Economics 11**

“Building Essential Infrastructure for Carbon Capture and Storage,” Report to the Global Carbon Capture and Storage Institute, http://cdn.globalccsinstitute.com/sites/default/files/publications/13361/development-carbon-capture-and-storage-infrastructure.pdf

If the private sector is to invest in CCS on a commercial basis, therefore, one necessary condition is the existence of a significant carbon price signal and market confidence that the carbon price will continue to be present, at an adequate level, at least during the payback period of the investment (which may be up to two decades). Until that is the case, it seems very **unlikely** that the decentralised model is capable of delivering private investment in CCS including the pipeline infrastructure. This may also reflect a more general problem, namely that while some countries (including the UK) have committed to very ambitious GHG reduction targets by 2020, it is unclear in the near future that they will increase the level of the carbon price to what is required to deliver the necessary abatement. Particularly in the current situation where CCS is still at the stage of being demonstrated at scale, it seems doubtful that the carbon price will be elevated to a level that would enable the technology to be deployed in time to contribute to meeting emissions targets in 2020.

1AR preparing for caps key

**CCS is inevitable after caps – preparing for it is key**

**Bidlack 10** - \*JD @ Michigan State University

Chris, “REGULATING THE INEVITABLE: UNDERSTANDING THE LEGAL CONSEQUENCES OF AND PROVIDING FOR THE REGULATION OF THE GEOLOGIC SEQUESTRATION OF CARBON DIOXIDE,” http://epubs.utah.edu/index.php/jlrel/article/view/281/237

As the world has entered the 21st century, discussions about alternative energy and climate change have become a leading topic in both scientific and political discourse. The issue of climate change, in particular, has come to the forefront. That our climate is changing dramatically because of our actions has become all too clear. Internationally and more recently nationally 1 there has been real governmental recognition of the reality of climate change. Along with this recognition comes a growing need for mitigation options. One such method that **will play** a significant role in the immediate future is Carbon Capture and Sequestration/Storage 2 (CCS). CCS is the process of separating carbon dioxide (CO2) from power generation, industrial, or other source, transporting it to a location, and storing it permanently. 3 CCS refers to the storage of CO2 in a variety of locations: geologic formations, oceans, and industrial fixation sites. 4 This Note examines the geologic sequestration of CO2 because it is the method most likely to be used on a large scale in the United States and, importantly, is currently unregulated. Geologic sequestration is the process of injecting CO2 in geologic formations, such as oil and gas fields, deep saline formations 5 or unmineable coal seams, 6 in order to remove the CO2 from the atmosphere and reduce climate change. To protect both the environment and the nation, a comprehensive system of regulation, composed of general federal regulation and specific state-based regulation, should be created. CCS is expected to be utilized on a large scale in the near future as a consequence of carbon emissions regulations that **will soon be implemented** through federal policies or through international agreement. 7 CCS technology is approaching maturity, and it is one of the few means of reducing carbon that allows continued use of coal without major alteration to the existing infrastructure. 8 Due to the large coal-based infrastructure in the United States, a “wedge” of mitigation that allows for the continued use of coal will likely be **pushed strongly** by the power industry as a practical necessity. While the wisdom of CCS may be questioned, it will be implemented in the near future in some form. 9 Thus, it is imperative to **prepare** for CCS. This Note avoids the value judgments about CCS or questions about its wisdom. Rather, this Note recognizes that CCS **will be** implemented and that regulation will be necessary. Because of the complexity and the potential danger of CCS, failing to establish comprehensive regulation could lead to disastrous results. This Note seeks to create a framework with a strong balance of state and federal regulation. The division of the regulation between the states and federal governments allows for the most effective means of regulation while allowing technological innovation. This Note looks at the process of CCS and the legal ramifications likely to arise from its use. The Note then argues that for the importance of implementing a regulatory scheme for CCS now, before the process becomes commonplace. That scheme should foster cooperation between the federal government and the states, building on previous federal environmental regulation but also recognizing the inherently state-based aspects of CCS. To explore CCS and the way it should be regulated, this Note first examines the science and technology involved in the process. This in-depth look at sequestration is followed by an exploration of the foreseeable legal consequences of CCS. This Note concludes with a CCS regulatory proposal with a combination of federal oversight and strong state-based programs.

**Federal Investment Key**

-investor confidence

**Government funding key to security and optimal construction**

**Chrysostomidis et al. 9** – Ioannis Chrysostomidis and Paul Zakkour, Environemtal Resources Management; Mark Bohm and Eric Beynon, Suncor Energy; Renato de Filippo, Eni SpA; Arthur Lee, Chevron Corporation (“Assessing issues of financing a CO2 transportation pipeline infrastructure” Energy Procedia Volume 1, Issue 1, Pages 1625–1632, February 2009, http://www.sciencedirect.com.proxy.lib.umich.edu/science/article/pii/S1876610209002148)//MR

¶ **Government funding can enable the project to operate commercially at a comparative cost of service** (~8$t/CO2)¶ to Option 1 even when Tranches 2, 3 and 4 are not realised (i.e. see Figure 4.4 at 40% capacity utilisation). In this¶ sense, **governments through favorable financing** or other types of support **can provide security to first mover over**¶ **future capacity up-take and mitigate risks in order to promote optimised deployment options for** a **CCS** scenario¶ such as the one modelled.

**Federal funding key to investor confidence—*jump-starts* the private industry**

**Klass and Wilson 8** - \*Professor of Law @ Minnesota, \*\*Professor of Public Policy @ Minnesota

Alexandra and Elizabeth, “CLIMATE CHANGE AND CARBON SEQUESTRATION: ASSESSING A LIABILITY REGIME FOR LONG-TERM STORAGE OF CARBON DIOXIDE,” http://www.law.emory.edu/fileadmin/journals/elj/58/58.1/Klass\_Wilson.pdf

What is unique about CCS, however, is the scale of projects and necessary deployment. A lowered liability cap within a strict liability **federal** fund for the first dozen or so full-sized CCS projects could help industry to gain the **confidence and experience** for the transition to a full commercial CCS deployment. Such a cap would let first movers manage the financial risk of new CCS technologies and serve to more rapidly transition from demonstration projects to commercial deployment. Although claimants could still resort to tort or environmental law to obtain compensation for those claims not covered by the strict liability fund, if the total fund amounts are high enough, and the in-fund liability caps low enough, this may help encourage operator development of initial projects. Care should be taken, however, to ensure that such a cap does not become permanent as—in addition to removing normal incentives for responsible operator behavior—it may create a negative public backlash toward CCS, which may adversely affect future project siting.

**Public funding key to catalyze the private sector**

**Posner 10** – Global Director of Energy, The Climate Group (Rupert, “Carbon Capture

and Storage: Mobilising Private Sector Finance” The Climate Group, Ecofin, and the Global CCS Institute, September 20 2010 http://www.theclimategroup.org/\_assets/files/CCS-report.pdf)//MR

**In the current stage, where CCS plants are yet to be**¶ **demonstrated at scale, projects will** most likely **have to be**¶ **funded** almost **exclusively by public sources. Public funding**¶ **will** likely **need to cover both the upfront capital costs**¶ **and also the long-term fuel inefficiencies** created by CCS.¶ **As the amount of private sector capital that is available**¶ **to follow that public funding is limited, public funding**¶ **should be focused on a few projects** instead of the current¶ trend of being spread across a suite of technologies and¶ locations. **Once the first plants are up and running, there**¶ **should be little difficulty in attracting large scale private**¶ **sector funding for other CCS plants.**

**Investment is key to bridge R and D to widespread deployment**

**WCI 9**

[World Coal Institute, international organization that represents the global coal industry, "SECURING THE FUTURE INANCING CARBON CAPTURE & STORAGE IN A POST-2012 WORLD," 2009, http://www.worldcoal.org/bin/pdf/original\_pdf\_file/securing\_the\_future\_ccs\_financing(12\_11\_2009).pdf]//SH

CCS can be deployed now using support mechanisms equivalent to those provided to other low carbon electricity generation options. The cost of electricity generation including CCS already compares favourably to the cost of electricity generated from renewable sources. However, deployment of CCS cannot be left to the market. The substantial experience with designing and implementing renewable energy technology support schemes (in around 60 countries4) is directly relevant in determining how to best incentivise development and deployment of commercial-scale CCS. This indicates that government action and investment is essential to bridge the gap between the research and demonstration phase and the widespread deployment of a technology family.

**Funding key – private sector won't do it without government incentives**

**Stephens 9**

[Jennie, Energy Technology Innovation Policy, Harvard Kennedy School, Heleen de Coninck, Energy research Centre of the Netherlands, Bert Metz, European Climate Foundation, "Global Learning on Carbon Capture and Storage: A Call for Strong International Cooperation on CCS Demonstration," 2009, http://live.belfercenter.org/files/de\_Coninck%20Stephens%20%20Metz\_January%2030\_final.pdf]//SH

**A lack of funding** for the large scale demonstration of technologies **is a well-recognized problem in technology innovation. After a successful R&D phase, public funding is often reduced, while private funding for application of the technology is still seen as** uneconomical or **too risky. The cash flow for the new technology dries up, and the ensuing “valley of death” looms** (Murphy and Edwards, 2003). **This pattern of difficulty at the demonstration phase can be identified in many technologies, but is particularly pronounced in large-scale, capital intensive technologies such as CCS.**

**-EU proves**

**Key to reduce investment risk – EU model proves**

**RCI 9**

Rotterdam Climate Initiative, “Co2 capture, transport and storage in Rotterdam,” http://www.rotterdamclimateinitiative.nl/documents/RCI-English-CCS-report\_2009.pdf

It is obvious that emitters, transportation companies and offshore operators will have to join forces to make the first investments. Allocation of European and national subsidies will play a crucial role. Once operational, the CCS chain will attract more users and investors, facilitating efforts to upscale it. Infrastructure subsidies are also necessary to make it possible to start with a degree of overcapacity in the first years of development and to optimise capital expenditures in the longer term. However, financing is not the only obstacle for a quick start. Relevant legislation and regulations regarding liability, planning permission and procedures should be developed and enacted. In order to stimulate decision making: operators and transportation companies should have a clear view of the conditions for the transport and storage of CO2 . For this reason, we recommend that the **government** take the following legislation and measures to further reduce the investment risk for transport and storage: - the **national government** subsidises investments in the pipeline network infrastructure; - the **national government** ensures the development of a master plan with the associated legislation to ensure the timely availability of suitable reservoirs and pipelines in the Dutch continental shelf (with fields like Q8A, P18, P6, L10, K7 or suitable equivalents) to offer emitters the required storage capacity for their CO 2

**-economies of scale**

**Only government-built pipelines adequately create economies of scale and avoid risk**

**Insight Economics 11**

“Building Essential Infrastructure for Carbon Capture and Storage,” Report to the Global Carbon Capture and Storage Institute, http://cdn.globalccsinstitute.com/sites/default/files/publications/13361/development-carbon-capture-and-storage-infrastructure.pdf

The difficulties in these areas are magnified by the existence of significant levels of risk and uncertainty in regard to the development of the CCS industry. In discussing the nature and extent of these risks, it needs to be remembered that the pipeline business is traditionally seen as a low risk/relatively low return operation. Much of the literature on CO2 pipelines appears to pursue an analogy with natural gas pipelines, where investors generally can rely on a steady if unexciting rate of return. The nature of the risks facing investors in CO2 pipelines, however, as well as the issue of building oversized pipelines initially so as to benefit from scale economies down the track, fundamentally challenges these assumptions. While in theory it may be supposed that pipeline businesses (and regulators) are capable of recalibrating their rate of return assumptions in the face of higher risks, in practice this may be rather more difficult to the extent that there may be a lack of interest from specialised pipeline businesses in investing in risky assets in which they have no experience. Certainly at this point in time, when CCS is still in the phase of being demonstrated at scale, potential investors in CCS projects face a number of significant risks with associated uncertainties. In the absence of **government** **intervention**, these can act as a **powerful deterrent** to investment. This is also likely to be an issue in the pipeline business where, although the technologies are mature, there is little experience in (and perhaps little appetite for) managing high risks

-gov-built pipelines key

**Only *government-built* pipelines catalyze broader investment**

**Insight Economics 11**

“Building Essential Infrastructure for Carbon Capture and Storage,” Report to the Global Carbon Capture and Storage Institute, http://cdn.globalccsinstitute.com/sites/default/files/publications/13361/development-carbon-capture-and-storage-infrastructure.pdf

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**-private won’t invest now**

**Private investors are hesitant to invest in pipeline infrastructure absent federal support**

**Insight Economics 11** (“Development of Carbon Capture and Storage Infrastructure” 4.4 Role for Government, Global CCS Institute, March 21 2011, http://www.globalccsinstitute.com/publications/development-carbon-capture-and-storage-infrastructure/online/39031)//MR

**Understanding these risks and uncertainties is** particularly **important in** terms of **setting the policy environment for** building **the future pipeline network** that will be required **for the large scale deployment of CCS.** Financial analysis suggests that **the private sector would be** understandably **unwilling to invest in the currently oversized pipelines that would provide more efficient transport in the longer term.** A reasonable question then is why should taxpayers take on this risk if private investors will not? One answer is that **there may** well **be public benefits in reducing the costs of CCS transportation, in terms** perhaps **of electricity prices and** the **carbon price being lower** than otherwise, **together with** any social **benefits** that accrue **from** having **a wider portfolio of emissions reduction technologies** than may otherwise be the case.¶ The conclusion from this analysis is that**, at this stage** at least, **governments will** probably **need to play an important role in facilitating investment in CCS infrastructure** via the mixed funding model. **This may involve subsidising the construction of** efficiently sized **CO2 pipelines. Another option is for governments to construct CCS infrastructure itself and then sell it to the private sector** when the risks are better understood and the uncertainties have been substantially reduced.

AT “Bliss”

**Only investment ensures infrastructure is built**

**Bliss et al 10- their author**

[Kevin, Interstate Oil and Gas Compact Commission, Darrick Eugene, Esq., Consultant, Austin, Texas Robert W. Harms, Esq., The Harms Group, Bismarck, North Dakota Victor G. Carrillo, Esq., Texas Railroad Commission, Austin, Texas Kipp Coddington, Esq., Mowrey, Meezan, Coddington, Cloud, LLP, Washington, D.C. Mike Moore, VP External Affairs, Blue Source LLC, Houston, Texas John Harju, Associate Director for Research at the University of North Dakota Energy & Environmental Research Center, Grand Forks, North Dakota Melanie Jensen, University of North Dakota Energy & Environmental Research Center, Grand Forks, North Dakota Lisa Botnen, University of North Dakota Energy & Environmental Research Center, Grand Forks, North Dakota Philip M. Marston, Esq., Marston Law, Alexandria, Virginia Doug Louis, Director, Conservation Division, Kansas Corporation Commission, Wichita, Kansas Steve Melzer, Melzer Consulting, Midland, Texas Colby Drechsel, Wyoming Pipeline Authority, Cheyenne, Wyoming Jack Moody, Director, State Mineral Lease Program, Jackson, Mississippi Lon Whitman, Enhanced Oil Recovery Institute, University of Wyoming IOGCC-SSEB CO2 Pipeline TaskForce members, "Evaluation of the Feasibility of a National Pipeline Infrastructure for the Transport and Storage of Carbon Dioxide," Reporting Period Beginning April 1, 2009, and Ending December 31, 2010, http://www.sseb.org/downloads/pipeline.pdf]//SH

Concerns regarding anthropogenic CO2 contributing to global climate change have fostered an interest among some to federally mandate a carbon management strategy that would require storage of CO2 for environmental purposes rather than economic reasons. CO2 makes up a small percentage of the atmosphere (CO2 represents 4/100 of 1% of the atmosphere; of that 96.7% of CO2 is natural and 3.3% is man-made). Public policy mandating CO2 emission reductions and storage should be carefully considered in view of uncertainty regarding global climate change, its causes, costs, and the somewhat limited utility of capturing CO2 in the U.S., unless other countries follow suit. **A federal mandate to reduce CO2 emissions will promote strategies to capture and store CO2 and presumes that the infrastructure necessary to transport and store the CO2 would follow. But, the premise that a mandate will result in infrastructure is unsubstantiated. If a federal mandate requires capture and storage of CO2, then public resources may be required to build the infrastructure necessary** to handle the CO2 produced in the U.S. **Because transport for storage alone is not market driven, there will be economic disconnects that need to be considered and for which compensation may be required. A federal mandate may encourage some sources of CO2 to off load the cost of transporting and storing CO2 to third parties through promoting public policies that support/allow for such a cost shift.**

AT “Van-Alphen”

**Government investment is key – costs are too high for the private sector**

**van Alphen et al. 9 – their author**

[Klaas, Department of Innovation Studies, Copernicus Institute for Sustainable Development and Innovation, Utrecht University, Marko Herrket, Department of Innovation Studies, Copernicus Institute for Sustainable Development and Innovation, Utrecht University, Wim Turkenberg, Department of Science, Technology and Society, Copernicus Institute for Sustainable Development and Innovation, Utrecht University, "Accelerating the deployment of carbon capture and storage technologies by strengthening the innovation system," 11/3/9, http://ac.els-cdn.com/S1750583609001078/1-s2.0-S1750583609001078-main.pdf?\_tid=1ce37ebddefc4d47bec86f7b5d2cc5c5&acdnat=1343326155\_b9bf787a3bd09770827339e168ee2684]//SH

Although investments in CCS RD&D have grown substantially over the past years, the 100 experts surveyed in this study rate their satisfaction on the availability resources with an average score of 2.8 (see Table 10). The most widely shared opinion is that **the current availability of financial resources is not sufficient to realize commercial-scale integrated CCS demonstration projects.** Interviewees (especially from **private firms) argued that financial risks are too high for firms to justify CCS investments to shareholders. Taking into account that the carbon price in the early years might not be high or stable enough to trigger enough CCS investment,** additional **incentives will** likely **be needed. To provide investor certainty**, it is believed by most of the experts participating in this study that public private partnerships are the way to go. In these partnerships **government agencies should fund a substantial part of the billions of dollars necessary to deploy the first set of commercial-scale CCS projects.** Several of the experts surveyed here recognize that supporting the fossil-fuel industry with public money could meet resistance from environmental NGOs and the certain societal groups (an issue that we will discuss further under the last function: ‘‘creation of legitimacy’’). Despite this possible risk, it is argued that **this approach would offer the highest incentives to early projects that have not yet benefited from scale economies, and technological learning**; e.g. improved materials and technology design, standardization of applications, system integration and optimization. **In order to get these first projects off the ground, Governments in all the countries under study announced additional funding for the demonstration projects.**

**Investment is key – incentives are key**

**van Alphen et al. 9 – their author**

[Klaas, Department of Innovation Studies, Copernicus Institute for Sustainable Development and Innovation, Utrecht University, Marko Herrket, Department of Innovation Studies, Copernicus Institute for Sustainable Development and Innovation, Utrecht University, Wim Turkenberg, Department of Science, Technology and Society, Copernicus Institute for Sustainable Development and Innovation, Utrecht University, "Accelerating the deployment of carbon capture and storage technologies by strengthening the innovation system," 11/3/9, http://ac.els-cdn.com/S1750583609001078/1-s2.0-S1750583609001078-main.pdf?\_tid=1ce37ebddefc4d47bec86f7b5d2cc5c5&acdnat=1343326155\_b9bf787a3bd09770827339e168ee2684]//SH

However, taking into account that the carbon price in the early years might not be high or stable enough to trigger enough CCS investment, **additional incentives will be needed to remove the financial disadvantage created by CCS.** Many of the 100 interviewees argued that public private partnerships are the way to go in establishing early commercial-scale CCS demonstration projects. **The billions of dollars that have been made available by the governments** ofAustralia, Canada and theUS aswell as the billions of Euro’s that will become available for CCS demonstration in the EU (including Norway and the Netherlands) after auctioning 300 million emission allowances, **would offer a significant incentive for early projects that have not yet benefited from scale economies, technological improvement and learning.** Although essential, we would argue that such investments are futile in the absence of an overarching long-term climate policy. Sound **alteration of near-term financial stimuli to push the demonstration of CCS technologies and longer-term technology pull strategies that create a clear market for CCS are therefore of prime importance to accelerate the deployment CCS in all countries under study.**

**Links to Politics**

**-eminent domain**

**Supreme Court eminent domain ruling sparked massive backlash**

**Kanner 6** – Professor of Law Emeritus, Loyola Law School, Los Angeles (Gideon, “Kelo v. New London: Bad Law, Bad Policy, and Bad Judgment” The Urban Lawyer Vol. 38, No. 2, 2006, http://www.americanbar.org/content/dam/aba/events/real\_property\_trust\_estate/joint\_fall/2007/kelo\_v\_new\_london\_bad\_law.authcheckdam.pdf)//MR

Last term’s five-to four, Kelo1 decision has precipitated a great¶ deal of controversy. Large numbers of Americans were dismayed and¶ angered to find that anyone’s unoffending home may be seized and¶ razed to convey the site to a municipally favored redeveloper, on the¶ theory that redevelopment will increase revenues and wages, thus tending¶ to revitalize the community. Public opinion polls indicate that¶ Kelo’s broad reading of the Public Use Clause has left the great majority¶ of Americans gasping with disbelief.2 Kelo has precipitated a¶ flood of proposed (and in some cases enacted) legislation to curb this¶ breathtaking expansion of unreviewable and unaccountable government¶ power.3 A strong public reaction to a Supreme Court ruling is¶ hardly a new phenomenon, but in this case its intensity and its ability¶ to stir legislatures into immediate corrective action are, at least in my¶ experience, unprecedented.¶

**Widespread opposition to eminent domain**

**Scribner 9** (Marc, “Fighting Eminent Domain Abuse” Competitive Enterprise Institute, October 13 2009, http://www.openmarket.org/2009/10/13/fighting-eminent-domain-abuse/)//MR

Popular outrage over eminent domain abuse may have waned a bit since the Supreme Court’s poorly-reasoned Kelo ruling in 2005, but economic development takings remain incredibly unpopular throughout the country. Public opinion polls indicate that more than 80 percent of Americans oppose eminent domain for economic development, which is surprising when one considers the relative inaction on the part of state legislatures to meaningfully protect their citizens’ property rights.

**Multiple polls prove—eminent domain is a political lightning rod**

**Castle Coalition 9** (“The Polls Are In” The Castle Coalition, 2009 (last date mentioned), http://castlecoalition.org/index.php?option=com\_content&task=view&id=43)//MR

Ask pretty much anyone else, though, and there’s clear consensus. Americans across the nation from all walks of life-regardless of their religious or ethnic background, political affiliation or geographic location-say the use of eminent domain for private gain is wrong. There is near universal agreement that taking private property should not be taken just so someone else can make more money-regardless.¶ The following polls all reflect this sentiment. Since the Kelo v. City of New London decision, polls all across the country have reflected the fact that Americans find the landmark-and now infamous-Supreme Court decision just plain wrong:¶ Constitutional Attitudes Survey¶ In 2009, Knowledge Networks conducted a survey on behalf of Harvard University and Columbia University to assess people's attitudes on constitutional issues. Question 215 in the survey asked: “Governments sometimes use the power of eminent domain to acquire a person’s property at a fair market price for other uses. Recently, a local government transferred someone’s property to private developers whose commercial projects could benefit the local economy. Do you think the local government should be able to use eminent domain for this purpose or not?” An overwhelming 83.5% of respondents said "no," the government should not be allowed to use eminent domain for economic development.¶ Results ¶ New Jersey Association of Realtors Smart Growth Survey¶ In December 2008, the New Jersey Association of Realtors conducted a telephone survey of 814 registered voters in the state, questioning them about various political issues. The voters surveyed were asked one of two questions about whether they favored or opposed the use of eminent domain to force homeowners to sell their homes to the government to build businesses for economic development. One of the questions mentioned compensation for "fair market value" while the other did not. Nearly 83% of respondents opposed the use of eminent domain for economic development and nearly 77% opposed eminent domain for economic development even with the inclusion of "fair market value" compensation in the question. ¶ Results ¶ Associated Press-National Constitution Center Poll¶ In an August 2008 poll with questions about various constitutional issues, 87% of respondents said government shouldn't have the power of eminent domain for redevelopment and 60% said they were opposed to the use of eminent domain for redevelopment even with fair market price for the property seized. 75% of those surveyed opposed government taking private property and handing it over to a developer, and 88% of respondents said property rights are just as important as freedom of speech and religion.¶ Results

-environmentalists

**It’s a political lightning rod—even environmentalists are wary**

**Luoma 11** – author of three books on environmental issues and a contributing editor at Audubon (Jon, “Are Carbon Sequestration Leaks a Potential Health Danger?” Popular Mechanics September 13 2011 <http://www.popularmechanics.com/science/environment/climate-change/are-carbon-sequestration-leaks-a-health-danger>)//MR

Still, **CCS remains a lightning rod.** Roberts and colleagues wrote in their study that CCS must be part of a plan to prevent many millions of tons of from "contributing to a [climate change] process which will have catastrophic effects on human lives across the globe." However, **even some environmentalists are opposed to the idea, the argument being that just burying carbon dioxide does nothing to ease the reliance on fossil fuels. Plus, it’s not clear whether studies** like this one **will reassure those wary of CO2 leaks.**

**Plan angers environmentalists**

**Hester 09** (Tom Hester Sr., October 15, 2009, “New Jersey’s environmentalists form alliance to oppose planned mega coal plant in Linden,” <http://www.newjerseynewsroom.com/science-updates/new-jerseys-environmentalists-form-alliance-to-oppose-planned-mega-coal-plant-in-linden)//DR>. H

A coalition of environmentalists announced Thursday that they have formed the Arthur Kill Watershed Alliance with the goal of fighting a proposed null coal plant in Linden**.** Members of the new Arthur Kill Watershed Alliance include the Tremley Point Alliance, the New Jersey Sierra Club, the Edison Wetlands Association, the New Jersey Environmental Federation, the New Jersey Environmental Lobby and Environment New Jersey. Linden City Council President Robert Bunk joined alliance leaders at a press conference at City Hall to announce his opposition to the proposal, a 500 megawatt coal plant and carbon capture and sequestration pilot project that environmentalists maintain will threaten the health of the area's residents and pollute the environment. The environmentalists insist the $5 billion pilot project, called PurGen, would "severely degrade'' the local environment and undermine Linden's revitalization effort. They argue that reliance on untested sequestration technology could jeopardize the state's attempts to help mitigate global warming. Carbon capture and sequestration is an unproven and untested technology, according to the environmentalists. PurGen theorizes it can capture and liquefy carbon dioxide and push it 70 miles through an offshore pipeline to be buried under the seabed. The proposed location for plant is the former DuPont site along the Arthur Kill. The pipeline would run under Raritan Bay through the ocean to the shores off Atlantic City, where the carbon dioxide discharge site will be located in ocean rock deposits**.**

-public opposition

**CCS is a political firestorm—caught up in ideological climate battles and coal industry is unpopular**

**Mills 11** - \*MSc in Geological Sciences @ Cambridge

Robin, “Capturing Carbon: The New Weapon in the War Against Climate Change,” Google Book

CCS already labours under something of a public relations disadvan­tage, due to its association with the unpopular petroleum, coal and electricity industries. It needs only to attract support from politicians, lawyers and real-estate agents to be completely condemned. CCS might suffer from its promotion by the Bush-era initiative on the 'Asia-Pacific Partnership on Clean Development and Climate', widely (and rather accurately) perceived as a literal and metaphorical smokescreen for pol­luting countries and industries to escape mandatory carbon curbs8 and dismissed as 'a nice little PR ploy' by none other than former presiden­tial candidate John McCain.9 The debate is further clouded by 'clean coal', a term trotted out by industry groups such as the American Coa­lition for Clean Coal Electricity. Indeed, coal has become vastly cleaner in recent years in terms of non-greenhouse pollutants such as sulphur dioxide. But to be meaningful at all, 'clean coal' has to include carbon capture on at least 85-95% of its emissions. Otherwise, as in Joel and Ethan Coen's satirical adverts,10 'clean coal' becomes a byword for hype, empty spin and evading environmental responsibility. Such bad press leads the public to be suspicious of carbon capture's environmental and safety credentials. There is a natural cynicism when industry proposes a solution so convenient to itself, however solid the scientific arguments. Scrutiny is intensified when the oil and coal indus­tries take the lead in campaigning against climate change bills, as dur­ing August 2009,n and score PR own-goals such as forging letters opposing environmental legislation. Part of this lobbying is a reaction to elements of the proposed legislation, rather than to the idea of limit­ing carbon dioxide emissions per se, but the subtlety of this message can easily be lost. Carbon capture may come to be seen—indeed, is sometimes already seen—as just one more tactic from the energy industry to delay or avoid taking real action on climate change.12 The major elements of the fossil fuel industry, particularly in the USA, were so slow to acknowledge the reality of climate change, denied the science at every turn, and still continue to spread doubt and misinformation, even allegedly generating fraudulent grass-roots campaigns.1" By doing so, they set themselves up to be the villains of the piece. To some extent, the global debate over carbon capture (and, indeed, over climate change legislation) is now being held hostage by the ideological clash in the USA between left and right. In Europe, a few mavericks apart, business and environmentalism agree much more closely than they might realise on the science of climate change, and the key solutions. Such public opposition can lead to lengthy delays, lawsuits, planning inquiries, permitting challenges and direct protests, against new CCS power plants, carbon dioxide pipelines and storage sites. A backlash from taxpayers or electricity consumers might be caused by percep­tions that heavy subsidies or rising power prices are being used to sup­port carbon capture. The substantial government aid being given to renewable energy in many developed countries may be more popular. Government programmes, as with America's FutureGen, may be more vulnerable to cuts amid the fickle winds of political fortune than those led by companies planning for their future. Recovery from the financial crisis will, at some point, have to be paid for by spending cuts and tax increases, and this may crimp funding for new technologies, however environmentally vital.

**Public opposes**

**Stephenson 8** - Director, Natural Resources and Environment @ GAO

“Federal Actions Will Greatly Affect the Viability of Carbon Capture and Storage As a Key Mitigation Option,” GAO, http://www.gao.gov/new.items/d081080.pdf

Thus far at least, there has been little public opposition to the CO2 injections that have taken place in states such as Texas to enhance oil recovery. However, several notable studies explain that this lack of publicly-expressed concern may reflect more a lack of knowledge about CCS rather than confidence that the process is safe. 56 This is suggested in the IPCC’s 2005 report on CCS which stated, for example, that there is insufficient public knowledge of climate change issues and of the various mitigation options and their potential impact. In another 2005 study, researchers surveyed 1,200 people, representing a general population sample of the United States, and found that that less than 4 percent of the respondents were familiar with the terms carbon dioxide capture and storage or carbon storage. Some of the stakeholders we interviewed explained that public opposition could indeed **grow** when CCS extends beyond the relatively small projects used to enhance oil and gas recovery, to include much larger CO2 sequestration projects located in more populated areas. One noted, in particular, that a lack of education about CCS’s safety could potentially create confusion and **fear** when commercial-scale CCS is implemented.

**Plan faces public opposition**

**Amann 10** Scholarly Group of Environmental and Energy Experts (Rachel Amann, December 31, 2010, “A Policy, Legal, and Regulatory Evaluation of the Feasibility of a National Pipeline Infrastructure for the Transport and Storage of Carbon Dioxide: Interstate Oil and Gas Compact Commission,” <http://www.sseb.org/downloads/pipeline.pdf)//DR>. H

In addition to the purity issue and the EPA actions on CO2, there also are political issues associated with the development of the CO2 infrastructure. Whether CO2 is treated as a commodity, pollutant, or transport resource to be managed, the likelihood of public opposition to pipeline transport is **high**, just as with other resource infrastructure.

FERC Bad

**FERC’s past failures destroyed all credibility—the agency empirically fails at enforcing regulations**

**CFA 02** (The Consumer Federation of America, October 8, 2002, “Opposition to FERC proposal reflects fundamental economic characteristics, consumer report contends,” <http://www.power-eng.com/articles/2002/10/opposition-to-ferc-proposal-reflects-fundamental-economic-characteristics-consumer-report-contends.html)//DR>. H

¶ The report argues that because deregulation of markets in the West and South would provide opportunities for transmission owners and power generators to exploit and manipulate the system, it is especially important to consumers in these regions for the FERC to have a highly developed and credible plan for preventing abuse.¶ Such a plan requires a clear definition of abuse, strong penalties, and a vigorous enforcement mechanism.¶ According to the report, in the FERC design, the agency defines market power with a complex array of potentially conflicting measures that could lead to indecisiveness. The report also said that FERC has not yet adopted a precise benchmark cost standard, based on the actual cost of production, against which overcharges should be measured. In addition, it contends that penalties are left to transmission organizations that haven't yet been formed.¶ The report claims that FERC's handling of the California crisis has destroyed its credibility as a consumer protection agency and it has done little to restore confidence in its abilities to enforce the law.¶ "FERC's own studies show that there is little to be gained from reliance on market-based regional transmission organizations," states Dr. Cooper. "This paper shows that in the South and West, there is a lot to be lost in terms of increased prices and monitoring to prevent market abuses is not the solution."

**FERC oversight drives up consumer utility costs**

**Pechman 08** Economist and the founder of the energy consulting firm Power Economics (Carl, February 12, 2008, “Cleaning up FERC's mess,” <http://election.sfbg.com/2008/02/12/cleaning-fercs-mess)//DR>. H

In the late 1980s, Federal Energy Regulatory Commission member Charles Trabant warned that "the only thing that we have to fear is FERC itself." He was speaking about his agency's aggressive policy of preempting state regulatory powers — and undermining the rights of consumers — to encourage utility competition. This spring the Supreme Court will decide whether or not Trabant was right.¶ FERC's response to the California energy crisis was too little too late.¶ At the height of the crisis FERC urged the state and many utilities — desperate to reduce the immediate cost impact of the crisis — to purchase long-term power supply contracts. Energy traders call this type of transaction "blend and extend" because the contract is a mix of short- and long-term prices. During this period, California and many utilities followed FERC's advice and took advantage of this form of contract with the objective of extending the contracts long enough to keep short-term prices down. One utility, for example, tried to limit prices to a 35 percent rate increase. While the immediate effect was to reduce prices, sellers ended up gaining crisis-related scarcity profits over the longer term of the contract.¶ After the crisis abated FERC found that short-term prices — including those that had been used in many utilities' blended contracts — were unjust and unreasonable and ordered sellers to refund revenues that exceeded an administratively determined just price. However, FERC denied the pleas of the state of California and others for adjustments to long-term contract prices. Ironically, it did so based on a "public interest standard," a financial test that considers the welfare of sellers but not that of customers. The public interest standard evolved to enable sellers to unilaterally raise a contract price that is below cost in order to avoid financial harm. Clearly, these were not the circumstances facing those who purchased power to temper customer costs. FERC just reckoned that the price would be passed on to customers.¶ The federal courts overturned the FERC decision. The 9th Circuit Court of Appeals found that FERC's oversight was "fatally flawed" and "offers no protection to purchasers victimized by the abuses of sellers or dysfunctional market conditions that FERC itself only notices in hindsight."

**FERC empirically fails at enforcing regulatory regimes**

**Lieberman 02** Senate Hearing**,** Senate Homeland Security and Governmental Affairs Chairman (Joe, November 12, 2002, “Asleep at the Switch: FERC’s Ovevrsight of Enron Corportation,” Volume 1, Government Printing Office, <http://www.gpo.gov/fdsys/pkg/CHRG-107shrg83483/html/CHRG-107shrg83483.htm)//DR>. H

Second, the agency failed to anticipate or prepare for changes occurring in the energy markets, which are among the most volatile and rapidly evolving sectors of our economy. Americans depend on our regulatory agencies to keep the economy fair and efficient, to anticipate major developments, and to stay on top of where those markets they monitor are headed.¶ Despite the fact that Enron Online and other electronic trading platforms had grown into a powerful force by the year 2000 and were expected to dominate energy trading, FERC failed to even complete a basic study of whether regulating those platforms was its job or the job of another governmental agency, in this case, probably the Commodity Futures Trading Commission. Without even that critical step completed, FERC and the rest of the Federal Government could not begin to develop any long-term public policy strategy about how to keep these emerging market tools fair and efficient.¶ Third, FERC reacted belatedly to many serious offenses, letting possible market abuses go uncorrected and unchallenged for many months. Too often, in place of effective oversight, the agency offered timid hindsight. For instance, in November 2000, a FERC staff investigation into the causes of the California energy crisis concluded that power sellers had the potential to manipulate the power market. I'm tempted to add to my prepared statement what my teenage daughter would say here, duh, right?¶ After coming to that obvious conclusion, which cried out for immediate follow-up, FERC took over a year to launch an investigation into the market behavior of individual companies during the California energy crisis, and that was only after Enron actually collapsed in early December of last year. Energy consumers on the West Coast should have had the Federal Government on their side during the energy crisis in 2000, not 6 months or a year later.¶ And the companies who may have tried to manipulate the market, or, in fact, any who may be thinking about doing it in the future, need to understand that FERC will be a sophisticated and sharp watchdog, not a listless and lackadaisical bystander.¶ Of course, this is made all the more clear and compelling by the recent plea of guilty by the head of trading for the Western markets for Enron in regard to--and we'll get into this in further detail--in regard to manipulation of the markets that he, as a significant employee of Enron's, was involved in.¶ Remember, FERC is the regulatory agency that led the movement toward widespread deregulation of the energy business. Of course, there was plenty of support for the deregulation in the private sector. But FERC was a supporter, and, therefore, it makes it particularly ironic, and I would say irresponsible, that FERC exhibited little or no vigilance to ensure that participants obeyed at least minimal rules of fair play in the deregulated marketplace.¶ FERC often seemed to view itself not as a regulator but as a facilitator, not as a market cop but as a market cheerleader, and that left consumers with nothing to cheer about.¶ When market players are given unprecedented latitude in a previously regulated market, there must be some effective checks and balances. No matter how passionately we believe in competition and capitalism as the best system for economic growth and opportunity, the invisible hand cannot do it all. We have seen this over our history, over and over again. The fact is that markets inherently have no conscience. To ensure the integrity of our markets, the invisible hand needs to be assisted by the fair hand of government oversight in the public interest and private sector self-regulation.¶ Fourth, FERC made no effort to address the gaps, flaws, and inadequacies in the regulatory structure that allowed Enron's most questionable business practices to go without scrutiny. For example, Enron had applied to the SEC requesting a special exception to the Public Utility Holding Company Act. Under FERC's rules, simply requesting such an exception allowed Enron to repurchase a number of its wind farms while retaining that special rate status I referred to earlier, and apparently allowed it to earn tens of millions of dollars above what it would otherwise have earned from those projects.¶ For more than 2\1/2\ years, the SEC sat on the application without reviewing it. Did anyone at FERC pick up the phone and ask the SEC about the status of those applications? Did these two lead regulatory agencies, FERC and the SEC, ever talk to each other about these applications? To the best of our staff's ability to find an answer to those questions, the answer is a disquieting one, which is no.¶ It's frustrating enough when major market abuses escape government regulation because perpetrators are crafty enough to fly under the government's radar, but it is really infuriating when clear signals are right there on the screen and the people manning the stations do not see them or keep their eyes closed. FERC and the SEC had the opportunity, indeed the responsibility, to close that regulatory gap and did not.¶ Fifth, FERC all too often relied on shortcuts and cursory analysis of the markets to come to overly optimistic conclusions about the potential effects of market manipulation.