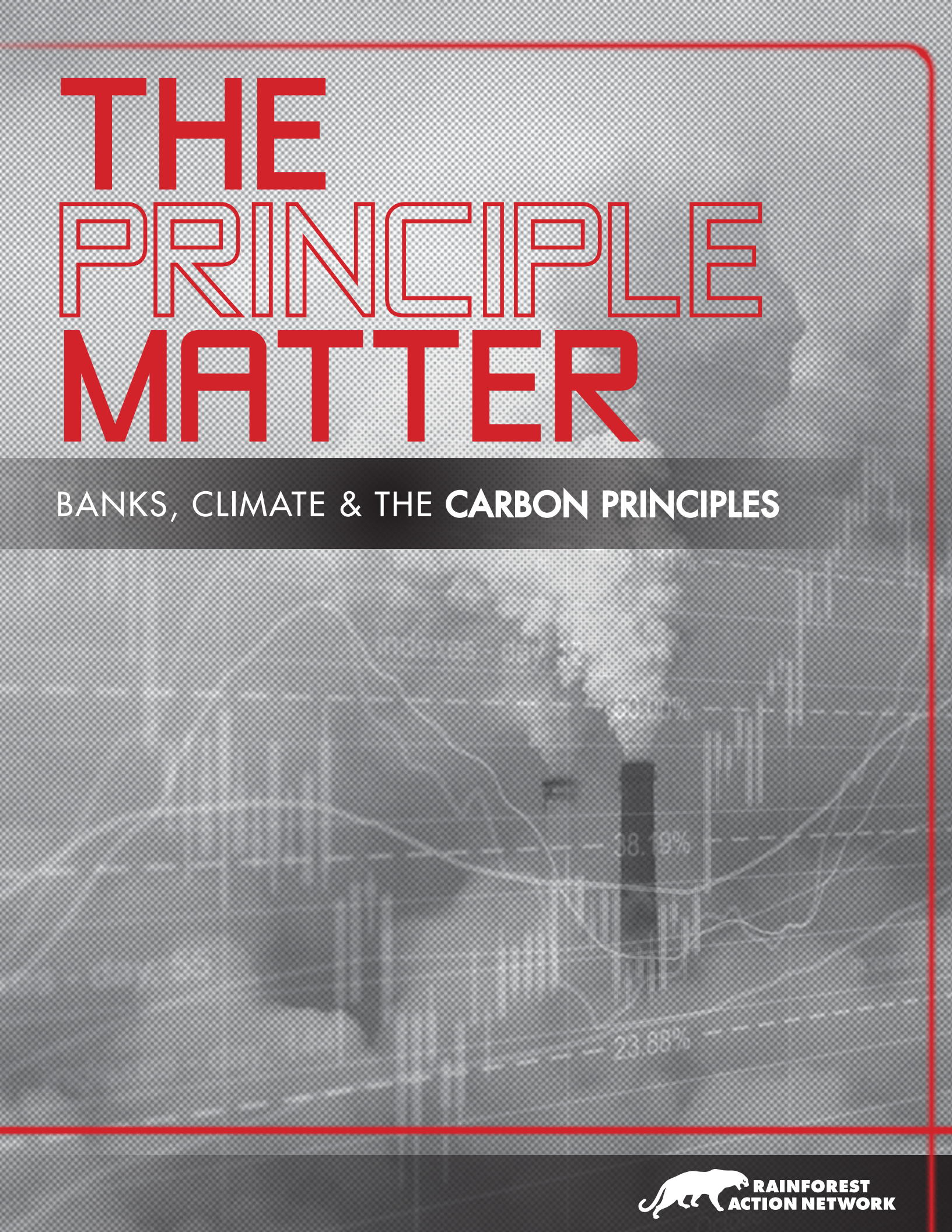
THE PRINCIPLE MATTER

BANKS, CLIMATE & THE **CARBON PRINCIPLES**



RAINFOREST ACTION NETWORK

INTRODUCTION

In February 2008, three leading banks, Citi, JPMorgan Chase and Morgan Stanley, announced common coal power financing policies, known as the Carbon Principles. The principles were designed to address the risks associated with regulatory uncertainty of carbon emissions, and were also a direct response to growing public concern over plans for more than one hundred new coal-fired power plants. The risk of those plants being built would lock the United States into a carbon-intensive utility sector future with hundreds of millions of tons of new and additional CO_2 emissions every year. The Carbon Principles placed stricter due diligence conditions on these banks for financing the construction of new coal fired power plants in the United States.

When the Carbon Principles were created, they were one of the first industry-wide statements from the banking sector specifically addressing climate change and carbon-intensive investments. Taking a cue from many other sectors of the economy that have acknowledged the urgency of climate change, the Carbon Principles were welcome additions to the diverse chorus recognizing that the private sector must respond to climate change without waiting for slow-moving governments. Banks recognized that carbon-intensive investments posed great risks, and that carbon must be included in traditional models for assessing risk.

According to the bank proponents, The Carbon Principles: *"Represent the first time that financial institutions, advised by their clients and environmental advocacy groups, have jointly committed to advance a consistent approach to the issue of climate change in the US electric power industry."*

The Carbon Principles were the outcome of a nine month bank led process to evaluate and address *"carbon risks in the financing of electric power projects"* in the United States. Since the Principles were released, Wells Fargo, Bank of America and Credit Suisse have subsequently become signatories.

This review of the Carbon Principles was completed by Rainforest Action Network (RAN) to assess their implementation and impact on the financing of U.S. coal-fired power plants and alternative low-carbon energy sources.

In compiling this review, RAN:

» Compared Carbon Principles with non-Carbon Principles bank underwriting in the U.S. electricity sector;
» Reviewed signatory bank reporting of Carbon Principles implementation;
» Interviewed bank and civil society participants in the Carbon Principles process;
» Examined alternative policy frameworks.

PHOTO: KENT KESSINGER / APPALACHIAN VOICES, FLIGHT COURTESY OF SOUTHWINGS

CONTEXT FOR THE CARBON PRINCIPLES: THE NEW COAL RUSH

In 2005, the Department of Energy's National Energy Technology Laboratory (NETL) published a list of 151 proposed new coal power plants. The NETL database helped galvanize public attention to the negative impacts on the ability of the United States to meet any scientifically meaningful green gas emission reduction targets if even a fraction of these 151 planned new coal power plants were built.

TXU – KING OF THE COAL RUSH

Leading the new coal power plant charge, TXU, the fifth biggest energy utility in the country[1], announced on Earth Day in 2006 plans to construct 11 new conventional coal fired power plants in Texas. The plan was to use a standardized "cookie cutter" power plant design intended to speed construction and reduce costs. This $11 billion build-out project, the largest single proposed new coal power construction project of any utility in the U.S., became a lightening rod at both the regional and national levels, attracting the active opposition of a diverse set of stakeholders concerned about a range of negative health, environmental and economic impacts.

The 11 new coal fired plants would have increased TXU's CO_2 pollution emissions by 78 million tons of CO_2 per year, an amount equivalent to 80% of the UK's entire Kyoto Protocol emission reduction commitment, 100% of Japan's, and 200% of Canada's. TXU was also starting to vet plans to construct even more coal fired power plants in the Midwest, which, if implemented, would have vaulted the company into the rank as number one corporate greenhouse gas emitter in the United States.

Oblivious to the climate implications, in June of 2006, Citi, Merrill Lynch and Morgan Stanley provided an $11 billion bridge loan to help initiate financing for TXU's new coal power plant construction project. Shortly thereafter Rainforest Action Network (RAN) and others launched a campaign to draw attention to the financing role of these banks in the coal rush. RAN also approached other major banks in North America, Europe and Japan to alert them to the high carbon risks of TXU's project.

In a surprising move, on February 26, 2007, two large U.S. hedge funds, Texas Pacific Group and Kohlberg Kravis Roberts, announced that they had struck a $45 billion deal to take TXU private in the largest leveraged buyout deal in U.S. history. As part of the deal, the new owners announced that they would suspend plans for 8 out of the 11 planned new coal fired power plants, which in turn freed up capital pledged to their construction to help finance the deal itself. Goldman Sachs, Morgan Stanley, JPMorgan Chase, Citigroup and Lehman Brothers provided $4 billion in equity "bridge" financing for the deal. The same banks also took on the $14 billion in existing TXU debt and $24 billion in new term debt to help close the deal.

PHOTO: ANDREW STERN

THE BIRTH OF THE CARBON PRINCIPLES

The TXU buyout served as a wake-up call to Wall Street banks that carbon risk was a growing and poorly assessed material isssue on a number of levels. To address this, three of the banks involved in the TXY debacle: Citi, JPMorgan Chase and Morgan Stanley, initiated a dialogue in May of 2007 that led to the development and release of the Carbon Principles in February 2008.

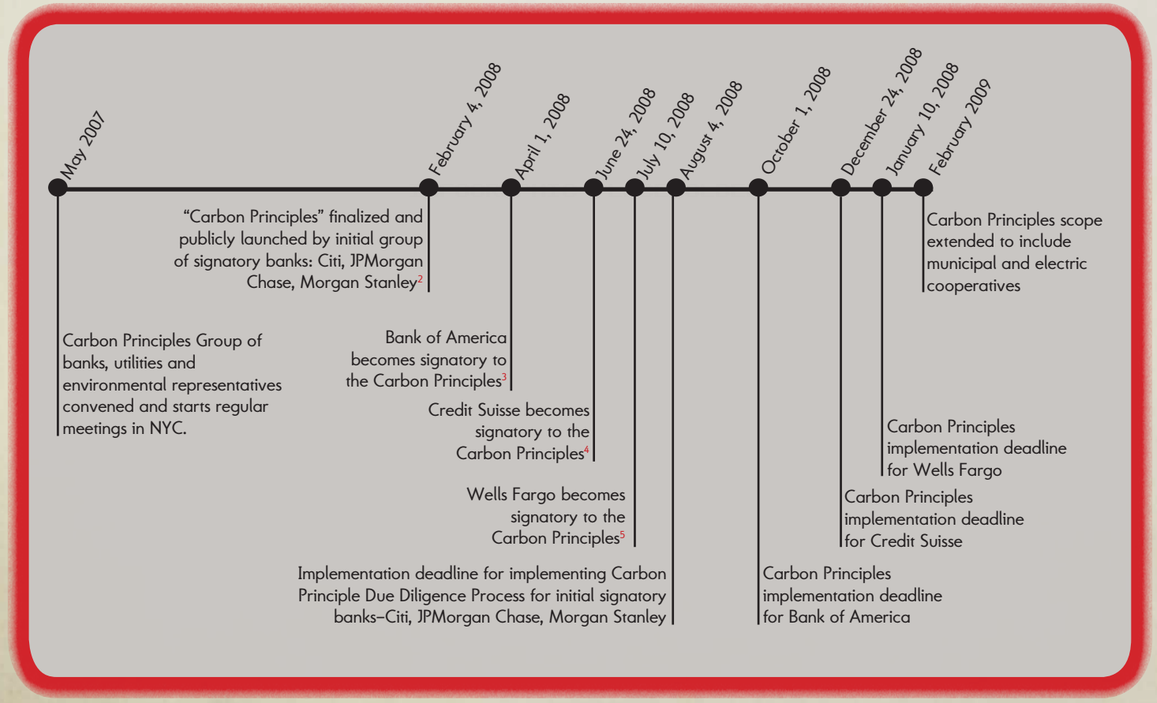
The signatories to the Carbon Principles commit to the following:

"Encourage clients to pursue cost-effective energy efficiency, renewable energy and other low carbon alternatives to conventional generation, taking into consideration the potential value of avoided CO2 emissions.

Ascertain and evaluate the financial and operational risk to fossil fuel generation financings posed by the prospect of domestic CO2 emissions controls through the application of the Enhanced Diligence Process. Use the results of this diligence as a contribution to the determination whether a transaction is eligible for financing and under what terms.

Educate clients, regulators, and other industry participants regarding the additional diligence required for fossil fuel generation financings, and encourage regulatory and legislative changes consistent with the Principles."

TABLE 1.1 CARBON PRINCIPLES CHRONOLOGY



New coal power plants are capital intensive, costing as much as $4 BILLION to build, with construction project cycle times as long as FIVE YEARS for larger power stations.

In August 2008 the Carbon Principles came into effect for financing of investor owned utilities. In February 2009 their scope was further extended to include transactions for public power and electric cooperatives. To date, the Carbon Principles only apply to transactions in the United States. Most of the signatories to the Carbon Principles have a large global banking presence or are implementing strategies for global growth of their commercial banking businesses. New coal power plants are capital intensive, costing as much as $4 billion to build, with construction project cycle times as long as five years for larger power stations. The Carbon Principles themselves have only been in effect for two years. During this period a limited number of new coal power plant proposals have been moving forward and have received financing. (Table 1.2)

TABLE 1.2: STATUS OF COAL POWER PLANT CONSTRUCTION IN THE U.S., JUNE 2010[6]

13	actively seeking permits
5	permitted, ready to start constructon in 2010
12	under construction as of June 2010
10	completed since August 2008
48	cancelled, abandoned or put on hold 2008-June 2010

The Carbon Principles are process standards and not performance standards. They require that clients provide information demonstrating that the utilities have considered energy efficiency and renewable energy opportunities. They do not specify, for example, a carbon intensity threshold for new power generation above which the banks would not provide financing. Examples of such carbon intensity performance standards include the one mandated by the State of California, which excludes Californian utilities from making new long term investments or contracts with in or out-of-state providers of electricity from conventional coal or any other source with a carbon intensity greater than that for new combined cycle natural gas power plants[7].

Carbon Principles (CP) banks dominate loan and bond underwriting for the U.S. utility sector

WALL STREET BANKS AND UTILITY SECTOR FINANCING

The CP banks comprise six of the top seven ranked banks in Bloomberg League Tables for underwriting and loans in the electric utility sector in the U.S. (Table 1.2). They also accounted for more than 55% of the $125 billion in loan and bond underwriting in the United States to the sector from the beginning of the Carbon Principles implementation date of August 4, 2008 through June 30, 2010"[8].

Table 1.3 shows that the CP banks dominate loan and bond underwriting for the U.S. utility sector. A significant portion of this financing is to companies that are actively pursuing permitting for or construction of new coal-fired power plants in the U.S. At first level of screening, no clear pattern emerges distinguishing CP banks from non-CP banks by the percentage of financing deals that involve such utilities. It is clear, CP banks are not disproportionately avoiding financing deals with clients actively pursuing new coal.

INDUSTRY PARTICIPATION IN CARBON PRINCIPLES DEVELOPMENT

The Carbon Principles were developed in consultation with the U.S. electricity utilities sector, including representatives from American Electric Power, CMS Energy, DTE Energy, NRG Energy, PSEG, Sempra and Southern Company, as well as environmental representatives from Environmental Defense, NRDC and CERES"[9]. In total, the seven utility companies above are responsible for nearly 10 percent of the total CO2 emissions in the United States, emitting approximately 496 million tons of CO2 in 2006. If these seven companies were a country, they would be the 10th largest greenhouse gas emitter in the world"[10]. 85 percent of the seven companies combined electricity generation comes from combustion of coal. (See Appendix for profiles of the participant utilities.) The Carbon Principles require that prior to financing new coal power generation in the U.S. the company should demonstrate that it has evaluated cost-effective energy efficiency and renewable energy opportunities, and identified CO2 pipeline routes to potential underground storage sites if carbon capture and sequestration is mandated in the future.

85 percent of the seven companies combined electricity generation comes from combustion of coal.

TABLE 1.3: CARBON PRINCIPLES VS. NON-CARBON PRINCIPLES BANK UNDERWRITING IN THE U.S. ELECTRIC UTILITY SECTOR

TOP 10 BANKS (ORDERED BY MARKET SHARE)	PERCENT OF ISSUES TO COMPANIES PURSUING NEW COAL	TOTAL AMOUNT OF UNDERWRITING IN SECTOR (USD)
BANK OF AMERICA	15%	$15,297,000,000.00
JP MORGAN CHASE	26%	$14,710,000,000.00
BARCLAYS CAPITAL	28%	$11,324,000,000.00
CITI	27%	$10,581,000,000.00
WELLS FARGO & CO.	22%	$10,556,000,000.00
CREDIT SUISSE	35%	$9,662,000,000.00
MORGAN STANLEY	16%	$8,660,000,000.00
RBS	16%	$8,275,000,000.00
UBS	28%	$5,559,000,000.00
GOLDMAN SACHS	39%	$5,473,000,000.00

BANKS IN RED ARE CARBON PRINCIPLES SIGNEES.

Source: Top 10 banks from Bloomberg League Table of underwriting and loans for power generation projects and independent power producers and for electric utilities generally (generation, transmission, distribution) in the US for the period of August 3, 2008 to June 30, 2010. For full data ser, see Annex 3

REPORTING

SIGNATORY BANKS

Despite being very public about signing onto the Carbon Principles, none of the banks are adequately reporting details on when and how the Principles are being triggered. While some banks are reporting the number of transactions triggered by the Principles, others are not. This lack of disclosure makes it impossible to verify when the Principles are being triggered, and assuming the due diligence was performed, what the outcomes of those efforts were. There is no way to determine if the Carbon Principles are having an impact on client choices, driving clients towards low-carbon pathways, or even if the Principles are even being adequately applied.

Bank of America

Public Report?
No. Did not publish Environmental Progress Report in 2009. 2010 report mentions CP signatory status only.

Transactions Triggered by CP?
No information publicly available.

Details?
No information publicly available.

JPMorganChase

Public Report?
Yes. 2008 and 2009 Corporate Responsibility Reports.

Transactions Triggered by CP?
3 in 2008. 8 in 2009. No information of any relevant transactions declined.

Details?
1 credit facility loan. 7 general corporate purpose bonds. All to companies with coal power plants already started construction prior to 2009.

citi

Public Report?
Yes: Global Citizenship Report 2008, 2009

Transactions Triggered by CP?
4 transactions in 2008, 2 transactions in 2009, but no details given as to clients. No information of any relevant transactions declined.

Details?
2008 all bonds
2009 both municipal finance loans

WELLS FARGO

Public Report?
Yes. 2010 Environmentally Responsible Lending Report.

Transactions Triggered by CP?
No transactions in 2009, 1 transaction in 1Q 2010.

Details?
No information publicly available.

CREDIT SUISSE

Public Report?
No. Becoming signatory to Carbon Principles mentioned in 2009 Corporate Citizenship Report, but no discussion of transactions.

Transactions Triggered by CP?
No information publicly available.

Details?
No information publicly available.

Morgan Stanley

Public Report?
No. Signatory to Carbon Principles mentioned in Sutainability 2009 report, but no information given on the number of transactions

Transactions Triggered by CP?
No information publicly available.

Details?
No information publicly available.

CASE STUDY

As we have noted, there is little public disclosure given in the process of financial transactions. Triggering the due diligence process of the Carbon Principles happens behind closed doors, and its role in the outcome of a deal is generally not articulated publicly. However, recent proposed coal-plants by American Municipal Power provide an example with which to analyze if and how the Carbon Principles impact the financing arrangements for these projects. This is the only known public case in which a signatory bank preemptively stated that the Principles would not be a concern, before even performing the due diligence to determine this fact.

AMERICAN MUNICIPAL POWER

In November 2009 American Municipal Power (formerly AMP-Ohio) announced the cancellation of a controversial, 1,000 megawatt pulverized coal plant in Meigs County, Ohio. The project (AMPGS) was estimated to cost nearly $4 billion, up from initial estimates of $1.2 billion in 2005. The project was expected to release at least 7.3 million tons of greenhouse gas emissions annually[11]. Both local and national environmental organizations mobilized opposition to this project, working with local community members and municipalities in repeatedly delaying the project.

In September 2007 AMP entered into a Credit Agreement with a syndicate of commercial banks led by JPMorgan Chase (JPMC), with a total available line of credit of $550 million[12].

Needing to secure nearly $4 billion from a bond placement for AMPGS, AMP contacted JPMC in early 2008 with concerns regarding how the Carbon Principles might affect the company's ability to raise capital. On February 7, 2008, a response from JPMC, which was leaked to the press, assured AMP that "*[n]othing in the Principles prevents us from underwriting debt or providing financing for AMP-Ohio's projects or is intended to do so*"[13].

At that time, the Carbon Principles technically excluded public power entities and applied only to investor-owned utilities. However, on March 20, 2008 the *Wall Street Journal* reported that Carbon Principles banks were in discussion with municipal utilities and looking to include municipal entities in the Carbon Principles, citing that the guidelines *"have made it easier for public utilities to continue pursuing coal-fired plants"*[14]. We assume that the same spirit, concerns, and risks outlined by the Principles would be relevant in this case study.

Concurrently, AMP was helping develop the Prairie State Energy Campus (PSEC) in Illinois, a 1600 megawatt coal plant, with joint ownership between Peabody Energy, AMP, and several other municipal utilities. In March 2008, *The Chicago Tribune* called the project the "largest source of carbon dioxide built in the United States in a quarter-century"[15], estimating that it would release 13 million tons of greenhouse gasses into the atmosphere annually. This project also had skyrocketing costs – doubling from initial estimates to $4.4 billion.

On March 24 2008, it was reported that AMP planned a $450 million short-term bond issue to partially finance the PSEC. However, upon consultation with JPMC over investor concerns on the project AMP ended up only selling $120 million of the notes[16]. A 2009 PSEC Bond issue explains that the September 2007 Credit Agreement from JPMC is being used to provide interim financing for the costs of AMPGS[18]. It is unclear if the Carbon Principles played a factor in this situation, but the public statement given cited market conditions generally as well as confidence that capital could still be secured at a later date. Indeed, AMP has subsequently secured hundreds of millions of dollars in bond placements for the PSEC. Most recently $300 million in 2010 Series Bonds were sold for the project– underwritten by J.P. Morgan Securities, and purchased by several Carbon Principle banks, including J.P. Morgan Securities, Merrill Lynch, and Wells Fargo.

While AMPGS ultimately was cancelled, expressed financial support for the project was given by JPMC - before the due diligence mandated by the Carbon Principles would have been performed. The even larger, more polluting and arguably riskier PSEC was able to secure financing from a number of signatory banks despite difficult economic conditions. These are both projects that should have raised red flags regarding the carbon risk posed - both in light of tumultuous economic times as well as the political uncertainty of looming. There appears to be little indication that the Carbon Principles impacted financing for either project.

PHOTOS: OHIO STUDENT ENVIRONMENT COALITION

ALTERNATIVE POLICY FRAMEWORKS

The Carbon Principles was one of the first widely adopted policy frameworks in the banking sector that addresses the risks specifically posed by carbon-intensive investment and climate change. However, several other policies have emerged since then that offer a more comprehensive approach to addressing climate change from both a frame of ecological and social responsibility as well as addressing the economic risk posed by carbon-intensive investments.

The Carbon Principles have often been compared to The Equator Principles, which were created in 2003 to address "social and environmental risk in project financing" and have since been signed by over 65 international banks. However, there are several important distinctions between them. While the Equator Principles are limited only to project finance specific financing arrangements, the Carbon Principles are a framework looking at transactions that include corporate financing, bond issuance, and even advisory services. The Carbon Principles affirm that banks can create policies that address a broader spectrum of corporate financing and services, beyond project financing.

The Climate Principles are a similar industry-wide framework, created in December 2008 by primarily European and international banks including Credit Agricole, HSBC, Munich Re, Standard Chartered, and Swiss RE. While similar to the Carbon Principles in terms of incorporating a risk analysis regarding carbon and climate into their due diligence protocols, the Climate Principles look more broadly at carbon-intensive aspects of their operations, clients, and transactions rather than only looking at coal-fired power plants. They also go beyond concern for immediate risk in a transaction, and also seek to address greenhouse gas impacts of their supply chain while explicitly acknowledging the urgency of the climate crisis and the need for collective societal action.

While industry-wide policies may appear simpler and more comprehensive, bank-specific policies often can lead to a more robust framework, rather than the lowest-common-denominator agreements across competitors. For instance, Bank of America has created a specific emissions-intensity target for its investment portfolio, and is aiming to lower the carbon-intensity of its portfolio by specific targets. Eight US and Swiss banks have also created sector-specific policies limiting their financing of mountain-top removal coal mining.

While several Carbon Principles signatory banks have pledged to reduce their emissions from their direct operations (physical buildings, travel etc), Bank of America also recognizes its responsibility to reduce "financed emissions" or the emissions associated with its client portfolio. In 2004, the bank committed to reduce the emissions rate from its utility portfolio by 7 percent by the end of 2008. Bank of America did meet this modest goal, but did not continue or expand its commitment.

The German bank WestLB recently announced its Policy for Business Activities Related to Coal-Fired Power Generation. This policy provides more than just a "due diligence framework", but actually creates sector-specific regulations. While these regulations do not bar financing of new coal-fired power plants, they do create tangible performance benchmarks that can be reported and verified, and concretely push the industry to pursue cleaner energy projects.

It is unclear why the guidelines of the Carbon Principles merited a stand-alone policy document.

CONCLUSION

While lacking clear guidelines from national or international political institutions, the global economy has responded to climate change in myriad ways – from investment in clean energy technologies to voluntary commitments to reduce emissions.

The Carbon Principles are not concerned with recognizing or addressing the environmental, social, or economic impacts of climate change and a carbon-intensive economy, they were adopted to address the "growing uncertainty around federal climate change policy and potential carbon costs." In this way, the Principles reflect only a short-term responsibility to shareholders and profit, not recognition of responsibility to communities concerning the climate nor a comprehensive commitment to the transition to a low-carbon economy.

At their launch, the Carbon Principles were touted by banks as an indication of the "Greening" of the banking sector, or at least as a step towards stronger corporate social responsibility from this sector. But despite dozens of media articles, press releases, and public comments that imply that the Carbon Principles are a step forward for corporate social responsibility – nothing in the Carbon Principles makes reference to such broader concerns.

It is unclear why the guidelines of the Carbon Principles merited a stand-alone policy document. Banks should be expected to perform due diligence with a client that encompasses all aspects of risk – this is standard practice in any industry. Incorporating the risk associated with carbon should not be seen as any more unusual than assessing the revenue streams, debt ratios, or management competency of a client. The Principles represent business-as-usual for a bank, and singling out one aspect of standard due diligence for accolades seems unwarranted.

In summary - have the Carbon Principles restricted financing to coal-fired power plants? Have they encouraged clients to evaluate low-carbon alternatives to coal-fired power plants? Are they adequately addressing the social and environmental risks posed by carbon-intensive projects? Are they even adequately minimizing the financial risk to investors in such projects - given the tremendous uncertainty of regulatory action? The answer is no to all these quesitions. Our research reveals that, while the broader economy has been shifting away from coal for myriad reasons, banks that have signed onto the Carbon Principles are continuing with business-as-usual in regards to coal and carbon.

KEY FINDINGS:

- The Carbon Principles do acknowledge that precautionary policies can be enacted by banks, and can be applied across the board to all types of client services.
- The Carbon Principles affirm the principal of active engagement with outside environmental NGO stakeholders in developing due diligence procedures.
- The Carbon Principles address the economic risk of financing climate change, rather than the environmental risk of providing this finance.
- The Carbon Principles are not a unique or innovative set of guidelines – they are simply a publicly articulated set of due diligence practices that address a real material risk as would be normally expected practice from the financing industry.
- There is no evidence that the Carbon Principles have stopped, or even slowed financing to carbon-intensive projects.
- There is no evidence that the Carbon Principles have spurred investment into clean energy investments in greater levels than what is happening across the economy.

RECOMMENDATIONS

RAN calls upon leading financial institutions to develop a robust framework of policies and practices to address climate risk, which should include:

- Phase out support for new and existing coal extraction and delivery projects
- Phase out support for new and existing coal-fired power plants
- Public acknowledgement of the risks and urgency of the climate crisis, and the need for economy and society-wide responses.
- Assess and report on the GHG emissions associated with all their loans, investments and other financial services (Financed emissions) to develop a baseline on which to set reduction targets, starting with the most GHG intensive sectors.
- Establish portfolio and business-unit emissions reduction targets in line with what is considered necessary to stop climate change from unfolding, as based on current scientific consensus on climate stabilization;
- Performance, not just procedural, standards for financial transactions and client engagement.
- Science-based emissions reduction targets that include emissions from both operational as well as financed emissions.
- A commitment to support political climate policy frameworks and emission reduction goals that will limit global temperature rise to between 1.5-2C
- A commitment to dramatically increase support for financing emissions reduction technology, renewable energy production and energy efficiency in all business lines
- Development of products and services to help retail customers address climate change

There is no evidence that the Carbon Principles have spurred investment into clean energy investments in greater levels than what is happening across the economy

ENDNOTES AND REFERENCES

ANNEX 1: LIST OF NEW COAL-FIRED POWER PLANTS

The Sierra Club database shows new coal fired power plants above 200MW that are actively progressing permitting or are under construction or completed construction in the fourth quarter of 2009. Search as of Dec 17, 201014.

These include:

In active permitting process, near construction

1. North American Power Group – Wyoming - Two Elk 325MW in active permitting process
2. Chase Power/Las Brisas Energy Center – Texas - Las Brisas 1,300MW in permitting process
3. South Texas Electric Cooperative/ International Power Texas- Coleto Creek Expansion 650MW in final permitting
4. Tenaska – Texas- Tenaska 600MW in final permitting process, will look for financing soon. CCS new plant. Hoping to start construction in 2010, get financing[19]
5. NRG Energy Texas – Limestone III 744MW in final permitting process (Bloomberg LT)
6. Old Dominion Electric Cooperative – Virginia- Cypress Creek Power Station 1.5GW in final permitting process
7. Excelsior Energy – Minnesota – Mesaba Energy Project (IGCC) 603MW in final permitting process
8. Sunflower Electric Power Corp/Tri-State Generation and Transmission Association – Kansas - Holcomb/ Tri-State 895MW in permitting final process
9. Erora Group – Kentucky - Cash Creek IGCC 770MW in final permitting (IGCC plant, like Taylorville. Project finance prospects[20]
10. LS Power Development/Longleaf Associates Georgia - Longleaf 1200MW in final permitting (litigation active[21]. Community opposition[22], permit to start extended to 2011)
11. Tenaska/Erora Group/ Christian County Generation Illinois - Taylorville Energy Center 770MW actively seeking permit (DOE $2.5 billion loan guarantee, July 2009[23]; this would be IGCC with CCS, pipeline routes identified, actively looking for financing[24,25] HOT[26] construction and financing study[27])
12. LS Power Development Arkansas: Plum Point II 665MW in permitting process, need uncertain
13. Wellington Development – Pennsylvania - Greene County 525MW has most permits, apprpoved since 2008, but no sign of construction yet.

Near construction start in 2010

1. Power4Georgians – Georgia - Washington County Power Station 850MW final air and water permits issued (Bloomberg LT). Air permit rejected, construction halted Dec 2010. 2. LG&E – Kentucky - Trimble 750MW final air and water permits issued December 2009. LG&E sold to PPL Capital Funding, June 2010. (Bloomberg LT)
2. NRG/Louisiana Generating – Louisiana – Big Cajun I 230MW near construction (Bloomberg LT)
3. Southern Company/Mississippi Power Company Mississippi – Mississippi Power Kemper IGCC 582MW permits approved, ready to start construction in second half of 2010 (Bloomberg LT)
4. White Stallion Energy Center, LLC Texas - White Stallion Energy Center 1.3Gw actively seeking permit (litigation active, July 2010 ruling sets back at least six months[28])
5. Public Power Generation Agency, Hastings Utilities Nebraska - Whelan Energy Center II 220MW under construction (not Bloomberg. 2009 financing to complete project, Build America Bonds and tax exempt bonds[29])

4/5 with financing to an associated company identified in Bloomberg League Table search

Under construction

1. Dominion, AEP, Appalachian Power Virginia - Virginia City Hybrid Energy Center Wise Co. 585MW under construction (Bloomberg LT)
2. Duke Energy/Vectren – Indiana - Duke Energy/Vectren Edwardsport 630MW 55% construction completed as of May 2010, expected to be operational in 2012 (Bloomberg LT)
3. Basin Electric Power Cooperative Wyoming – Basin/ Dry Fork 385MW under construction (members on Bloomberg LT: Tri-state)
4. American Electric Power/Southwestern Electric Power Company Arkansas – Hempstead (AEP) Turk 600MW under construction (Bloomberg LT)
5. Great Plains Energy & Kansas City Power and Light Missouri - Iatan (Kansas City Power & Light) 850MW under construction (Bloomberg LT)
6. Peabody Energy Illinois - Prairie State/Peabody 1,500MW under construction (not Bloomberg. Other financing: Illinois Finance Authority[30]; Illinois Power Authority[31]; AMP-Ohio revenue bonds[32], [33]
7. City Public Service of San Antonio Texas - Spruce 750MW under construction, started in 2006. (not Bloomberg. Other financing, bonds offer 2010[34]. CPS Energy owned by the City of San Antonio, which is offering revenue bonds to fund the construction[35],[36]. EE and RE study[37]
8. GenPower, LLC West Virginia - Longview/ Monongalia County 695MW under construction (not Bloomberg. Formed 2006 with $1.6billion Longview as first project[38]. Additional financing in 2009[39]. This is a merchant power plant[40])
9. Duke Energy – North Carolina - Cliffside 800MW under construction 60% complete as of May 2010, expected operational in 2012 (Bloomberg LT)
10. LS Power Development Arkansas - Plum Point I 665MW construction started 2007, to be completed in 2010 (aka Dynegy. Bloomberg LT)
11. We Energies & Madison Gas Wisconsin - Oak Creek/ Elm Road 1200MW construction completed on unit 1 January 2010[41] Second unit to be ready later 2010 (Bloomberg LT)
12. LS Power Development/Dynegy/Sandy Creek Energy Associates – Texas - Sandy Creek 800MW. Permits still being litigated (Bloomberg LT). Litigation has halted further construction, Nov. 2010, project`ed to go online 2012

9/12 with financing since August 2008 for company as identified in Bloomberg League Tables

Construction recently completed

1. Santee Cooper South Carolina - Cross Generating Station 1280 MW construction completed oct 2008
2. East Kentucky Power Cooperative Kentucky - Spurlock 268MW construction completed April 2009, litigation pending
3. Omaha Public Power District Nebraska – OPPD's Nebraska City 2 660 MW Sub-critical construction completed 2009
4. TXU Texas - TXU Oak Grove I and II 1720MW construction on unit I completed in 2009. Second unit completed in June 2010. (Bloomberg LT) Energy Future Holdings (ex TXU) is partly owned by Goldman Sachs.
5. TXU Texas- TXU Sandow 5 600MW construction completed 2009 (Bloomberg LT)
6. Tucson Electric Power Arizona - Springerville 400MW completed 2009
7. City Water Light & Power Illinois - Springfield 200MW completed 2009
8. Cleco Power Louisiana - Rodemacher Power Station 660 MW construction completed early 2010 (Bloomberg LT)
9. We Energies & Madison Gas Wisconsin - Oak Creek/ Elm Road 1200MW construction completed on unit 1 January 2010[42] Second unit to be ready later 2010 (Bloomberg LT)
10. Xcel Energy Colorado - Comanche 750MW. Unit in service July 2010.

AEP AMERICAN ELECTRIC POWER

Rank among utilities for CO@ emissions: 1
Tons of CO2 emissions/yr: 170 million
Percentage of electricity from coal: 86%

New coal plants status as of June 2010:

*AEP Hempstead-Turk, Arkansas, under construction starting early 2008.
*AEP-Dominion Virginia City, Wise County, Virginia, under construction starting April, 2008
*Great Bend IGCC "on hold" Feb '09
*Mountaineer IGCC-CCS, WV, actively seeking permitting

SOUTHERN COMPANY
Energy to Serve Your World™

Rank among utilities for CO@ emissions: 2
Tons of CO2 emissions/yr: 164 million
Percentage of electricity from coal: 70%

New coal plants status as of June 2010:

*Kemper IGCC, Mississippi, permitted May 2010 for construction start

NRG

Rank among utilities for CO@ emissions: 7
Tons of CO2 emissions/yr: 68 million
Percentage of electricity from coal: 68%

New coal plants status as of June 2010:

*Big Cajun I, Louisiana, new coal power permitted, near construction, July 2010.
*Limestone III, Texas, new coal power in final permitting process.
*Big Cajun II Unit 4, formally cancelled, February 2010
*La Porte IGCC, Texas, cancelled August 2009

DTE Energy

Rank among utilities for CO@ emissions: 19
Tons of CO2 emissions/yr: 37 million
Percentage of electricity from coal: 80%

New coal plants status as of June 2010:

none

CMS ENERGY

Rank among utilities for CO@ emissions: 24
Tons of CO2 emissions/yr: 26 million
Percentage of electricity from coal: 77%

New coal plants status as of June 2010:

*Midland Plant, Michigan, cancelled May 2009
*Karn-Weadock, Michigan, deferred May 2010

PSEG

Rank among utilities for CO@ emissions: 25
Tons of CO2 emissions/yr: 25 million
Percentage of electricity from coal: 23%

New coal plants status as of June 2010:

none

Sempra Energy™

Rank among utilities for CO@ emissions: 77
Tons of CO2 emissions/yr: 6 million
Percentage of electricity from coal: 0%

New coal plants status as of June 2010:

none

Total power production by CP utility advisors
617 MWhs electricity generation in 2006 from the 7 companies. This represents 18% of U.S. electricity generation by top 100 companies[43]

Percentage power production from coal
- 85% of electricity generation is from coal by the seven companies[44]
- 24% of all the electricity generated by coal by the top 100 companies[45]

CO2 emissions, total, from CP utility advisors
- 496 million tons of CO2 from the 7 companies (nearly half a gigaton per year)
- 2,325 tons of CO2 emitted from all electricity generation by all utilities in U.S. in 2006[46]
- Electricity generation represents 41% of all fossil fuel CO2 emissions in U.S. in 2006[47]

Percentage of U.S. CO2 emissions
- 21% of electricity CO2 emissions in U.S. is from the 7 companies
- 9% of total U.S. CO2 emissions from burning fossil fuels is from the 7 companies

ANNEX 3: CO2 CARBON PRINCIPLE VS. NON-CARBON PRINCIPLE BANK UNDERWRITING IN THE U.S. ELECTRIC UTILITY SECTOR

Bank	Rank	Market Share (out of 49 banks total)	Amount USD (Mln)	Carbon Principles Signatory	Total issues participation by bank	Issues to companies pursuing permits or with new coal under construction	Percent of issues to companies pursuing new coal
Bank of America	1	12,2%	$15,297	Yes	98	15	15%
JPMorgan Chase	2	11.8%	$14,710	Yes	111	29	26%
Barclays Capital	3	9.0%	$11,324	No	80	22	28%
Citi	4	8.5%	$10,581	Yes	67	18	27%
Wells Fargo & Co	5	8.4%	$10,556	Yes	67	15	22%
Credit Suisse	6	7.7%	$9,662	Yes	52	18	35%
Morgan Stanley	7	6.9%	$8,660	Yes	70	11	16%
RBS	8	6.6%	$8,275	No	56	9	16%
UBS	9	4.4%	$5,559	No	46	13	28%
Goldman Sachs	10	4.4%	$5,473	No	36	14	39%
Total		79.9%	$100,187		683	164	24%

ENDNOTES

1. http://dealbook.blogs.nytimes.com/2010/03/01/for-buyout-kingpins-the-txu-deal-gets-tricky/ http://www.nytimes.com/2010/02/28/business/energy-environment/28txu.html?_r=1&dbk

2. http://www.carbonprinciples.org/documents/Carbon%20Principles%20Press%20Release%20Final.pdf

3. http://newsroom.bankofamerica.com/index.php?s=43&item=8124

4. https://www.credit-suisse.com/news/en/media_release.jsp?ns=40826

5. https://www.wellsfargo.com/about/csr/ea/news/2008/07-10-08_climate leaders

6. See Annex 2. Data compiled from the Sierra Club power plant database and SourceWatch Coal Wikipedia site, plus supplementary google searches to update the status of specific projects as needed. http://www.sierraclub.org/environmentallaw/coal/plantlist.aspx; http://www.sourcewatch.org/index.php?title=Portal:Coal_Issues;

7. http://www.ncel.net/articles/CA-SB1368-UCS.Perata-fact-sheet.pdf

8. From Bloomberg League Tables of underwriting and loans for a) power generation and to independent power producers and b) for electric utilities generally (generation, transmission, distribution) in the US generated for the period of August 3, 2008 to June 30, 2010.

9. http://carbonprinciples.org/documents/Carbon%20Principles%20Press%20Release%20Final.pdf

10. http://en.wikipedia.org/wiki/List_of_countries_by_carbon_dioxide_emissions

11. AMP Generating Station Feasibility Study, Appendix ES-1 pp. 1-2 line 13

12. http://amppartners.org/pdf/quarterly-reports/2010_AMP_Q3_Financial_Statements.pdf

13. Letter from Gene Saffold, Managing Director Head of Tax-Exempt Investment Banking, JP Morgan Securities Inc, written to Marc Gerken, President and CEO of AMP-Ohio. Dated February 7th, 2008 http://www.ohiocitizen.org/campaigns/coal/jp_morgan.pdf

14. http://online.wsj.com/article/SB120598549040551197.html?mod=googlenews_wsj

15. Hawthorne, Michael (July 12, 2010). "Clean coal dream a costly nightmare". Chicago Tribune. http://www.chicagotribune.com/news/local/ct-met-coal-plant-20100710%2C0%2C3046966%2Cfull.story. Retrieved 5 October 2010

16. http://www.ohiocitizen.org/campaigns/coal/Ohio_Power_Company_Scales_Back_Sale_Citing_%27.pdf

17. http://emma.msrb.org/MS279643-MS278442-MD564814.pdf

18. http://www.sierraclub.org/environmentallaw/coal/plantlist.asp

19. http://energycommerce.house.gov/Press_111/20090423/testimony_kunkel.pdf

20. http://gasification-igcc.blogspot.com/2010/03/does-bact-decision-kill-coal-based-igcc.html

21. http://green-law.org/core/item/page.aspx?s=52505.0.101.19069

22. http://www2.dothaneagle.com/dea/news/local/article/georgia_residents_speak_out_against_potential_coal_plant/164198/

23. http://www.tenaska.com/newsItem.aspx?id=62

24. http://www.sj-r.com/business/x776893962/Tenaska-projects-construction-start-this-year

25. http://communistpartyillinois.blogspot.com/2010/04/questions-surround-true-cost-of.html

26. http://www.chicagobusiness.com/cgi-bin/news.pl?id=37878 ; http://www.sierraclub.org/coal/il/downloads/Taylorville.pdf

27. http://www.icc.illinois.gov/electricity/Tenaska.asp

28. http://www.chron.com/disp/story.mpl/business/7098447.html

29. http://hcpdblog.com/2010/02/26/whelan-energy-center-2-on-schedule/ ; http://www.hawkins.com/news_view.asp?langdisp=&id=69

30. http://www.il-fa.com/energy/

31. http://www.accessmylibrary.com/coms2/summary_0286-32713564_ITM

32. http://www.pr-inside.com/fitch-rates-amp-479-17mm-prairie-state-r1501947.htm

33. http://www.standardandpoors.com/ratings/articles/en/us/?assetID=1245193638313

34. http://sanantonio.bizjournals.com/sanantonio/stories/2010/03/08/daily2.html

35. http://www.accessmylibrary.com/coms2/summary_0286-34577407_ITM

36. http://www.businesswire.com/portal/site/home/permalink/?ndmViewId=news_view&newsId=20100305005998&newsLang=en

37. http://www2.mysanantonio.com/PDFs/BrattleReport.pdf

38. http://www.smartbrief.com/news/sifma/industryPR-detail.jsp?id=96C1D7C6-3545-4268-BBE5-10B86AD829C9

39. http://www.genpower.net/who-we-are/news-item.php?id=20&PHPSESSID=1da87ee6ef16561674d4b72d50d891f3

40. http://www.nolongview.org/background.shtml; http://statejournal.com/story.cfm?func=viewstory&storyid=72153

41. http://www.jsonline.com/news/milwaukee/82567142.html

42. http://www.jsonline.com/news/milwaukee/82567142.html

43. Out of the top 100 electricity producers. http://www.nrdc.org/air/pollution/benchmarking/db/rank.asp?t=e&s=2&d=0

44. http://www.nrdc.org/air/pollution/benchmarking/db/rank.asp?t=e&s=0&d=-1

45. http://www.nrdc.org/air/pollution/benchmarking/db/rank.asp?t=e&s=0&d=-1

46. http://www.epa.gov/climatechange/emissions/downloads10/US-GHG-Inventory-2010-Chapter-Executive-Summary.pdf

47. http://www.epa.gov/climatechange/emissions/downloads10/US-GHG-Inventory-2010-Chapter-Executive-Summary.pdf

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