



The Greening of Louisiana's Economy:

the Finance and Insurance Sector



Louisiana Workforce Commission
www.LMI.LaWorks.net/Green

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In 2009, Louisiana and Mississippi partnered to research economic development opportunities and workforce needs associated with the region's green economy. Through a \$2.3 million grant from the U.S. Department of Labor, a consortium of the Louisiana Workforce Commission, Louisiana State University, Mississippi Department of Employment Security, and Mississippi State University conducted an extensive study of economic activity that is beneficial to the environment. This and other research products were developed as part of that effort.



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On the cover: completed in 2009, the Bank of America Tower at One Bryant Park in New York City was designed to be one of the most efficient and ecologically friendly buildings in the world. It was awarded LEED platinum status in 2010, a first for a high-rise commercial office building.

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Description of Sector

The North American Industry Classification System (NAICS) describes the Finance and Insurance sector, NAICS 52, as primarily involved in transactions that create, liquidate or transfer the ownership of assets. These financial transactions can be further divided into three main activity categories: a) financial intermediation, raising funds to acquire assets through securities purchases or loan making; b) pooling risk, fee collection in the form of insurance premiums that is then used in reserves, to make payments, and for investments; c) specialized services, facilitating and supporting financial or employee benefits programs. This sector also includes the regulatory authorities charged with monetary controls.¹ In Louisiana, this sector employs 57,699 people representing 3.1 percent of total nonfarm employment.² In 2009, private entities in the sector were responsible for \$8.07 billion, or 3.9 percent of Louisiana's gross state product.³

The *Louisiana Green Jobs Survey* was conducted during the fourth quarter of 2010 as part of this research effort to quantify and characterize the green economy in Louisiana. The survey provides a baseline measure of green employment. The survey results show an estimated 30,205 primary green jobs^a across all sectors, which represent 1.6 percent of Louisiana's nonfarm employment. An estimated 67,591 support green jobs^b raises the total number of jobs involved in green activity categories to 97,796 jobs or 5.3 percent of nonfarm employment. The survey found that Louisiana's Finance and Insurance sector accounted for 164 primary green jobs and 933 support green jobs. These survey results reveal that 1.9 percent of jobs in the Finance and Insurance sector are green with 0.3 percent primary green jobs and 1.6 percent support green jobs.

^a A primary green job is defined as one where more than 50 percent of an employee's time is devoted to one of the seven green activity categories: renewable energy; energy efficiency; greenhouse gas reduction; pollution reduction and clean-up; recycling and waste reduction; sustainable agriculture, natural resource conservation and coastal restoration; and education, compliance, public awareness and training supporting the other categories.

^b Support green jobs are defined as those essential to an organization's involvement in one of the activity categories, but not requiring more than 50 percent of an employee's effort.

Introduction to the Green Component of the Finance and Insurance Sector

As the financiers and managers of risk, the Finance and Insurance sector has tremendous sway over the direction and speed of environmental progress. The loans, investments and risk protections provided by this sector make green businesses and markets possible and provide key assessments of risk that can further influence financial and policy decisions. This sector also may exert influence over environmental matters by establishing policies to deny funds and insurance protections to projects that are harmful to the environment. In addition to directly financing green business developments, this sector also assists with investments and insurance for environmental performance improvements to facilities such as renewable energy installations, energy efficiency improvements, certified green construction projects and remodels, and the conversion of fleet vehicles to alternative fuels. Financial and insurance establishments are also involved in providing specialized banking services designed to preserve environmental resources like wetlands known as mitigation banks.

The Finance and Insurance sector is making efforts to improve the environmental performance of its own operations around the globe. Large financial and insurance institutions are increasing environmental efficiencies in their business practices, developing sustainability plans and joining national and international efforts to reduce their industry's environmental footprint.

This report will focus on the environmentally beneficial activities of the Finance and Insurance sector in two major areas: goods and services, and business practices. Discussions of this sector's involvement in environmentally beneficial activities will be provided where significant involvement by the industry is found. As with other components of this project, green was defined based on seven green activity categories:

1. Renewable Energy
2. Energy Efficiency
3. Greenhouse Gas Reduction
4. Pollution Reduction and Cleanup
5. Recycling and Waste Reduction
6. Sustainable Agriculture, Natural Resource Conservation and Coastal Restoration
7. Education, Compliance, Public Awareness and Training Supporting the Other Categories

Each activity category includes: the research, development, production and distribution of a final good or service; the supply of unique parts or inputs to a final good or service; and production processes and business practices regardless of the final good or service produced. The table below indicates which environmentally beneficial categories will be featured in this report.

	Renewable Energy	Energy Efficiency	Greenhouse Gas Reduction	Pollution Prevention & Clean Up	Waste Reduction & Recycling	Sustainable Agriculture, Natural Resources Conservation, & Coastal Restoration	Education, Compliance, Public Awareness & Training
Goods & Services	●	●	●	●		●	
Business Practices		●	●			●	

Green Goods and Services

Financial and insurance establishments play a large role in the development of businesses, including those that are providing goods and services that benefit the environment. According to Forbes.com, green technology investments have been heavily supported by venture capitalists in recent years. In 2007, venture capitalists invested \$2.2 billion in green technologies, six times the amount invested in 2002.⁴ Firms like Kleiner, Perkins, Caufield & Byers (KPCB),⁵ the Clean Tech Group,⁶ and Nth Power have targeted investing more than \$8 billion in energy-related green technologies advancing energy efficiency, renewable energy, energy storage and alternative fuels.⁷

Environmentally sensitive investing, sometimes known as sustainable investing, is another activity supported by this sector. Sustainable investing can be seen as a type of socially responsible investing that supports the ethical considerations of the clients represented as well as their financial concerns. According to the Social Investment Forum, sustainable and responsible investing represents 12 percent of all managed funds in the United States. Financial and insurance establishments are also supporting these sustainable investments through goods and services specially tailored to meet the needs of environmental projects and environmentally minded clients.

Some firms, such as Ceres, exist for the explicit purpose of addressing sustainability challenges through capital market investments. Ceres was founded in the wake of the Exxon Valdez oil spill in order to promote a vision where businesses and capital markets promoted the protection of environmental resources. Since its founding, Ceres has developed the Global Reporting Initiative (GRI) for environmental, social and economic performance, developed a corporate leadership program with Yale University for corporate leaders to address climate change, and established the Investor Network on Climate Risk with assets of \$7 trillion.⁸

These types of investments, however, require new approaches to investing that accurately evaluate the market worth of environmentally sensitive projects.⁹ Before making investments in green pursuits, those in the Finance and Insurance sector are developing new methods for gauging the risk and potential value of environmentally beneficial projects. These new approaches attempt to adequately reflect both the environmental and market advantages of project outcomes. Evaluating projects including energy-efficiency upgrades, or retrofits, for example, requires financial establishments to be knowledgeable of the proposed facilities' environmental improvements impact on their market value. Financial firms are evolving to accommodate environmental investments. They are beginning to see improvements to the environmental performance of an investment less as a tool for reducing utility costs and more as value-adding features that can impact the speed of sale, decrease risk and lead to higher lease prices.¹⁰

Renewable Energy

Many large financial firms are supporting renewable energy projects with specialized teams providing financial services. Bank of America's Renewable Energy Finance team specializes in financial services for renewable energy projects and equipment.¹¹ The group arranged the funding for a \$24 million solar project that will provide power for Wal-Mart and Sam's Club locations in Southern California, financial assistance for the purchase of a 34 percent stake in a Portuguese solar power plant, and a \$44 million investment to a wind power tax equity partnership in North Dakota.¹² Citi Bank also supported renewable energy projects by financing the development of a wind farm, a hydroelectric dam, and a transmission line in 2008.¹³ And, J.P. Morgan has made investments of \$3.2 billion in wind projects, raised another \$3.5 billion from co-investors, and is helping to expand access to capital for renewable energy companies through its Energy Investments banking group.¹⁴ In May 2011, it was announced that California-based SAIL Capital Partners would be creating a private equity fund worth \$250 million to finance renewable energy and clean technology businesses within Louisiana. The Louisiana Sustainability Fund, as the fund is known, has already identified five companies in which it is prepared to invest between \$5 million and \$15 million. According to Walter Schindler, the fund's chairman and a New Orleans native, the fund is interested in supporting between 15 and 20 projects at a time.¹⁵

Financial institutions are also offering products that support renewable energy projects automatically through special credit cards. With Bank of America's Brighter Planet Visa card, points earned by making purchases with the card are automatically directed to community-based renewable energy projects in the United States.¹⁶

Energy Efficiency

The Finance and Insurance sector is promoting energy efficiency by offering special financing for overcoming the costs of energy-efficiency improvements to existing homes and for purchasing energy-efficient homes. Both conventional and government-insured loan programs offer energy efficiency mortgages (EEMs) through the Federal Housing Administration that allow for the purchase or refinancing of homes that are already energy efficient or will become energy efficient after upgrades.¹⁷ EEM loan programs allow buyers to qualify for larger loan amounts to cover the higher up-front cost of energy-efficiency improvements. In Louisiana, EEM mortgages are available from 1st Continental Mortgage, Allied Home Mortgage Capital Corp. (Baton Rouge), Southwest Funding (Metairie), Louisiana Federal Credit Union (La Place), and the Veteran's Administration.¹⁸

One barrier to the financing of energy efficiency and similar green construction projects, however, is the lack of standard, comprehensive methods for evaluating the return on investment and risk associated with those types of building upgrades. Full accounts of the financial benefits (such as higher sale or lease price, faster sales, price per square foot, etc.) of green building are not yet incorporated into the due diligence process of many financial firms. Ideally, environmentally beneficial elements of a property such as energy efficiency would be fully factored into market-value considerations so that financial data could be gathered on how green building methods affect property value.¹⁹

Greenhouse Gas Reduction

The eventual transition to a low-carbon economy will require significant investments in new technology, infrastructure and intellectual capacity, making the Finance and Insurance sector a key player in greenhouse gas reduction. Bank of America has pledged to make \$20 billion in environmental investments over 10 years in order to spur the growth of low-carbon activities. These funds will support a variety of projects to help firms lease more energy-efficient equipment, take advantage of renewable energy, and finance new technologies.²⁰ In 2007, Citi Bank announced a 10-year, \$50 billion pledge to support greenhouse gas reducing ventures such as alternative energy, sustainable construction and clean tech investments.²¹ The investment bank of J.P. Morgan Chase is encouraging clients with significant greenhouse gas emissions to develop carbon mitigation plans and is incorporating the costs of carbon emissions into transaction valuations in the Utilities sector.²²

Large financial institutions are also operating the carbon markets that are establishing financial incentives for greenhouse gas reductions. According to the World Bank, even with the global economic downturn, the carbon market carried a value of \$144 billion at the end of 2009 with the majority of the activity in the European market.²³ However, banks that were fortifying their carbon teams may be discouraged about the long-term interest in carbon trading due to stalled agreements and policies and the lack of unified progress at international climate meetings in Copenhagen and Cancun. Financial firms pursuing carbon-reducing projects for the near term are supporting renewable energy, biofuels, energy efficiency and forestry projects.²⁴ The Chicago Climate Exchange was the first voluntary greenhouse gas emissions exchange established to reduce carbon emissions. Bank of America was the first financial institution to join the Chicago Climate Exchange thereby agreeing to reduce their carbon footprint by a set amount. Since 2008 at Merrill Lynch, a program known as Green & Gold, has offered clients in countries not facing greenhouse gas regulations services to help them voluntarily lower their emissions and enter the carbon market.²⁵

Pollution Prevention and Cleanup

Finance and Insurance sector firms are engaging in pollution prevention and cleanup activities by providing funding and insurance protection for brownfields rehabilitation projects and other development projects requiring site rehabilitation. Insurance companies can provide specialized environmental insurance to clients who quantify and transfer the risks of brownfields cleanup. Pollution liability insurance protects against cleanup costs on site as well as third-party claims arising from pollution conditions. Cost cap insurance protects against cost overruns for pollution cleanups. Secured lender insurance protects lenders in the event that borrowers default on a loan as the result of a pollution condition.²⁶ As of 2006, only four states operate brownfields insurance programs: Massachusetts, Wisconsin, New York and Connecticut, but several others had shown some interest. Louisiana, however, was not among those states.²⁷

Insurance products are also available to real estate investors to protect against unforeseen pollution events. Zurich, a North American firm, offers a product referred to as Real Estate Environmental Liability (REEL) that includes three types of protection. This insurance can provide compensation for public relations firms to assist with the restoration of public

Planting tens of thousands of stems of native longleaf pine as part of the restoration work in the Mossy Hill Mitigation Bank.
Photo © David Urban.



confidence after a pollution event, it allows holders to incorporate green technologies in the cleanup following a pollution event, and it finances the repair or replacement of properties to comply with green building standards such as Leadership in Energy and Environmental Design (LEED).²⁸

Recycling and Waste Reduction

No evidence of significant involvement for this activity category was found in the Finance and Insurance sector.

Sustainable Agriculture, Natural Resource Conservation and Coastal Restoration

An approach to natural resource conservation and coastal restoration unique to the Finance and Insurance sector is mitigation banking. Mitigation banking is wetland restoration, creation, enhancement or preservation undertaken in order to offset the unavoidable loss of such ecosystems in development projects in which on-site compensation is not possible or not as environmentally beneficial. In most cases, wetland mitigation banking consists of the consolidation of many fragmented wetland projects into a single, larger site. Restored or enhanced wetland areas are expressed as units or “credits” that can later be used to counteract wetland losses at development sites. Mitigation bankers also assume responsibility for the long-term maintenance of consolidated wetland tracts as a condition of receiving the credits. Wetland credits can later be sold by mitigation bankers to firms with permits to build in wetland areas that require offsets. Oversight of wetland consolidation projects and the sale of wetland credits are conducted by state and federal regulatory agencies in a Mitigation Banking Review Team (MBRT) that must approve plans and designate the number of credits to be created.²⁹

By purchasing wetland credits, developers can avoid the approval process for creating or restoring wetlands, which can save time and money. They can also avoid the risks and responsibilities associated with wetland maintenance by purchasing credits, because the mitigation bank has already assumed those liabilities. Finally, mitigation banking ensures

that wetland rehabilitation will be lasting and effective, because the areas are managed by professionals and are not the responsibility of landowners at the development site.³⁰

As of 2008, the United States was home to 405 wetland mitigation banks with 23 percent located in Louisiana.³¹ Two prominent examples are the Mossy Hill Mitigation Bank serving St. Tammany, Washington and Tangipahoa parishes, and Resource Environmental Solutions, LLC, serving a variety of locations around the state through its subsidiaries. In 2008, Ecosystem Investment Partners purchased Mossy Hill, a 2,263 acre, wet, longleaf pine savanna near Abita Springs. They ceded it to the Nature Conservancy for preservation and management, and the work to maintain this area is being funded through the Mossy Hill Mitigation Bank.³² In April 2010, Third Louisiana Resource, a subsidiary of Resource Environmental Solutions, announced its plan to create the Grand Canard Mitigation Bank in Jefferson Davis Parish. Of the 1,700 acres of freshwater marsh and cypress swamp, 270 will be permanently preserved to compensate for wetlands lost through development in and around the Lake Charles area.³³

Education, Compliance, Public Awareness and Training

No evidence of significant involvement for this activity category was found in the Finance and Insurance sector.

Green Business Practices

The Finance and Insurance sector maintains locations across the globe to serve its clients and to participate in world markets. This presence, in real estate alone, makes for a large environmental footprint. According to Bank of America, the firm occupies 123.6 million square feet of space around the world with 6,000 banking centers in the United States alone.³⁴ With such a large international presence, this sector has many opportunities to reduce water use, energy use and greenhouse gas emissions.

In response to the growing awareness of the environmental impacts of their business activities and in coordination with investment strategies and products promoting environmental projects, many financial and insurance corporations have adopted sustainability plans to measure, monitor and reduce the environmental costs of their business practices. Capital One has created an Environmental Sustainability Office (ESO) to pursue the company's environmental goals, Regions Financial Corporation instituted its sustainability policy in 2008, and J.P. Morgan Chase has had an Office of Environmental Affairs since 2004. Bank of America appointed an Environmental Council to report directly to the CEO as well as a Global Environmental Group and a Global Environmental executive, and Citi Bank maintains a Corporate Sustainability Unit to give advice and program support for environmental improvements and policy.

In addition to establishing sustainability plans, this sector is also building to green standards that incorporate energy, water and greenhouse gas savings. Goldman Sachs' office tower in New Jersey was the largest LEED-certified office building in the country when it was completed in 2003; Bank of America's new 55-story building in midtown Manhattan was awarded LEED platinum status in 2010, a first for a high-rise commercial office building.³⁵

This facility will have a 30 percent lower peak energy demand, onsite cogeneration providing heat and electricity, rainwater reclamation, and a 50 percent reduction in water use.³⁶ Banks and insurance offices often construct multiple branches to serve their clients. Volume building programs such as these are also working to adopt green building techniques. PNC Bank was the first to develop a green branch prototype for use in the 100 builds it has planned for the next three years.³⁷

Renewable Energy

As in other industries, financial and insurance institutions may choose to purchase electricity for their operations directly from renewable sources or renewable energy credits when renewable producers are not available.

Energy Efficiency

Improvements to energy efficiency can lower operating expenses and result in significant reductions in greenhouse gases. Finance and insurance establishments can improve their energy efficiency by installing software on computers that allows them to manage power use. By automatically “sleeping” the computers of 5,000 employees across all business lines in North America, Citi Bank has been able to save \$1 million.³⁸ Systems are also available to manage the energy needs of more than just computer equipment. At Bank of America, the Corporate Workplace Intelligent Command Control Center adjusts energy use across buildings. This system has reduced emissions and saved \$100 million since 2004.⁴⁰ Energy-efficiency improvements are a large component of green building certification systems. ENERGY STAR for commercial buildings and LEED certification are available to facilities in this sector.

Greenhouse Gas Reduction

Greenhouse gas reduction is a key component of the corporate sustainability plans enacted by firms in the Finance and Insurance sector. Many are also taking steps such as increased teleconferencing and videoconferencing in place of travel, and carpool programs among employees to encourage greenhouse gas reductions. Additionally, firms in this sector are joining third-party climate programs and forging partnerships to reduce greenhouse gas emissions from their operations.

Many firms in the Finance and Insurance sector joined the Environmental Protection Agency's Climate Leaders Program, an industry-government partnership program working with companies to set goals and plans to reduce greenhouse gas emissions. Partners in the program are required to: develop a corporate-wide greenhouse gas inventory of emissions sources; set aggressive reduction goals; report data annually; set new goals when others are achieved; and publicize the organization's accomplishments.⁴⁰

In addition to joining Climate Leaders, Citigroup also instituted “carbon principles” to evaluate carbon risks in coal power plant investments. These principles include encouraging low-carbon alternatives to conventional coal power generation and conducting additional due diligence before financing fossil fuel power generation projects.⁴¹

Financial institutions can also join with the United Nations Environment Program Finance Initiative, a global partnership between the UN Environmental Program (UNEP) and the finance industry. This partnership promotes best practices for sustainability at all levels of operations

in financial establishments including evaluation of environmental credit risk and raising awareness about climate change with those in the industry, policymakers and the public.⁴²

Pollution Prevention and Cleanup

No evidence of significant involvement for this activity category was found in the Finance and Insurance sector.

Recycling and Waste Reduction

The two major ways the Finance and Insurance sector is approaching waste reduction and recycling efforts is through efforts to curb electronic waste and offering paperless billing for customers. Electronic waste, or e-waste, is one of the fastest growing contributors to the waste stream in the United States.⁴³ Comprised of the televisions, computers, monitors, cameras and other electronic devices discarded by consumers, e-waste also often contains mercury and other toxic materials. Financial and insurance establishments are developing policies to address the responsible replacement and recycling of the electronic equipment their operations utilize.

Firms in this sector are also working to reduce the waste and conserve paper from their billing processes. One service, PayitGreen, is a membership organization of the Electronic Payments Association helping the finance industry move to electronic billing and payment systems.⁴⁴ Louisiana insurance company, esurance, estimates that it has helped to save more than 2,700 trees since 2000 through paperless billing.

Sustainable Agriculture, Natural Resources Conservation and Coastal Restoration

Internal policies regarding what projects will be funded by financial services firms are having an impact on protecting forestry resources around the world. Forest lending policies, like the one at Bank of America, are incorporating verifiable third-party forestry certification into the due diligence process to assure that finances are not used to support illegally logged forests or non-sustainably managed forests.⁴⁵ Bank of America also ensures that paper it purchases is certified by either the Forest Stewardship Council or the Sustainable Forestry Initiative and that a minimal amount of virgin wood fiber is used.⁴⁶

Finance and insurance establishments can protect other types of natural resources through company policies. Many firms see environmental protection as a way to protect against risk and a key component of good corporate citizenship and have established policies to that effect. At Citi Bank, an Environmental and Social Risk Management Review policy is in place to advise, train and serve as a point of reference on projects with the potential to have undesirable social or environmental outcomes such as metal and mining, oil and gas, power projects, forestry, and certain types of manufacturing. As a component of their environmental policy, J.P. Morgan Chase has established “no go” zones deemed too environmentally and culturally sensitive and valuable to support anything but preservation and non-extractive forestry projects.⁴⁷

Education, Compliance, Public Awareness and Training

As finance and insurance establishments adopt new policies in support of environmental goals or implement new ways to evaluate the value or risk involved in environmental improvement projects, they must undertake staff training efforts. When Citi Bank added the

carbon policy framework to its existing environmental and social risk management process, it trained all its workers to identify applicable carbon principles and transactions at the project and corporate level.⁴⁸

This sector also supports education efforts on environmental topics through sponsorships of panels, conferences and other events. The Harvard University Center for the Environment lecture series on Energy and the Environment, for example, has been sponsored by Bank of America since 2006.⁴⁹

Economic Factors

Financing of activities in the green economy is largely determined by risk, regulatory oversight and consumer preferences. Many green businesses are new (with no track record or existing cash flow), involve unproven technology or uncertain demand for that technology, or have uncertain future tax treatment or regulatory support. Uncertain market conditions (i.e. the cost of alternative fuels, etc.) present another risk that creditors and investors must evaluate.

In order for business establishments across all sectors to obtain funding for building new, environmentally beneficial structures, to retrofit existing structures, or to install renewable energy sources or energy efficient equipment and technology, those in the Finance and Insurance sector must believe such green investments will offer a reasonable return. Regulators scrutinize many business loans, especially for businesses in a rapidly changing industry. Mortgage companies and banks often have difficulty getting real estate appraisals that establish a market value on new green construction and retrofits that are in line with the premium cost of “green” construction. If financial regulators do not provide some latitude for determining an acceptable “market value” for these more costly construction projects, it will require time to develop comparables to support the loan-to-value requirements.

Several factors have positively influenced the viability of environmental activities on the part of the Finance and Insurance sector. In “the economics of green building,” a paper presented to the Strengthening the Green Foundation conference sponsored by the Federal Reserve Bank of Atlanta, the authors argue that certain environmental improvements to properties have now been fully capitalized into rents and asset values. The higher costs of insuring thermal efficiency improvements and energy efficiency products have been entirely overcome by premiums in rent and asset values.⁵⁰ Findings such as these encourage Finance and Insurance sector to support environmental improvements to properties or the initial construction of green buildings when offering products and services to their clients as well as designing and managing their own properties.

Public Policy

Finance and insurance representatives have shown leadership on environmental policy efforts through their support of the United Nations Environmental Programme's Finance Initiative. In 2007, leaders from more than 20 financial services companies, and members

of the UNEP FI, have supported stronger cuts to greenhouse gas emissions targets among the G8 nations. Citing “grave social and environmental harm” and economic losses as high as 1 trillion U.S. dollars by 2040, finance and insurance leaders called on heads of state to formally agree to emissions reduction targets by 2009 at the latest.⁵¹ In 2010, a group of 268 investors representing 15 trillion U.S. dollars signed on to a statement urging stronger action on climate change from world leaders to better direct the flow of private investment capital into low-carbon projects.⁵²

Changes to U.S. policy are also having an impact on the environmental activities of the Finance and Insurance sector. In 2008, the Environmental Protection Agency and the Army Corps of Engineers released new regulations for wetland mitigation banking that were a boon to the industry. The regulations support the growth of mitigation banking by emphasizing this remediation tactic for developers over other existing methods. These rules eliminate the economic and regulatory hurdles that put mitigation banks at a disadvantage relative to competing methods for offsetting wetland loss that are not as effective.⁵³

In Louisiana, the Property Assessed Clean Energy Bonds finance mechanism, known as PACE, approved by the Legislature in 2009 has created innovative funding sources to accelerate green projects. PACE bonds support the retrofitting of commercial and residential properties for renewable energy and energy efficiency by lessening the high upfront costs of these improvements and allaying the fears that these investments will not be recouped in time for property resale.⁵⁴ PACE bonds spread the cost of renewable energy and energy efficiency upgrades over 20 years by adding the improvement costs to a homeowners’ property tax bill. However, in 2010, the Federal Housing Financing Agency (FHFA) and the U.S. Treasury Department halted the programs. FHFA called for states to cease their programs because liens for PACE loans represented an alteration to traditional mortgage lending practices.⁵⁵

Technology

Technology is not a key driver for environmental activities in the Finance and Insurance sector. However, evolving computer software surely plays a role in the assessment of risk and evaluation of investments in environmental projects. Indirectly, improvements to technology will make renewable energy and energy efficiency more financially viable over time, increasing willingness to invest in such technology and projects incorporating it into property design and business operations.

Job Growth and Workforce Development

Considering primary and support jobs, green employment in the Finance and Insurance sector is projected to increase by 13.8 percent over the 10-year period from 2010 to 2020. The growth in this sector is expected to be moderate and consistent throughout the

projection horizon following the overall rate of growth in the green economy. In the first year, green employment is expected to increase from 1,097 in 2010 to 1,116 in 2011. The steady increase will continue in 2012 bringing the total to 1,132. In 2015, green employment is expected to increase to 1,174 and will continue to rise until 2020, reaching a total of 1,248.

This growth in green employment is expected to outpace growth in total employment in the Finance and Insurance sector. The most recent industry projections for Louisiana imply that total employment will increase by 6.2 percent over the 10-year period from 2008 to 2018. Those 2018 projections were revised in 2011 to reflect new information available since the initial projections release including new developments identified through the Green Jobs Consortium research effort.

Large, multi-state or multi-national firms in the Finance and Insurance sector are promoting environmentally beneficial policies and investment strategies to such a degree as to create green job opportunities within those firms. Members of this sector in Louisiana are more likely, however, to support green activities through investments, sponsorships and underwriting.

Workforce requirements for participation in the environmentally beneficial activities of the Finance and Insurance sector will include a familiarity with green technologies and developments in addition to understandings of accounting, financial markets and risk assessment. In the case of wetland mitigation banking, even more specialized environmental knowledge may be required to address the accounting, financial, legal and biological nature of the work.

Finally, it is important to note that the anticipated employment growth of green jobs in the Finance and Insurance sector will be comprised of a combination of the creation of new green jobs and the gradual greening of existing jobs. While the contribution of each factor has yet to be determined, training providers should consider the unique training needs brought on by each of these changes. For some green occupations, existing workers will need training to enhance their skills. For other occupations, curricula may be needed to provide a more comprehensive training for new workers or those entering a new occupation.

Key Players

Ceres: www.ceres.org

National network of investors and environmental organizations working to integrate sustainability concerns into capital markets.

National Banks and Insurance Firms

National Mitigation Banking Association (NMBA): www.mitigationbanking.org

Organization of mitigation bankers committed to research, education, outreach programs and policy advocacy supporting mitigation banking.

United Nations Environmental Programme Finance Initiative: www.unepfi.org

Global partnership between the United Nations and the financial sector working to develop and promote linkages between improvements to environmental sustainability and financial performance.

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