



Jarmel Kizel Architects and Engineers, Inc.

Energy Solutions Studio

We Understand

Energy Brokerage

Solar PV

Solar Thermal

Lighting

HVAC

Building Management Systems

LEED / Energy Star

Energy Financing

Green Branding

Our Clients

ARCHITECTURE
ENGINEERING
INTERIOR DESIGN
Energy Solutions

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Comprehensive Energy Solutions

Jarmel Kizel Architects and Engineers Inc. was founded in 1975 by Marvin Jarmel. The firm initially specialized in the interior design of corporate offices, and since then has transformed into a full-service general practice offering a full spectrum of architecture and engineering services for a diverse base of public and private clients. Jarmel Kizel has extensive experience throughout several industries including commercial, industrial, multifamily, educational, medical and retail, among others. With every project the firm undertakes—both new buildings and building renovations—they design with sensitivity to green and sustainable techniques.

As the country becomes more and more focused on energy efficiency, eco-friendly products and sustainable design, our company is called upon to provide a variety of energy solutions for our clients. Jarmel Kizel is an innovator in the “green” design industry and our Energy Solutions Studio is focused on assisting and educating our clients on energy upgrades that help make buildings and individual tenant spaces more energy efficient and cost-effective.

Large-scale tenants, major corporations, government agencies, and International companies are all sensitive about their carbon footprints. When they look at existing buildings, they look for green and sustainable features such as clean air and energy efficiency through the implementation of lighting and HVAC retrofits. A green building, or a building that is perceived as green, is more marketable for building owners and more desirable to tenants than a neighboring building that does not have energy efficient upgrades. For building owners and tenants alike, energy efficiency means lower operating costs.

Jarmel Kizel’s Energy Solutions Studio is comprised of a diverse group of professionals including architects, engineers and LEED accredited professionals—all with a passion to foster energy solutions for their clients through green and sustainable design practices. The firm understands its clients’ needs and help them achieve bottom line results.

Energy Brokerage



Today, there are many electric and natural gas providers to choose from, and any company can competitively shop these services. Under the deregulation law, the supply portion of electric and gas bills is separated from the delivery portion, making it possible to purchase power from a different utility company than the one that directly supplies the power.



For example, in the State of New Jersey, there are over 125 power suppliers from whom you can choose to purchase your power, and many of these third-party suppliers also offer clean energy programs where the power they sell is generated through wind and solar technology.

If you choose this route, the delivery of your electric and gas are still provided by the utility companies you currently depend on, and they are still the companies to call when you experience any type of power outage.



Navigation through the procurement process of third-party energy supply can be complex and requires industry knowledge about current market rates. Jarmel Kizel's Energy Solutions Studio is always studying market rates and trends and helps its clients through the energy procurement process. The firm can study your energy usage history focusing on cost, and season-related use and daily demand. Once Jarmel Kizel understands your energy needs, it can request bids on your behalf from multiple energy suppliers.

Solar - Photovoltaic



Among the many energy solutions Jarmel Kizel provides, the firm believes that solar photovoltaic (PV) systems are one of the most popular and easily achievable green designs in today's marketplace. These systems considerably reduce energy bills and energy consumption. With additional revenue achieved through Solar Renewable Energy Certificates (SRECs) and tremendous tax incentives—these solar systems ultimately pay for themselves and produce generous returns for owners.



Jarmel Kizel's Energy Solutions Studio has designed solar photovoltaic (PV) developments that range in size from 50 kilowatts (kW) to as large as 2 megawatts (MW), and include rooftop and ground-mounted systems, as well as parking canopies. The firm can provide services from start-to-finish for any solar development from architectural, structural, site plan and electrical design to assistance with obtaining land entitlements and project management. Jarmel Kizel also can act as a consultant on several aspects such as technology selection, construction, financing, and the harvesting of renewable attributes including SRECs and Power Purchase Agreements (PPAs).

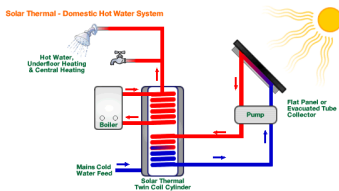


The solar PV financial model is dependent on Renewable Portfolio Standards (RPSs), which drive the creation of SRECs. Jarmel Kizel can advise clients as to the current regulations associated with RPSs and the current spot and future strip rates associated with SRECs, as well as advise on determining a strategy for SREC sales.

Solar - Thermal



Solar thermal domestic hot water systems also are a unique energy savings solution. The solar thermal system uses the energy generated from the solar panels to pre-heat city- or town-supplied water in the building before it reaches the water heater. In turn, the water heater works less, and on some days will not be needed at all, therefore requiring less energy to run. Solar thermal hot water systems can reduce annual energy costs for domestic hot water by over 50 percent. The technology of these systems is highly efficient and typically yields a financial payback on a three-to-five year timeframe.



Solar collectors are utilized to absorb the sun's energy and in turn used to heat a closed water loop. Through a heat exchange process, the utility-supplied water is heated and stored in a storage tank. Traditional boilers are also utilized to assist with heating the water in winter months or when weather conditions impede solar thermal production.



Water temperature for domestic needs such as cooking and bathing are easily obtained through the system. Higher water temperatures for industrial processes also can be achieved.

Jarmel Kizel designed one of New Jersey's first operable solar thermal domestic hot water systems, and can advise clients through the design and construction process, as well as determining utility, state and federal rebate programs that may be available.

Lighting



According to the U.S. Government's Energy Star web site (www.energystar.gov), lighting consumes approximately 35% of the electricity used in commercial buildings in the U.S. and effects other building systems through its electrical requirements and the waste heat that the lights produce.



Upgrading lighting fixtures and controls can reduce energy consumption, improve the visual environment and have a positive effect on the sizing of HVAC and electrical systems. Lighting retrofit projects can cut the power usage in half while maintaining or improving light quality. Improved light quality can lead to improved workplace conditions promoting employee morale, increased production and quality control. These projects typically pay for themselves via energy savings within a few years.



Jarmel Kizel has formed a strategic alliance with Philips® to offer clients lighting audits and financial solutions for lighting modernization projects. At no obligation to the client, Jarmel Kizel can arrange for a lighting audit and financial analysis. Working with Philips, Jarmel Kizel can typically develop a financing strategy that pays for itself out of the energy savings within a three- to five-year period, with little or no out of pocket expenditure by the client.

Heating, Ventilation, Air Conditioning HVAC



Heating, ventilation and air conditioning equipment (HVAC) systems—both gas and electric—comprise as much as 50% of all the energy utilized in a building. HVAC systems bleed energy, and older systems are inefficient and also utilize ozone depleting gasses for refrigerants. Older systems also typically re-circulate building air without introducing outside ventilation, which can be used to achieve free cooling and combat “sick” building syndrome.

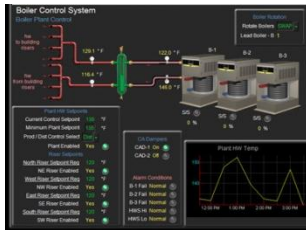


Jarmel Kizel’s mechanical engineers have experience designing HVAC systems for office buildings, schools, multifamily residential buildings, retail establishments, medical and pharmaceutical facilities, data centers and manufacturing facilities. Jarmel Kizel is a leader in designing energy efficient systems that have achieved LEED and Energy Star Certifications.



Energy solutions for HVAC systems include an energy audit, system design, construction and payback analysis budgeting.

Building Management Systems



A Building Management System (BMS) is a computer-based control system that monitors a building's mechanical and electrical equipment. The BMS can be deployed to control multiple building systems including, but not limited to, the following:

- Lighting (Interior and Exterior)
- HVAC (Temperature, Humidity, Carbon Dioxide)
- Domestic Hot Water
- Elevators
- Shades
- Fire Systems
- Security Systems



The system includes hardware and software that implements a series of protocols for manual and automated control. The system can be controlled on or off site.

The most effective way to reduce energy costs is to control the use of energy. The BMS allows monitoring, tracking of historic usage and enhances system control. Jarmel Kizel's Energy Solutions Studio has designed BMS systems for both new and existing buildings, helping its clients reduce their energy bills.



Leadership in Energy and Environmental Design (LEED) and Energy Star



Many programs exist for certifying new and renovated buildings for green and sustainable design and energy efficiency. Jarmel Kizel's Energy Solutions Studio believes that the two leading certifications are LEED and Energy Star. The firm has significant experience working with its clients and development teams to achieve both LEED and Energy Star certifications.



LEED is an internationally recognized green building certification system developed by the U.S. Green Building Council (USGBC). LEED provides building owners and operators with a framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions.



Energy Star is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy. The program is designed to help consumers save money and protect the environment through energy efficient products and practices.

Our team of professionals is familiar with the process of registering projects for these certifications, submitting paperwork throughout the design and construction process, and assisting with final commissioning of the building.

Energy Financing



Jarmel Kizel's Energy Solutions Studio not only has the ability to design your project and develop a financial pro-forma related to its performance or energy savings, the firm can also assist with securing financing for any energy project. Financial services offered by the firm include the following:

- Construction Budget Development
 - Payback Analysis
 - Grants, Tax Credit and Rebate Processing
 - Leasing programs
-
- Lighting
 - HVAC
 - Solar PV
-
- SREC Strategy Development
 - Power Purchase Agreement Negotiations
 - Banking Relations



Green Branding



Jarmel Kizel's Energy Solutions Studio understands the power of adopting a green branding and marketing strategy. Let's face it, practicing "Green" standards is both good for the environment and good for business. Consumers buy products and services from companies they believe utilize green and sustainable strategies in their business operations. Many major corporations will only use vendors that can demonstrate a green and sustainable business strategy. Homebuyers and tenants look for green and sustainable designs and construction practices in the buildings they buy and lease.

What are you doing to be "Green"?



Implementing an energy solutions program for your business is an excellent way to promote your green branding efforts. Your energy solutions plan can:

- Reduce your power cost
- Reduce the effects operating your business has on the environment
- Improve the morale and productivity of your staff
- Promote your business

Comprehensive Energy Solutions

For more information on Jarmel Kizel's Energy Solutions Studio, and developing an effective green and sustainable energy solution for your business, please contact:

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