

# robert derector associates



Energy Modeling . Energy Audits . High Performance Fit-outs . Building Upgrades . Clean Technology . Portfolio Strategy

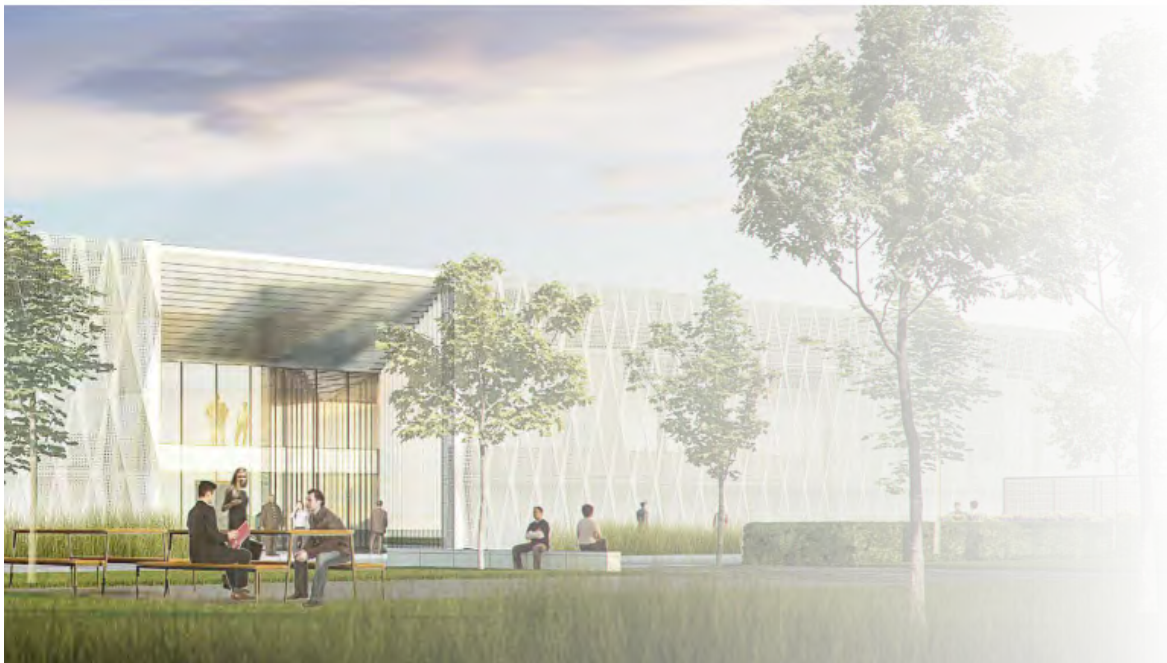
## Energy & Sustainability Group

# Overview

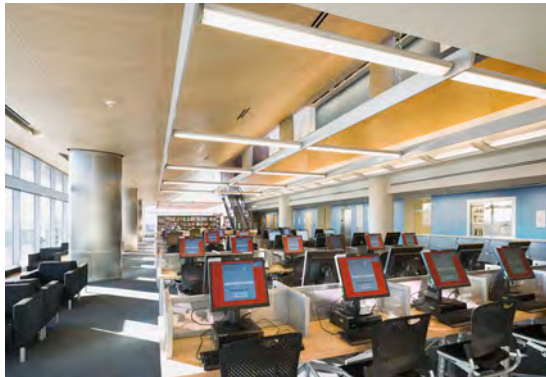
The Energy and Sustainability group at RDA provides independent analysis for commercial tenants, data centers and building owners. Delving deep into how our clients use energy, and what they can do to use less.

Our approach is to distill clear pragmatic advice from technical detail: helping decision makers to quickly see both the strength of a business case, and whether specific measures make sense for their current situation.

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*“If you have anything to do with energy use in buildings we can probably help you to cut costs by using less.”*



## Background

Robert Derector Associates (RDA) is a full service engineering firm that was founded in October 1980 by Robert Derector and Leib Koyfman. We are currently a corporation with Robert Derector holding the position of President, and Anthony Lonigro and Marc W. Feldman as Managing Partners. RDA's core practice focuses on MEP engineering design for high-tech tenant fit-outs, educational, retail and residential assignments and building modernizations. Robert Derector Telecommunications (RDT) provides our clients with a unique engineering approach to the design of telecommunications, security and audiovisual systems. While Robert Derector Mission Critical (RDMC) specializes in the design of data centers, MEP engineering for other mission critical facilities and the provision of full commissioning services.

*“Long after projects are completed, RDA remains committed to, and stands behind, their work.”*

Susanne Fullam  
Director of Administration  
Herrick, Feinstein LLP

It is through uncompromised attention-to-detail, constant concern for our clients' needs and a pragmatic engineering approach that Robert Derector Associates has become one of the premier consulting engineering practices in New York. We understand the importance of maintaining our efforts on every assignment until our clients' expectations have been fully met or exceeded; and we measure our success in that respect by the high percentage of our work that comes from repeat assignments and referrals.

We never lose sight of the fact that we are a service organization. Excellence is the cornerstone of our practice.



# CERTIFICATIONS HELD – ENERGY AND SUSTAINABILITY

NYSERDA FlexTech Consultants

Certified Energy Auditor (CEA)

Existing Building Commissioning Professional (EBCP)

LEED Accredited Professional Building Design + Construction (LEED AP BD+C)

LEED Accredited Professional Interior Design + Construction (LEED AP ID+C)

LEED Accredited Professional Operations + Maintenance (LEED AP O+M)

LEED Green Associate

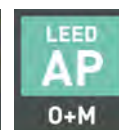
The firm is licensed to practice in 27 states.

*“Their individual teams’ work product is exceptional and their staff’s conscientiousness and attention-to-detail defines them as a dependable resource.”*

Emilio Galanda  
Assistant Vice President  
Head of Corporate Facilities  
ING Investment Management



NYSERDA







## Select Clients

### Real Estate

Boston Properties  
TIAA-CREF  
Muss Development Group  
The Olnick Organization  
The Nightingale Group  
Capstone Equities  
Moinian Group

### Professional Services

Gensler NYC  
Ernst & Young  
Cushman Wakefield  
Jones Lang LaSalle  
Proskauer Rose LLP  
Paul Hastings LLP  
White & Case LLP

### Financial

Renaissance Technologies  
Morgan Stanley  
Blackstone  
Santander  
SWIFT  
Lloyds Banking Group

### Consumer

Ericsson  
Coca Cola Company  
PepsiCo

### Education

St Stanislaus Kostka Catholic Academy  
Chapin School



# Awards

Engineering News-Record (2009 - 2016) 500 Top Design Firms

IFMA Awards of Excellence 2013 - Aegis Media  
 IFMA Awards of Excellence 2013 - National Football League  
 IFMA Awards of Excellence 2014 - Univison

New York Construction News (October 2002 - 2009)  
 Number 1 Interior Design Engineering Practice in the New York Metropolitan Area

New York Construction News (October 2002 - 2006) Top Telecommunications firm

Listed as an industry giant in Consulting Specifying Engineer Magazine (1994 – Present)

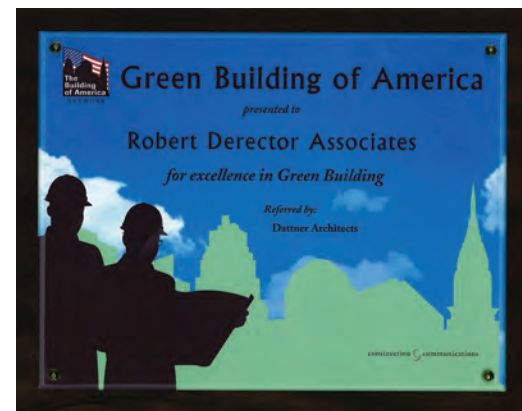
Real Estate & Construction Review 2008 Top Project - Klein Campus Center at the Dwight Englewood School

New York Construction Best of 2008 Award - The Reed Smith Conference Center

New York Construction Best of 2004 Award - US Concepts

New York Board of Ed Award for Design of PS 234

Cover of Consulting Specifying Engineer Magazine October 2001

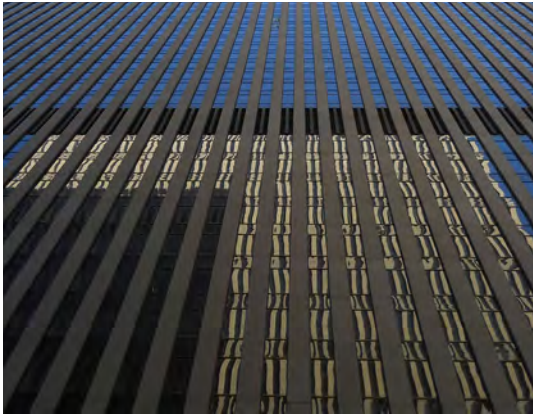




# rd Services

*“Their ability to solve problems and find solutions has been successfully applied to all of the various projects they have worked on with us.”*

David Sanderson  
Project Manager II  
DLA Piper LLP (US)



## Services

### For Tenants

- Energy Modeling and Cost Savings Analysis
- High Performance Tenant Fit Outs
- Incentive and/or LEED Support
- Portfolio Energy Strategy

### For Building Owners

- Certified Energy Audits (NYC Local Law 87)
- Energy Modeling and Cost Savings Analysis
- Incentive and/or LEED Support
- Renewable and Alternative Technology Feasibility
- Portfolio Energy Strategy

### For Building Upgrades

- Energy Modeling for NYC Energy Code Compliance
- High Performance Building Upgrades
- Incentive and/or LEED Support
- Renewable and Alternative Technology Feasibility

### For Data Centers

- Energy Modeling and Cost Savings Analysis
- Incentive and/or LEED Support
- Energy Audits
- Renewable and Alternative Technology Feasibility

*“RDA’s engineers were directly involved on-site and met deadlines on an already extremely aggressive timeline.”*

Dan Salomon  
Vice-President - Technology  
National Financial Partners





## Selected Highlights

### NYC LOCAL LAW 87 – ENERGY AUDITS AND RETRO-COMMISSIONING

Our energy auditors and commissioning team are certified to perform audits and retro-commissioning for NYC Local Law 87 compliance.

### FLEXTech CONSULTANTS – NYSEDA SUPPORTED ENERGY STUDIES

Our clients in New York can get up to 50% off on our fees for qualifying energy studies. As RDA is a pre-approved FlexTech Consultant, NYSEDA will pay the remainder direct to us.

### CODE COMPLIANCE – ENERGY MODELING

Under the latest energy codes some projects are not permitted to file using COMCHECK. In these cases we can produce an energy model to support code compliance.

### NET ZERO ENERGY – CLEAN TECHNOLOGY FEASIBILITY STUDIES

Onsite renewable, and other clean, energy technology can be an attractive investment at facilities with the right features. We can help assess those features to unlock a site's potential.

*“We have been working with NYSEDA as energy modeler for three of the five pilot projects they ran while developing their new Commercial Tenant Program.”*



*“Tenant fit-out projects in New York can get 50% off on our fees for Energy Modeling under the NYSEDA Commercial Tenant Program.”*

## ENERGY MODELING FOR TENANT FIT-OUTS

Energy modeling is a powerful tool that can help both projects and existing facilities to test out and see how much energy an idea is likely to save before they commit to it.

Traditionally tenant fit-out projects have missed out on these benefits as energy modeling is rarely applied to them. This is due to a combination of: the slow speed of conventional modeling, its focus on whole buildings rather than tenant space, and its inability to distinguish energy use paid for by the tenant from that paid for by the building.

### RDA's SIMPLE THREE STEP APPROACH

RDA's energy and sustainability group has developed a simple three step approach that overcomes these issues: unlocking the benefits of energy modeling for commercial tenants.

#### 1 – Idea Generation

Focus is on the tenant space: its design, its operation and the building systems supporting it.

#### 2 – Interim Model

Initial results are provided early - to assist in making key project decisions

#### 3 – Final Model

Our unique analysis breaks out cost savings for the tenant separately from those of the building.

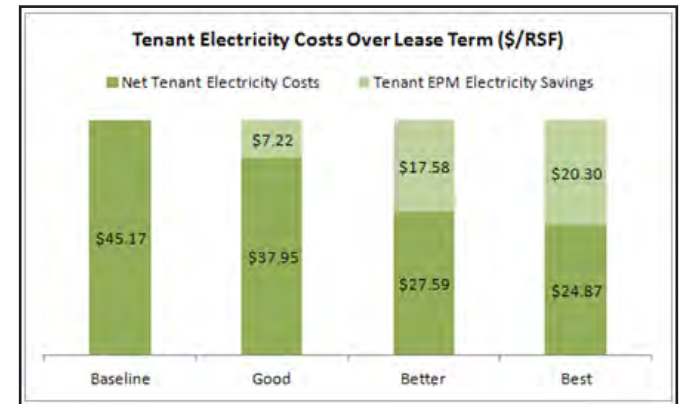
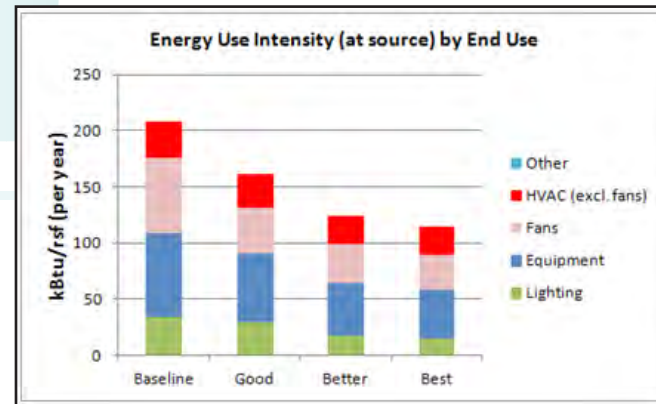
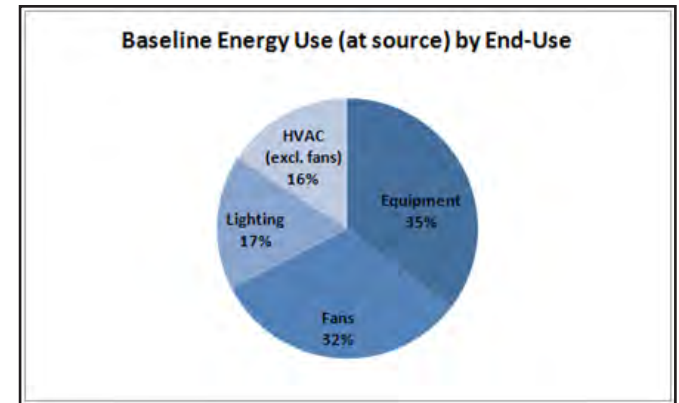
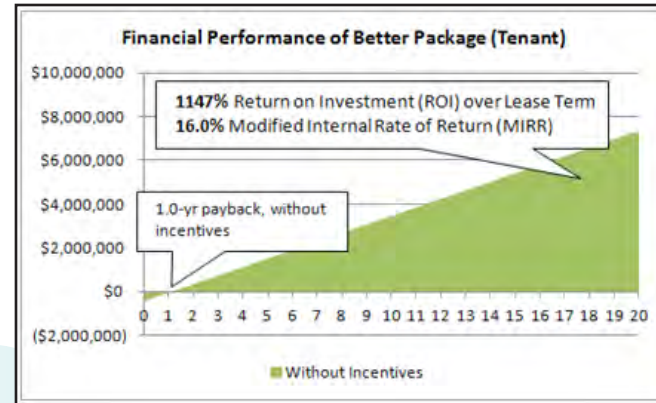
We focus on the challenges and particular energy saving opportunities that exist in tenant space: making use of this three step process, along with material developed by the NRDC's High Performance Tenant Demonstration Program, and our own unique proprietary analytical tools.



“Our analysis for fit-out projects typically identifies potential for energy cost savings of up to 30-50%.”

## HIGH PERFORMANCE TENANT FIT-OUTS – ENERGY MODELING

The best time to cut energy costs as a tenant is during the fit-out of a new space.



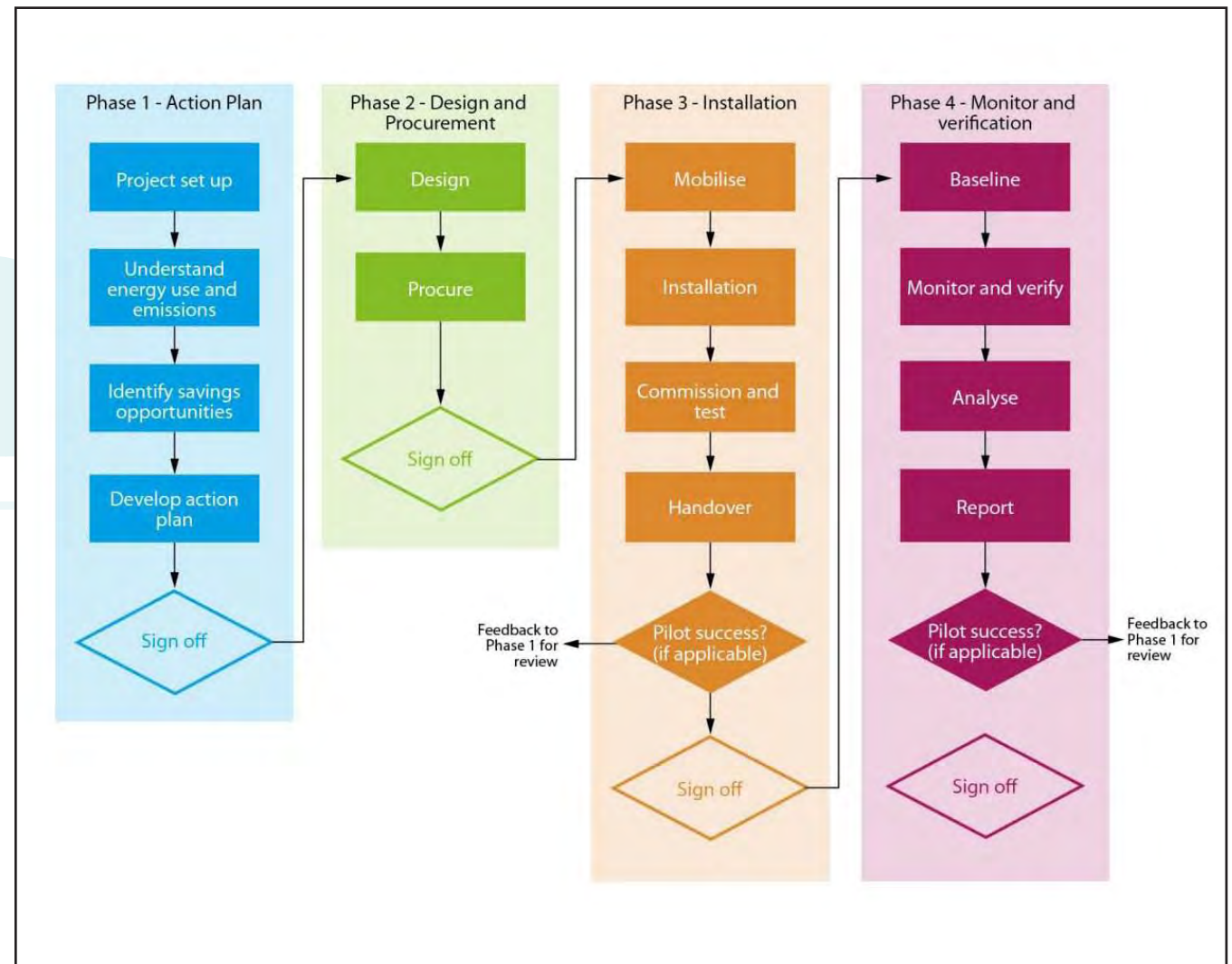


## PORTFOLIO-WIDE ENERGY STRATEGY

Our client's with regional, national, or global responsibility benefit from economies of scale: making use of our strategic approach to identify the biggest savings at the lowest cost.

After agreeing a prioritized list of savings, we optionally develop an efficient repeatable program to deliver these savings across the portfolio - with minimal requirement for in-house client resource.

*“Jack, our energy and sustainability lead, previously helped Barclays deliver a global energy savings program, that was recognized as the Bank’s most advanced cost reduction program in the first half of 2013.”*





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## Projects

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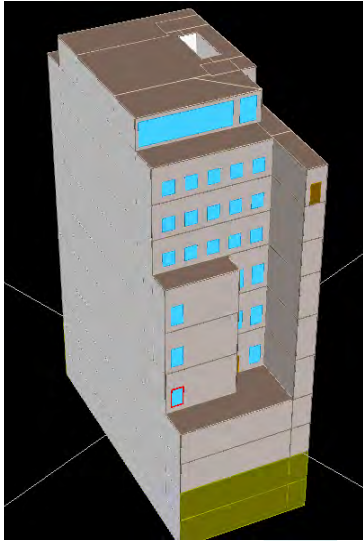
*“No job has been too big and more importantly no job has been too small.”*

Mark E. Roberts  
Facilities Manager  
King & Spalding



## Selected Project Experience - Tenant Space

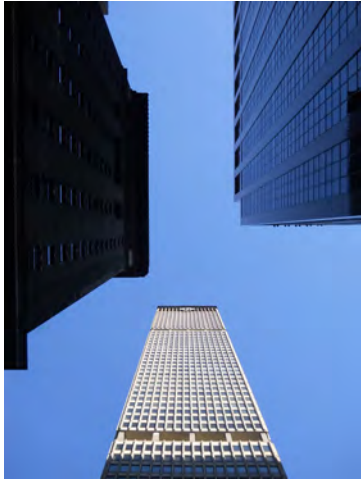
CLIENT	LOCATION	PROJECT TYPE	DESCRIPTION
Gensler NYC	1700 Broadway, New York, NY	Tenant Energy Model	Energy modeling and analysis of a 125,000 square foot architectural office as a pilot NYSERDA/NRDC high performance tenant demonstration project.
White & Case LLP	1221 Avenue of the Americas, New York, NY	Tenant Energy Model	Energy modeling and analysis of a 440,000 square foot law office as a pilot NYSERDA/NRDC high performance tenant demonstration project. Identifying tenant energy savings of 39%.
Paul Hastings LLP	200 Park Avenue, New York, NY	Tenant Energy Model	Energy modeling and analysis of a 190,000 square foot law office as a pilot NYSERDA/NRDC high performance tenant demonstration pilot project. Identifying tenant energy savings of 35%.
Cushman Wakefield	One World Trade Center, New York, NY	Tenant Energy Model	Energy modeling and analysis of a 6,000 square foot brokerage office, as an NRDC high performance tenant demonstration project.
Law Firm	Midtown, NY	Tenant Energy Study	Review of tenant energy use, identifying \$120,000 in annual savings for tenant from simple, no or low cost measures.



screenshot from eQUEST energy modeling software

## Selected Project Experience - Building Upgrades

CLIENT	LOCATION	PROJECT TYPE	DESCRIPTION
Capstone Equities	5 East 59th Street, New York, NY	NYCECC Energy Model	Energy modeling to support full building renovation and facade replacement, to achieve NYCECC code compliance.
Moinian Group	2 East 45th Street, New York, NY	NYCECC Energy Model	Energy modeling for a re-development of retail floors, to achieve NYCECC code compliance.
Nightingale Group	645 Madison Avenue, New York, NY	MEP Upgrade Energy Model	Energy modeling to determine whether cost savings from a set of proposed upgrades to the building's MEP infrastructure will be sufficient to justify their implementation.
PepsiCo	700 Anderson Hill Road, New York, NY	MEP Upgrade Energy Model	Energy modeling supporting the design of a high performance HVAC system.
Chapin School	100 East End Avenue, New York, NY	MEP Upgrade Energy Analysis	Energy analysis of lighting and HVAC upgrades; supporting application for NYSERDA/Con Edison incentive support.
Muss Development	Forest Hills Tower, Forest Hills, NY	MEP Upgrade Energy Analysis	Energy analysis of base building HVAC upgrades in a 520,000 square foot mixed use building; supporting application for NYSERDA Existing Facility and Demand Management Program incentive support.



## Selected Project Experience - Portfolio Management

CLIENT	LOCATION	PROJECT TYPE	DESCRIPTION
TIAA-CREF / JLL	685 Third Avenue, New York, NY	Energy Audit	ASHRAE Level II Audit, Retro-commissioning and NYC Local Law 87 Compliance at a 650,000 square foot office building.
Boston Properties	540 Madison Avenue, New York, NY	Energy Audit	Level III Audit of a 290,000 square foot office building. Identifying electrical savings of 27% and achieving Local Law 87 Compliance.
Ernst & Young	200 Plaza Drive Secaucus, NJ	Energy Audit	ASHRAE Level I Audit to assess building energy cost, system efficiency and MEP operation for LEED EBOM certification.
St Stanislaus Kostka Catholic Academy	12 Newell Street, Brooklyn, NY	Energy Audit	Thermal imaging survey and energy performance walkthrough identifying steam heating improvements in a pre-war building.
Coca Cola Company	711 5th Avenue, New York, NY	Fair Rent Evaluation	Fair rent evaluation of base building HVAC charges on behalf of building ownership.
The Olnick Organization	2600 Netherlands Avenue, New York, NY	Fair Rent Evaluation	Fair rent evaluation of metered Btu rates for tenant consumption of chilled water, hot water and steam.





## Selected Project Experience - Mission Critical Facilities

CLIENT	LOCATION	PROJECT TYPE	DESCRIPTION
Santander Bank	United Kingdom	LEED Certification	Energy analysis of IT side equipment for a high resilience new build data center. Awarded LEED Gold Certification.
Technology Firm	Quebec, Canada	LEED Certification	LEED consultancy support and management of design stage certification for a 200,000 square foot new build data center. Targeting LEED Gold Certification.
Financial Firm	United Kingdom	LEED Certification	LEED certification support for a high resilience new build data center. Targeting LEED Gold Certification.
Financial Firm	245 Park Avenue, New York, NY	Data Center Upgrade	Energy analysis of a performance upgrade to data center infrastructure. Achieved 33% energy savings and a NYSERDA Industrial and Process Efficiency incentive.
Morgan Stanley	2000 Westchester Avenue, Westchester, NY	MEP Upgrade Energy Model	Energy modeling to assess potential for energy cost savings from the installation of a transfer duct on a 100% outdoor air system.
Financial Firm	Long Island, NY	Clean Tech Feasibility	Feasibility study for a mission critical campus facility. Assessing technical potential and business case for use of energy technologies; including fuel cells and solar photovoltaic (PV) panel arrays.



## Team

*“RDA has consistently exceeded our expectations.”*

Richard Gesimondo  
Property Manager  
Hampton Management



**Jack Jenkins, CEA, LEED AP BD+C**  
*Energy and Sustainability Lead*

Jack leads the Energy and Sustainability group at RDA. He is a keen advocate for a greener economy, and has spent over 10 years providing independent analysis to help organizations both become more sustainable and cut their energy costs.

Education: Imperial College London, MS Energy Policy  
University of Manchester & UC Davis, BS Physics



**Perry Fox, CEA, LEED AP ID+C**  
*Associate*

Since 2008, Perry has worked on all aspects of HVAC design and construction. He has also supported Tenant build-outs by using energy modeling to test out ideas before projects commit to them. Perry is a LEED AP and has been integral to the design of many LEED projects. He also obtained his accreditation as a Certified Energy Auditor, performing Type I and II energy audits.

Education: Yeshiva University, BS Physics with  
Mathematics and Computer Science



**Tzvi Karoly, PE, CEA, LEED AP O+M**  
*Mechanical and Energy Engineer*

Tzvi joined RDA in 2012 and has participated in a wide variety of projects, including multi floor tenant fit-outs, base building infrastructure upgrades, retail spaces and energy audits. Prior to this, he worked for 3 years as an energy consultant, helping commercial and residential buildings as well as large sports facilities significantly reduce their energy usage and utility costs by implementing innovative energy efficient design strategies and procuring various NYSERDA and Con Edison incentives to offset the capital expenditures.

Education: Columbia University, BSME  
Yeshiva University, BS Physics



**Michael Agazzi, EBCP, LEED AP ID+C**  
*Mechanical & Commissioning Engineer*

Michael quickly began taking on numerous projects as a mechanical engineer for RDA's Mission Critical (RDMC) group, after joining in 2011. Such projects involve office fit-outs, data center expansions, and new construction. With a primary focus on commissioning both new and existing HVAC/Mechanical systems, he also has experience with testing various Electrical and Plumbing equipment.

Education: Manhattan College, BSME

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