

District Energy Space 2016



Spotlighting Industry Growth

2016: More than 163 million square feet reported

Over 2.1 billion square feet reported since 1990

District Energy Space 2016

Industry Growth around the World

Dedicated to the growth and utilization of district energy as a means to enhance energy efficiency, provide more sustainable and reliable energy infrastructure, and contribute to improving the global environmen.



The publication of *District Energy Space* has become an annual tradition for the International District Energy Association since 1990. Compilations beyond North America were initiated in 2004.

This issue features a compilation of data provided by our members including the number of buildings and their area in square feet that have been committed or recommitted to district energy service in North America during calendar year 2016, or previously unreported for recent years.

Established in 1909, the International District Energy Association (IDEA) serves as a vital communications and information hub for the district energy industry, connecting industry professionals and advancing the technology around the world. With headquarters just outside of Boston, Mass., IDEA comprises over 2,000 district heating and cooling system executives, managers, engineers, consultants and equipment suppliers from 23 countries. IDEA supports the growth and utilization of district energy as a means to conserve fuel, increase energy efficiency and resilience, and reduce emissions.



Each year, IDEA asks all of its member systems to provide information on buildings that committed or recommitted to district energy service during the previous calendar year. To qualify for consideration in *District Energy Space*, a renewal must be a contracted building or space that had been scheduled to expire during the calendar year and was renewed under a contract with a duration of 10 years or more. Year-to-year rollover--simple continuation of service to existing buildings is not considered renewal.

For each building, *District Energy Space* provides the following information:

- Building name and/or type
- Service provider's name and location
- Building area served in square feet
- Services provided (heating, domestic hot water, laundry, cooling, ice-making, pool warming, etc.)



District Energy Space not only enables IDEA to document the year-to-year growth experienced by our member systems, but also can be a valuable marketing asset for your organization. During the IDEA 108th Annual Conference in Scottsdale, Arizona, June 26-29, 2017, IDEA will recognize and present awards to those systems submitting the greatest amount of total square footage and the greatest number of total buildings for 2016 for both North America and Beyond North America.

All systems submitting growth data will receive an IDEA *Certificate of Participation*.

District Energy Space 2016 and previous issues are available in PDF format by downloading from IDEA's Web site, http://www.districtenergy.org/district-energy-space-2/

Summary for 2016

North America

Our members reported that they committed or recommitted **350** customer buildings in North America totaling **57,810,954** square feet (sq ft) of building space to district energy service during 2016, or were previously unreported. That compares with **158** buildings and **33,678,616** sq ft during 2015.

The North America total of **57,810,954** sq ft added in 2016 to IDEA's running total of reported square footage of **693,853,070** sq ft committed to North American district energy systems since 1990, brings the current total for North America reported since 1990 to **751,664,024** sq ft.

Beyond North America

IDEA is also pleased to be able to report strong system growth from beyond North America, which we have tracked since 2004. An additional 425 buildings and 105,331,989 sq ft were reported for 2016. That compares with 121 buildings and 42,856,027 sq ft during 2015.

The Beyond North America total of **105,331,989** sq ft added in 2016 to IDEA's running total of square footage of **1,261,181,305**

Beyond North America since 2004, brings the Beyond North America total reported since 2004 to 1,366,513,294 sq ft.

Totals: North America and Beyond North America

The total combined building area reported added during 2016 in North America and Beyond North America is **163,142,942** sq ft. The total building area added, as reported to *District Energy Space* by our members since our tally began is **163,142,942** + **1,955,034,376** = **2,118,177,318** sq feet.

Stand Up and Be Recognized for 2017

Make plans now to photograph and enter your customer buildings that commit or recommit for your district energy service during 2017! The deadline for submittal of buildings added in 2017 is Fri., April 20, 2018. See back cover for more information.

Continuing our tradition, during the IDEA 108th annual conference in Scottsdale, Arizona, June 26-29, 2017, IDEA will congratulate and present awards to those systems reporting the largest growth for calendar 2016 for both North America and Beyond North America. We look forward to seeing you there!

Category	North America	Beyond North America
Commercial-Mixed Use	1,688,769	89,569,318
Commercial-Office	22,152,891	4,885,222
Commercial-Retail/Manufacturing	1,295,392	539,234
Commercial-Other	987,441	44,530
Entertainment, Cultural or Sporting Center	426,672	172,088
Government	1,925,885	39,617
Hotel	1,264,323	1,544,366
Residential	6,897,551	8,518,076
School, Hospital or Institution	19,459,110	19,536
Other	1,712,920	0
Square Footage Reported 2016	57,810,954	105,331,989

^{*} All entries are newly signed, connected or renewed customers during calendar year 2016 (*Renewal* means contractually recommitted to a long-term service agreement of 10 years or greater.)

Commercial-Mixed Use

 Mixed Use (Retail/Restaurant & Commercial/Residential)
 New York City, NY

Con Edison Steam Operations 12.420 sq ft—space heating

Mixed Use (Residential & Commercial)

New York City, NY Con Edison Steam Operations 636,916 sq ft—space heating

Mixed Use (Retail/Restaurant & Commercial/Residential)

New York City, NY Con Edison Steam Operations 27,785 sq ft—space heating

Mixed Use (Retail/Restaurant & Commercial/Residential)

New York City, NY Con Edison Steam Operations 866,359 sq ft—space heating

Tempo

Richmond, BC, Canada Lulu Island Energy Company 4,952 sq ft (commercial) space heating, domestic hot water



Tempo

River Park Place

Richmond, BC, Canada Lulu Island Energy Company 12,627 sq ft (commercial) space heating, domestic hot water



River Park Place

■ Cadence

Richmond, BC, Canada Lulu Island Energy Company 76,750 sq ft (commercial) space heating, domestic hot water



Cadence

CBRE

Boston, MA Veolia Energy Boston 50,960 sq ft—space heating

Commercial-Office

208 Neces

Austin, TX Austin Energy 365,500 sq ft—space cooling

Shoal Creek Walk

Austin, TX Austin Energy 218,500 sq ft—space cooling

Surrey Gateway Place

Surrey, BC, Canada Surrey City Energy 135,335 sq ft—space cooling

Office Building

New York City, NY Con Edison Steam Operations 1,638,637 sq ft—space heating, domestic hot water

Office Building

New York City, NY Con Edison Steam Operations 156,823 sq ft—space heating

Office Building

New York City, NY Con Edison Steam Operations 156,823 sq ft—space heating

Office Building

New York City, NY Con Edison Steam Operations 827,686 sq ft—space heating, domestic hot water Office Building

New York City, NY Con Edison Steam Operations 493,039 sq ft—space heating, domestic hot water

Office Building

New York City, NY Con Edison Steam Operations 370,000 sq ft—space heating

Office Building

New York City, NY Con Edison Steam Operations 400,294 sq ft—space heating, domestic hot water

Office Building

New York City, NY Con Edison Steam Operations 488,366 sq ft—space heating, space cooling, domestic hot water

Office Building

New York City, NY Con Edison Steam Operations 101,319 sq ft—space heating, domestic hot water

Office Building

New York City, NY Con Edison Steam Operations 582,542 sq ft—space heating, domestic hot water

Office Building

New York City, NY Con Edison Steam Operations 383.486 sq ft—space heating, space cooling, domestic hot water

Office Building

New York City, NY Con Edison Steam Operations 636,490 sq ft—space heating, space cooling, domestic hot water

Office Building

New York City, NY Con Edison Steam Operations 1,578,972 sq ft—space heating, space cooling, domestic hot water

200 S. Michigan Avenue

Chicago, IL Enwave Chicago 357,000 sq ft—space cooling 141 W. Jackson Boulevard Chicago, IL
 Enwave Chicago
 775,000 sq ft—space cooling

■ 151 N. Franklin Street

Chicago, IL Enwave Chicago 807,000 sq ft—space cooling

122 S. Michigan Avenue

Chicago, IL Enwave Chicago 578,359 sq ft—space cooling

■ 225 W. Randolph Avenue

Chicago, IL Enwave Chicago 800,000 sq ft—space cooling

311 W. Washington Boulevard

> Chicago, IL Enwave Chicago 64,800 sq ft—space cooling

231 S. LaSalle Street

Chicago, IL Enwave Chicago 936,800 sq ft—space cooling

220 Simcoe Street

Toronto, ON, Canada Enwave Toronto 294.011 sq ft—space cooling

Exchange Tower

Toronto, ON, Canada Enwave Toronto 1,028,412 sq ft—space cooling

Brookfield Place

Toronto, ON, Canada Enwave Toronto 1,391,000 sq ft—space cooling

■ 19 Duncan Street

Toronto, ON, Canada Enwave Toronto 455,384 sq ft—space heating, space cooling

Historic Flat Iron Building

San Francisco, CA NRG Energy Center San Francisco LLC 37,500 sq ft—space heating, domestic hot water

400 Montgomery

San Francisco, CA NRG Energy Center San Francisco LLC 80,000 sq ft—space heating, domestic hot water

Commercial-Office cont.

Post Montgomery Center
 San Francisco, CA
 NRG Energy Center San
 Francisco LLC
 1,000,000 sq ft—space heating, domestic hot water

Standard Oil Building
 San Francisco, CA
 NRG Energy Center San
 Francisco LLC
 560,000 sq ft—space heating, domestic hot water

Montgomery Office Tower
 San Francisco, CA
 NRG Energy Center San
 Francisco LLC
 631,000 sq ft—space heating,
 domestic hot water

1 Light Street Baltimore, MD Veolia Energy Baltimore 776,000 sq ft—space heating, space cooling, domestic hot water

Beacon Capital
 Boston, MA
 Veolia Energy Boston
 207,000 sq ft—space heating, domestic hot water

One Beacon
 Boston, MA
 Veolia Energy Boston
 1,258,404 sq ft—space heating, space cooling domestic hot water

Oklahoma City, OK
Veolia Energy Oklahoma City
200,000 sq ft—space cooling

Four Penn Center
 Philadelphia, PA
 Veolia Energy Philadelphia
 525,000 sq ft—space heating, domestic hot water

SEPTA
 Philadelphia, PA
 Veolia Energy Philadelphia
 1,670,332 sq ft—space heating, domestic hot water

Commercial—Retail/ Manufacturing

Retail
 New York City, NY
 Con Edison Steam Operations
 115,330 sq ft—space heating

Commercial
 New York City, NY
 Con Edison Steam Operations
 33,626 sq ft—space heating,
 domestic hot water

Retail
New York City, NY
Con Edison Steam Operations
57,700 sq ft—space heating,
domestic hot water

208 W. Washington
 Boulevard
 Chicago, IL
 Enwave Chicago
 292,736 sq. ft—space cooling

55 E. Grand Avenue
 Chicago, IL
 Enwave Chicago
 15,283 sq. ft—space cooling

 520 N. Michigan Avenue Chicago, IL Enwave Chicago 98,527 sq. ft—space cooling

 65 W. Jackson Boulevard Chicago, IL Enwave Chicago
 48,190 sq. ft—space cooling

Smart Reit Richmond, BC, Canada Lulu Island Energy Company 284,000 sq ft—space heating, space cooling



Smart Reit

Faneuil Hall
 Boston, MA
 Veolia Energy Boston
 350,000 sq ft—space heating

Commercial-Other

Restaurant
 New York City, NY
 Con Edison Steam Operations
 855,142 sq ft—space heating, domestic hot water

Arvest Bank
 Tulsa Oklahoma
 Veolia North America
 72,299 sq ft—space cooling

Holarud
Tulsa Oklahoma
Veolia North America
60,000 sq ft—space heating,
space cooling

Entertainment, Cultural or Sporting Center

Indoor Sports Center (ISC)
 Oxford, OH
 Miami University of Ohio
 91,000 sq ft—space heating



Indoor Sports Center (ISC)

Joslyn Museum
 Omaha, NE
 NRG Energy Center Omaha
 107,000 sq ft—space heating,
 space cooling

Philadelphia Racquet Club
 Philadelphia, PA
 Veolia North America
 Philadelphia
 110,000 sq ft—space heating, domestic hot water

Tremont Street Theater Boston, MA Veolia North America Boston 10,401 sq ft—space heating

Aquatic Centre (LEED® Gold) Vancouver, BC, Canada University of British Columbia 86,521 sq ft—space heating, domestic hot water



Aquatic Centre

Jane Sanders Stadium
 Eugene, OR
 University of Oregon
 21,750 sq ft—space heating,
 space cooling, domestic hot



Jane Sanders Stadium

Government

Courts Complex
 Phoenix, AZ
 NRG Energy Center Phoenix
 575,725 sq ft—space cooling



Courts Complex

Government cont.

225 W. Madison Building Phoenix, AZ NRG Energy Center Phoenix 198,899 sq ft—space cooling



225 W. Madison Building

■ Executive Complex

San Diego, CA NRG Energy Center San Diego 33,400 sq ft—space cooling



Executive Complex

Courthouse

Boston, MA Veolia North America Boston 26,460 sq ft—space heating

Registry of Deeds

Boston, MA Veolia North America Boston 256,401 sq ft—space heating

Municipal Courts Building

Oklahoma City, OK Veolia North America Oklahoma City 80,000 sq ft—space heating, space cooling, domestic hot water

 Tulsa Kerr Edmondson State Office Facility

Tulsa, Oklahoma Veolia North America Tulsa 255,000 sq ft—space cooling David L. Moss Criminal Justice Center

> Tulsa, Oklahoma Veolia North America Tulsa 500,000 sq ft—space heating, space cooling

Hotel

Aloft/Element Hotel

Austin TX Austin Energy 197,821 sq ft—space cooling

■ Hotel/Club

New York City, NY Con Edison Steam Operations 83,000 sq ft—space heating, domestic hot water

■ 65 W. Jackson Boulevard

Chicago, IL Enwave Chicago 193,323 sq ft—space cooling

Marriott Hotel

Omaha, NE NRG Energy Center Omaha 304,000 sq ft—space heating, space cooling, kitchen

Clift Hotel

San Francisco, CA NRG Energy Center San Francisco 100,000 sq ft—space heating, domestic hot water

■ Four Seasons

Boston, MA Veolia North America 584,000 sq ft—space heating, space cooling, kitchen

Residential

■ Fifth & West Residential

Austin, TX
Austin Energy
330,000 sq ft—space cooling

The Independent

Austin, TX
Austin Energy
700,000 sq ft—space cooling

208 W. Washington Blvd.

Chicago, IL Enwave Chicago 385,580 sq ft—space cooling Alexandra Court

Richmond, BC, Canada Lulu Island Energy Company 258,000 sq ft—space heating, space cooling, domestic hot water



Alexandra Court

Oxford Lane

Richmond, BC, Canada Lulu Island Energy Company 64,000 sq ft—space heating, space cooling, domestic hot water



Oxford Lane

■ Tempo

Richmond, BC, Canada Lulu Island Energy Company 209,315 sq ft—space heating, domestic hot water

■ River Park Place

Richmond, BC, Canada Lulu Island Energy Company 179,058 sq ft—space heating, domestic hot water

Cadence

Richmond, BC, Canada Lulu Island Energy Company 200,080 sq ft—space heating, domestic hot water

■ Encore Capital

San Francisco, CA Enwave North America 80,000 sq ft—domestic hot water ■ Trinity 3

San Francisco, CA Enwave North America 325,000 sq ft—space heating, domestic hot water

University District

Surrey, BC, Canada Surrey City Energy 246,483 sq ft—space heating, domestic hot water

Park Avenue

Surrey, BC, Canada Surrey City Energy 661,765 sq ft—space heating, domestic hot water

■ One/Two Family Dwelling

New York City, NY Con Edison Steam Operations 4,320 sq ft—space heating, domestic hot water

Condominium

New York City, NY Con Edison Steam Operations 81,199 sq ft—space heating

Elevator Apartment

New York City, NY Con Edison Steam Operations 297,703 sq ft—space heating, domestic hot water

Condominium

New York City, NY Con Edison Steam Operations 905,634 sq ft—space heating

Condominium

New York City, NY Con Edison Steam Operations 577,300 sq ft—space heating, domestic hot water

Condominium

New York City, NY Con Edison Steam Operations 756,686 sq ft—space heating, domestic hot water

Condominium

New York City, NY Con Edison Steam Operations 215,000 sq ft—space heating, domestic hot water

Condominium

New York City, NY Con Edison Steam Operations 393,031 sq ft—space heating, domestic hot water

Residential cont

- Condominium
 New York City, NY
 Con Edison Steam Operations
 322,260 sq ft—space heating,
 domestic hot water
- Orchard Commons (LEED® Gold)
 Vancouver, BC, Canada University of British Columbia 343,201 sq ft—space heating, domestic hot water
 Orchard Commons
- Brooks Hall (Seeking LEED® Certification)
 Columbia, MO
 University of Missouri
 91,937 sq ft—space heating,
 space cooling, humidification,
 domestic water, electricity



Brooks Hall

The Drake Apartments
 Philadelphia, PA
 Veolia Energy Philadelphia
 300,000 sq ft—space heating, domestic hot water

School, Hospital, Institution

 Indiana University-Purdue University Indianapolis (IUPUI)

Marion, IN Citizens Thermal Energy 45,000 sq ft—space heating, space cooling

- Hospital/Health Facility New York City, NY Con Edison Steam Operations 150,000 sq ft—space heating, space cooling, domestic hot water
- Educational Facility
 New York City, NY
 Con Edison Steam Operations
 11,235 sq ft—space heating

Orchard Commons (LEED[®] Gold)

Vancouver, BC, Canada University of British Columbia 85,456 sq ft—space heating, domestic hot water, kitchen

Addition-Quantum Matter Institute (LEED® Gold)
Vancouver, BC, Canada
University of British Columbia 54,984 sq ft—space heating,

domestic hot water, process

The Brimacombe Building



The Brimacombe Building Addition (QMI)

Health Clinics and Surgery Center

Minneapolis, MN University of Minnesota 344,760 sq ft—space heating, space cooling, domestic hot water, humidification, process, refrigeration



Health Clinics and Surgery Center

Missouri Orthopedic Addition (Seeking LEED® Certification) Minneapolis, MN University of Minnesota 87,503 sq ft—space heating, space cooling, humidification, domestic water, electricity



Missouri Orthopedic Addition

Lafferre Hall Addition

Minneapolis, MN University of Minnesota 349,345 sq ft—space heating, space cooling, humidification, domestic water, electricity



Lafferre Hall Addition

 Swallow Hall (LEED[®] Gold Certified)

Minneapolis, MN University of Minnesota 37,592 sq ft—space heating, space cooling, humidification, domestic water, electricity



Swallow Hall

Early Childhood CARES Building

Eugene, OR University of Oregon 22,563 sq ft—space heating, space cooling, domestic hot water



Early Childhood CARES Building

942 Olive

Eugene, OR University of Oregon 12,800 sq ft—space heating, space cooling, domestic hot water



942 Olive

■ Enzi STEM Building

Laramie, WY University of Wyoming 98,980 sq ft—space heating, domestic hot water, process, other



Enzi STEM Building

High Bay Research Facility Laramie, WY

University of Wyoming 79,701 sq ft—space heating, domestic hot water, process



High Bay Research Facility

School, Hospital, Institution

- University of MD, Baltimore, Health Sciences Facility III Baltimore, MD
 Veolia Energy Baltimore
 428,970 sq ft—space heating, domestic hot water, humidification
- Emerson College Cafeteria Boston, MA
 Veolia Energy Boston 10,000 sq ft—space heating
- Emerson College
 Boston, MA
 Veolia Energy Boston
 1,250,000 sq ft—space heating
- Brigham and Women's Hospital Boston, MA Veolia Energy Boston 360,000 sq ft—space heating, space cooling, process
- Temple School of Podiatric Medicine Philadelphia, PA

Veolia Energy Philadelphia 150,000 sq ft—space heating, domestic hot water, humidification, process

University of Pennsylvania Philadelphia, PA Veolia Energy Philadelphia 14,000,000 sq ft—space heating, space cooling, domestic hot water, humidification, process, kitchen

North Quad Dorms

Oxford, OH Miami University of Ohio 250,221 sq ft—space heating, space cooling, domestic hot water, kitchen, refrigeration



North Quad Dorms

- Kiewit University
 - Omaha, NE NRG Energy Center Omaha 60,000 sq ft—space heating, space cooling
- Allegheny General Hospital Pittsburgh, PA NRG Energy Center Pittsburgh 1,589,000 sq ft—space heating, space cooling



Allegheny General Hospital

Other

New England Historical Society

Boston, MA Veolia Energy Boston 24,460 sq ft—space heating, humidification

- Biogen
 Boston, MA
 Veolia Energy Boston
 26,460 sq ft—space heating,
 space cooling, domestic hot
 water, process
- Bristol Myers Squibb
 Boston, MA
 Veolia Energy Boston
 460,000 sq ft—space heating,
 domestic hot water, process
- Fire Hall No. 3 (LEED® Gold) Richmond, BC, Canada Lulu Island Energy Company 26,000 sq ft—space heating, domestic hot water



Fire Hall No. 3

Uptown Energy Center/ UPMC Mercy Pittsburgh, PA NRG Energy Center Pittsburgh

1,200,000 sq ft—space heat-



Uptown Energy Center/UPMC Mercy

Commercial-Mixed Use

- Sanfran Trading FZCO
 Dubai, UAE
 Emirates District Cooling-EMICOOL LLC
 35,779 sq ft—space cooling
- Blue Rhine Gen. Trading LLC Dubai, UAE
 Emirates District Cooling-EMICOOL LLC
 33,074 sq ft—space cooling
- Fashion Way Trading LLC
 Dubai, UAE
 Emirates District Cooling EMICOOL LLC
 62,302 sq ft—space cooling
- Mohd. Hussain & Brothers
 Dubai, UAE
 Emirates District Cooling EMICOOL LLC
 41,570 sq ft—space cooling
- Accuro Specialist Support Services
 Dubai, UAE
 Emirates District Cooling-EMICOOL LLC
 25,228 sq ft—space cooling
- Moon Mood General Trading LLC
 Dubai, UAE
 Emirates District Cooling-EMICOOL LLC
 18,299 sq ft—space cooling
- Kanaka Trading FZCO
 Dubai, UAE
 Emirates District Cooling-EMICOOL LLC
 84,253 sq ft—space cooling



Kanaka Trading FZCO-Fortune Park Hotel

Bloomsbury Trading
 Dubai, UAE
 Emirates District Cooling EMICOOL LLC
 45,488 sq ft—space cooling

- Bloomsbury Trading
 Dubai, UAE
 Emirates District Cooling-EMICOOL LLC
 76,435 sq ft—space cooling
- Alphamed General Trading LLC
 Dubai, UAE
 Emirates District Cooling-EMICOOL LLC
 28,542 sq ft—space cooling
- Jumeirah Village Circle
 Dubai, UAE
 Empower-Emirates Central
 Cooling Systems Corporation
 72,055,405 sq ft—space
 cooling



Jumeirah Village Circle Project

Abraj Quartier-01
Doha, Qatar
Qatar District Cooling
Company
655,248 sq ft—space cooling



Abraj Quartier-01

Abraj Quartier-02
 Doha, Qatar
 Qatar District Cooling
 Company
 646,916 sq ft—space cooling

- QIMC Tower
 Doha, Qatar
 Qatar District Cooling
 Company
 861,120 sq ft—space cooling
- BCA Green Mark Platinum Award) Singapore Singapore District Cooling 2,440,876 sq ft—space cooling

Marina One (LEED® Platinum,



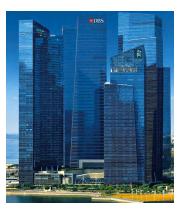
Marina One

Marina Bay Sands (BCA Green Mark Platinum Award) Singapore Singapore District Cooling 6,135,423 sq ft—space cooling, domestic hot water



Marina Bay Sands

 Marina Bay Financial Centre (BCA Green Mark Platinum Award)
 Singapore
 Singapore District Cooling
 3,665,743 sq ft—space cooling



Marina Bay Financial Centre

 Asia Square (LEED® Platinum, BCA Green Mark Platinum Award)

Singapore
Singapore District Cooling
2,657,618 sq ft—space cooling



Asia Square

Commercial-Office

- Taif Al Madina Contracting LLC
 Dubai, UAE
 Emirates District Cooling-EMICOOL LLC
 19,590 sq ft—space cooling
- Aerosoft International
 Trading
 Dubai, UAE
 Emirates District Cooling-EMICOOL LLC
 32,873 sq ft—space cooling
- Dubai Business & Mgmt
 Consultants
 Dubai, UAE
 Emirates District Cooling EMICOOL LLC
 34,703 sq ft—space cooling
- Khansaheb Investment LLC Dubai, UAE
 Emirates District Cooling-EMICOOL LLC
 35,916 sq ft—space cooling
- Bukhowa Investment LLC
 Dubai, UAE
 Emirates District CoolingEMICOOL LLC
 39,697 sq ft—space cooling
- Lootah Real Estate Dev. LLC Dubai, UAE
 Emirates District Cooling-EMICOOL LLC
 13,594 sq ft—space cooling
- Affan Innovative Structures
 Dubai, UAE
 Emirates District Cooling EMICOOL LLC
 32,292 sq ft—space cooling

Commercial-Office cont.

Dubai Business & Mgmt Consultants

> Dubai, UAE Emirates District Cooling-EMICOOL LLC 35,542 sq ft—space cooling

Darwish Bin Ahmed & Sons Co LLC

Dubai, UAE
Emirates District CoolingEMICOOL LLC
132,579 sq ft—space cooling

 Themaar Investments LLC & Fizeta Middle East Dubai, UAE Emirates District Cooling-

EMICOOL LLC 32,827 sq ft—space cooling

Union Properties PJSC
 Dubai, UAE
 Emirates District Cooling EMICOOL LLC
 46,503 sq ft—space cooling



Union Properties PJSC-Green Community Phase 3

Zamzam Refreshment Co. LLC

Dubai, UAE Emirates District Cooling-EMICOOL LLC 3,229 sq ft—space cooling

Triplanet International
 Dubai, UAE
 Emirates District Cooling EMICOOL LLC
 282,532 sq ft—space cooling

Raphael Khlat Middle East FZ LLC

Dubai, UAE Emirates District Cooling-EMICOOL LLC 55,908 sq ft—space cooling ■ TECOM C-Grand Central Comm. Brokers

Dubai, UAE Empower-Emirates Central Cooling Systems Corporation 315,697 sq ft—space cooling

Dubiotech-Tecom Investment-Headquarters Complex

Dubai, UAE Empower-Emirates Central Cooling Systems Corporation 585,053 sq ft—space cooling



Dubiotech-Tecom Investment-Headquarters Complex

Dubiotech-DeyaarDevelopment PJSC-Montrose Tower-Hotel

Dubai, UAE Empower-Emirates Central Cooling Systems Corporation 152,987 sq ft—space cooling



Dubiotech-Deyaar Development PJSC-3rd Building-Montrose Tower-Hotel

 One Raffles Quay (LEED[®] Platinum, BCA Green Mark Platinum Award)

Singapore
Singapore District Cooling
1,590,583 sq ft—space cooling



One Raffles Quay

 Ocean Financial Centre (LEED® Platinum, BCA Green Mark Platinum Award) Singapore

Singapore District Cooling 1,033,334 sq ft—space cooling



Ocean Financial Centre

One Marina Boulevard
Singapore
Singapore District Cooling
419,792 sq ft—space cooling



One Marina Boulevard

Commercial—Retail/ Manufacturing

Integrated Tubulars &
 Oilfield Supplies FZCO
 Dubai, UAE
 Emirates District Cooling EMICOOL - LLC
 50,052 sq ft-district cooling

 Corodex Industries Co. LLC Dubai, UAE
 Emirates District Cooling-EMICOOL – LLC
 50,494 sq ft-district cooling

 Aljihan Gulf Horizon General Contracting LLC
 Dubai, UAE
 Emirates District Cooling-EMICOOL – LLC
 37,165 sq ft-district cooling

Naffco FZCO
 Dubai, UAE
 Emirates District Cooling-EMICOOL – LLC
 51,419 sq ft-district cooling

 Al Massoud Bergum Co LLC Dubai, UAE
 Emirates District Cooling-EMICOOL – LLC
 36,360 sq ft-district cooling

Range 3 Investments Ltd. Dubai, UAE Emirates District Cooling-EMICOOL – LLC 152,794 sq ft-district cooling

 Al Fanar Electrical System LLC
 Dubai, UAE
 Emirates District Cooling-EMICOOL – LLC
 27,879 sq ft-district cooling

 Shapoorji Pallonji Middle East Dubai, UAE
 Emirates District Cooling EMICOOL – LLC
 45,187 sq ft-district cooling

Seveille Products
Dubai, UAE
Emirates District CoolingEMICOOL – LLC
54,142 sq ft-district cooling

Commercial-Office cont

- Transline Express General LLC
 Dubai, UAE
 Emirates District Cooling-EMICOOL LLC
 4,680 sq ft-district cooling
- The Sail @ Marina Bay
 Singapore
 Singapore District Cooling
 29,063 sq ft—space cooling



The Sail @ Marina Bay

Commercial-Other

- Parco Restaurant
 Dubai, UAE
 Emirates District Cooling EMICOOL LLC
 25,112 sq ft-district cooling
- Greenhouse Index LLC
 Dubai, UAE
 Emirates District Cooling-EMICOOL LLC
 19,418 sq ft-district cooling

Entertainment

 Singapore Chinese Cultural Centre (BCA Green Mark Platinum Award)
 Singapore
 Singapore District Cooling
 162,772 sq ft—space cooling



Singapore Chinese Cultural Centre

Marina Bay City Gallery
 Singapore
 Singapore District Cooling
 9,317 sq ft—space cooling



Marina Bay City Gallery

Government

 Jamal Abdullah Rashed Mohammed Lootah Dubai, UAE Emirates District Cooling-EMICOOL – LLC 39,617 sq ft-district cooling

Hotel

Land Mark Hotel
 Management LLC
 Dubai, UAE
 Emirates District Cooling EMICOOL – LLC
 26,694 sq ft-district cooling

 Sheikh Zayed Road- Namaa Properties Development LLC-Paramount Tower Hotel & Residence

Dubai, UAE
Empower-Emirates Central
Cooling Systems Corporation
1,016,499 sq ft-district cooling



Sheikh Zayed Road- Namaa Properties Development LLC- Paramount Tower Hotel & Residence

■ TECOM C-H.E. Sheikh
Mohammed Bin Ali Bin
Rashid Al Nuaimi- Telal
Hotel & Residence
Dubai, UAE
Empower-Emirates Central
Cooling Systems Corporation
501,173 sq ft-district cooling

School, Hospital, Institution

Shehla Bridle
 Dubai, UAE
 Emirates District Cooling EMICOOL – LLC
 19,536 sq ft-district cooling

Residential

- Al Marfa Pearl for Development & Investment LLC
 Dubai, UAE
 Emirates District Cooling-EMICOOL LLC
 135,202 sq ft-district cooling
- Al Marfa Pearl for Development & Investment LLC
 Dubai, UAE
 Emirates District Cooling-EMICOOL LLC
 135,202 sq ft-district cooling

Sheikh Zayed Road-HH Sheikh Sultan Mohammed Sultan Al Qasimi Tower-Al Batha Tower Dubai, UAE

Dubai, UAE Empower-Emirates Central Cooling Systems Corporation 495,639 sq ft-district cooling



Sheikh Zayed Road-HH Sheikh Sultan Mohammed Sultan Al Qasimi Tower-Al Batha Tower

Tecom C-Mr. Tayeb
Mohamed Ibrahim
Building
Dubai, UAE
Empower-Emirates Central
Cooling Systems Corporation
1,044,585 sq ft-district cooling



Mr. Tayeb Mohamed Ibrahim Building

Residential cont.

Duboitech-Deyaar
 Development PJSC Montrose Tower Residence
 Dubai, UAE

Empower-Emirates Central Cooling Systems Corporation 313,398 sq ft-district cooling



Duboitech-Deyaar Development PJSC-Montrose Tower Residence

 Dubai Land-H.E. Shaikh Mohammed Bin Ali Bin Rashid Al Nuaimi Residential Building Dubai, UAE

Empower-Emirates Central Cooling Systems Corporation 107,226 sq ft-district cooling



H.E. Shaikh Mohammed Bin Ali Bin Rashid Al Nuaimi Residential Building

 Dubai Land-Mr. Mohammad Mohsen Madhavi-Residential Building

Dubai, ŪAE Empower-Emirates Central Cooling Systems Corporation 153,917 sq ft-district cooling Dubai Land-Mr. Mohammad Mohsen Madhavi-Residential Building

Dubai, UAE Empower-Emirates Central Cooling Systems Corporation 83,593 sq ft-district cooling

 Dubai Land-Al Sondos Real Estate LLC-Residential building

Dubai, UAE Empower-Emirates Central Cooling Systems Corporation 124,155 sq ft-district cooling

 Dubai Land-Mr. Jamno P.
 Kalwani-Residential Building Dubai. UAE

Empower-Emirates Central Cooling Systems Corporation 108,667 sq ft-district cooling

 Dubai Land-Worldgate Investments- Residential Building

Dubai, UAE Empower-Emirates Central Cooling Systems Corporation 96,466 sq ft-district cooling

 Dubai Land-Mr. Goshi Chand Peter Ram- Residential Building

Dubai, UAE Empower-Emirates Central Cooling Systems Corporation 28,861 sq ft-district cooling

Parcel-02B

Doha, Qatar Qatar District Cooling Company (Qatar Cool) 423,714 sq ft-district cooling



The Pearl Qatar—the site of Qatar Cool's new client buildings

Viva Bahriya-20
 Doha, Qatar
 Qatar District Cooling
 Company (Qatar Cool)
 267,313 sq ft-district cooling



Viva Bahriya-20

Viva Bahriya-21
 Doha, Qatar
 Qatar District Cooling
 Company (Qatar Cool)
 267,313 sq ft-district cooling

 La Plage Villa Central Doha, Qatar
 Qatar District Cooling
 Company (Qatar Cool)
 29,999 sq ft-district cooling



La Plage Villa Central-05



La Plage Villa Central-17



La Plage Villa Central-32



La Plage Villa Central-33

La Plage Villa East
 Doha, Qatar
 Qatar District Cooling
 Company (Qatar Cool)
 12,453 sq ft-district cooling

Bahri Villa North
 Doha, Qatar
 Qatar District Cooling
 Company (Qatar Cool)
 64,068 sq ft-district cooling



Bahri Villa North-03



Bahri Villa North-06 & 07

Residential cont.



Bahri Villa North-11 & 12



Bahri Villa North-30 & 31



Bahri Villa North-41



Bahri Villa North-45

Bahri Villa South
 Doha, Qatar
 Qatar District Cooling
 Company (Qatar Cool)
 39,966 sq ft-district cooling



Bahri Villa South-38



Bahri Villa South-46 & 47



Bahri Villa South-49 & 50

Fanar Fayrouz-20
 Doha, Qatar
 Qatar District Cooling
 Company (Qatar Cool)
 7,147 sq ft-district cooling
 Fanar Fayrouz-20

■ Parcel-10A

Doha, Qatar Qatar District Cooling Company (Qatar Cool) 445,479 sq ft-district cooling

■ Parcel-12A

Doha, Qatar Qatar District Cooling Company (Qatar Cool) 399,151 sq ft-district cooling

AQ 3&4

Doha, Qatar Qatar District Cooling Company (Qatar Cool) 1,851,946 sq ft-district cooling

AQ 5&6

Doha, Qatar Qatar District Cooling Company (Qatar Cool) 1,844,411 sq ft-district cooling

Bahri Villa North

Doha, Qatar Qatar District Cooling Company (Qatar Cool) 41,205 sq ft-district cooling

District Energy Space 2016

Plan to submit your calendar 2017 growth data.

Make plans now to photograph and enter your customer buildings that commit or recommit for your district energy service during 2017!

The deadline for submittal of system growth data for calendar 2017 is Fri., April 20, 2018.

Continuing our tradition, during the IDEA 109th Annual Conference in Vancouver, BC, Canada, June 11-14, 2018, IDEA will congratulate and present awards to those systems reporting the largest growth for calendar 2017 for both North America and Beyond North America. We look forward to seeing you there!

To enter data for newly committed, recommitted or connected customers for calendar 2017, please download and complete the appropriate **North America** or **Beyond North America** Excel® template following, and submit it in the Microsoft Excel format:

- Submission Form-North America
- Submission Form-Beyond North America

You can also go to http://www.districtenergy.org/district-energy-space-2/ to download your submittal form and for more information about *District Energy Space*.

Please use the form as provided and fill in all appropriate cells to facilitate our compilation of the data.

Submit the final document to Len Phillips at len.idea@districtenergy.org. We encourage you to send as many building photographs as possible, and label them clearly with your company name and identifying title such as: "My Energy Company-Smith Office Building".

To access past issues of *District Energy Space*, visit: http://www.districtenergy.org/district-energy-space-2/



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