

INTERNATIONAL
DISTRICT ENERGY
ASSOCIATION

Spotlighting
Industry
Growth

District Energy Space '07

More than 271 million
square feet reported

The publication District Energy Space has become an annual tradition for the International District Energy Association. The publication features a compilation of buildings that have committed or recommitted to district energy service in North America and beyond during the previous calendar year.

District Energy Space is available digitally by download from IDEA's Web site, www.districtenergy.org/de_space.htm. You may download the entire publication, specific building category sections or even past issues.

As represented here, North American customers totaling 33,868,495 sq ft of space committed to district energy service in 2007. That figure was added to IDEA's running total of square footage committed to North American district energy systems since 1990, bringing the current total to 422,714,867 sq ft.

Once again, IDEA is pleased to be able to report system growth from beyond the bounds of North America. An additional 237,183,645 sq ft has been reported and is documented at the end of this publication.

Each year, IDEA asks all of its member systems – private, public, campus, municipal, etc. – to provide information on buildings that committed or recommitted to district energy service during the previous calendar year. For each building, District Energy Space highlights the

- building's name;
- service provider's name and location;
- building's square footage (where available); and
- services provided (heating, domestic hot water, laundry, brewing, cooling, etc.)

District Energy Space helps IDEA tabulate the types of growth experienced by its member systems – and can be a valuable marketing tool for your organization. Make plans now to photograph and enter all of those buildings that commit or recommit for your service in 2008!

The deadline for submittal of buildings for 2008 is **Fri., April 3, 2009**. All systems submitting entries will receive a certificate of appreciation. Also, during the 2009 annual conference in Washington, D.C., IDEA will congratulate and present awards to those systems submitting the greatest amount of total square footage and the greatest number of total buildings for 2008 for both North America and Beyond North America.

2007 Square Footage Reported*

Category	North America	Beyond North America
Commercial-Mixed Use	8,533,947	90,016,800
Commercial-Office	5,704,807	122,568,820
Commercial-Retail/Manufacturing	107,500	642,000
Entertainment, Cultural or Sporting Center	3,781,684	373,965
Government	816,000	9,595,760
Hotel	1,684,000	-
Other	126,100	-
Residential	6,501,407	13,986,300
School, Hospital or Institution	6,613,050	-
2007 Square Footage Reported	33,868,495	237,183,645

Total 2007 Reported in North America and Beyond North America 271,052,140

* All entries are newly signed or connected customers within 2007 unless specifically noted as renewals. (renewal) = renewed/recommitted to a long-term service agreement (10 years<).

District Energy Space '07

A Feature to Spotlight Industry Growth

North America

Commercial–Mixed Use

Broadbent Building **Citizens Thermal Energy**

Indianapolis, Ind.
56,000 sq ft – heating, cooling, domestic hot water, humidification

Circle Tower Building

Citizens Thermal Energy
Indianapolis, Ind.
120,000 sq ft – heating, cooling, domestic hot water, humidification

Greenway Plaza (15 buildings, renewal)

Crescent Real Estate Equities
Houston, Texas
5,000,000 sq ft – heating, cooling

Maple Leaf Square (3 buildings)

Enwave Energy Corporation
Toronto, Ont., Canada
1,145,118 sq ft – cooling

One North Penn (renewal)

Citizens Thermal Energy
Indianapolis, Ind.
102,000 sq ft – heating, cooling, domestic hot water, humidification

Parcel B

Trigen Inner Harbor East LLC
Baltimore, Md.
810,829 sq ft of 1,087,000 sq ft – heating, cooling, domestic hot water, process

RBC Center (2 buildings)

Enwave Energy Corporation
Toronto, Ont., Canada
1,300,000 sq ft – heating



Broadbent Building



Circle Tower Building

Commercial–Office

1035 Market Street Office

NRG Energy Center San Francisco
San Francisco, Calif.
100,000 sq ft – heating, domestic hot water

110 Sutter Street Office

NRG Energy Center San Francisco
San Francisco, Calif.
200,000 sq ft – heating, domestic hot water

1101 Avenue of the Americas

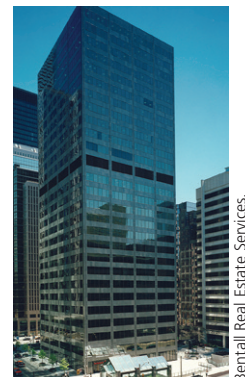
Con Edison Steam Operations
New York, N.Y.
2,100,000 sq ft

13-15 West 54th Street

Con Edison Steam Operations
New York, N.Y.
15,000 sq ft

145 King Street

Enwave Energy Corporation
Toronto, Ont., Canada
209,000 sq ft – cooling



145 King Street

Commercial – Office continued

15 Central Park West

Con Edison Steam Operations
New York, N.Y.
43,600 sq ft

20 Queen Street West

Enwave Energy Corporation
Toronto, Ont., Canada
674,199 sq ft – heating

AT&T Office Building

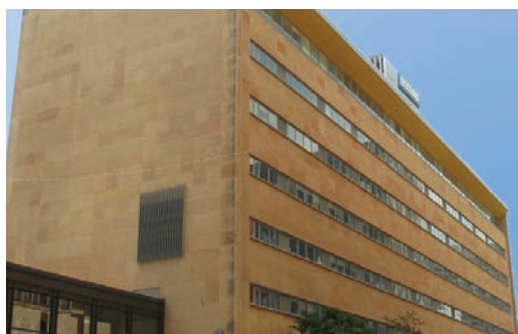
NRG Energy Center San Francisco
San Francisco, Calif.
250,000 sq ft – heating, domestic hot water

One Pennsylvania Plaza

Trigen-Philadelphia Energy Corporation
Philadelphia, Pa.
1,200,000 sq ft – heating, cooling, domestic hot water, kitchen

St. Paul Pioneer Press

District Energy St. Paul
St. Paul, Minn.
120,000 sq ft – cooling



St. Paul Pioneer Press Building



University Capital Center

University Capital Center (renewal)

The University of Iowa
Iowa City, Iowa
181,008 sq ft – heating, cooling, humidification

620 Eighth Avenue

Con Edison Steam Operations
New York, N.Y.
612,000 sq ft

Commercial– Retail/Manufacturing

49 West 33rd Street (additional)

Con Edison Steam Operations
New York, N.Y.
107,500 sq ft

Entertainment, Cultural or Sporting Center

Butler North Education Building

Youngstown Thermal LLC
Youngstown, Ohio
35,000 sq ft - heating

Lucas Oil Stadium (new) & Indiana Convention Center (renewal)

Citizens Thermal Energy
Indianapolis, Ind.
3,500,000 sq ft – heating, cooling, domestic hot water, humidification



Butler North Education Building



Lucas Oil Stadium

Minnesota Boat Club

District Energy St. Paul
St. Paul, Minn.
5,675 sq ft – heating, domestic hot water

Ruth and Raymond G. Perelman Building

Trigen-Philadelphia Energy Corporation
Philadelphia, Pa.
180,000 sq ft – heating, domestic hot water, humidification

Youngstown State University Wellness Center

Youngstown Thermal LLC
Youngstown, Ohio
61,009 sq ft – heating, domestic hot water

Government

New City Hall (3 buildings)

Enwave Energy Corporation
Toronto, Ont., Canada
816,000 sq ft – cooling



Minnesota Boat Club



Youngstown State University Wellness Center

Hotel

19 West 58th Street (768 5th Ave.)

Con Edison Steam Operations
New York, N.Y.
494,000 sq ft

Arctic Building

Seattle Steam Company
Seattle, Wash.
200,000 sq ft – heating, domestic hot water, kitchen

Ritz Carlton Hotel & Residences

Enwave Energy Corporation
Toronto, Ont., Canada
990,000 sq ft – cooling

Other

Austin Music Hall

Austin Energy
Austin, Texas
39,500 sq ft of 43,000 sq ft – cooling

Ballet Austin

Austin Energy
Austin, Texas
34,600 sq ft – cooling

Southwest Educational Development Laboratory

Austin Energy
Austin, Texas
52,000 sq ft – cooling



City of Toronto.

New City Hall

Residential

11 East 29th Street

Con Edison Steam Operations
New York, N.Y.
266,133 sq ft

110 Third Avenue

Con Edison Steam Operations
New York, N.Y.
117,250 sq ft

15 Central Park West

Con Edison Steam Operations
New York, N.Y.
651,000 sq ft

19 West 58th Street (768 5th Ave.)

Con Edison Steam Operations
New York, N.Y.
424,250 sq ft

20 Pine Street (additional)

Con Edison Steam Operations
New York, N.Y.
750,000 sq ft

240 Park Avenue South

Con Edison Steam Operations
New York, N.Y.
110,000 sq ft

340 East 23rd Street

Con Edison Steam Operations
New York, N.Y.
240,400 sq ft

40-44 East 66th Street (additional)

Con Edison Steam Operations
New York, N.Y.
114,380 sq ft

55 John Street (additional)

Con Edison Steam Operations
New York, N.Y.
77,900 sq ft

74 New Montgomery

NRG Energy Center San Francisco
San Francisco, Calif.
116,000 sq ft – heating, domestic hot water

95 Wall Street

Con Edison Steam Operations
New York, N.Y.
500,000 sq ft

995 Fifth Avenue

Con Edison Steam Operations
New York, N.Y.
175,000 sq ft

Aria Condominiums

Trigen-Philadelphia Energy Corporation
Philadelphia, Pa.
250,000 sq ft – heating, domestic hot water

Austonian/200 Congress

Austin Energy
Austin, Texas
395,820 sq ft of 650,900 sq ft – cooling

Four Seasons Residence

Austin Energy
Austin, Texas
300,647 sq ft of 408,618 sq ft – cooling

Murano Condominium

Trigen-Philadelphia Energy Corporation
Philadelphia, Pa.
440,000 sq ft – heating, domestic hot water

Residential - continued

Ritz-Carlton Residences (2 buildings)

NRG Energy Center San Francisco
San Francisco, Calif.
300,000 sq ft – heating, domestic hot water

Ronald McDonald House

Austin Energy
Austin, Texas
30,627 sq ft of 31,334 sq ft – cooling

Symphony House Condominium

Trigen-Philadelphia Energy Corporation
Philadelphia, Pa.
642,000 sq ft – heating, domestic hot water

Trinity Plaza Apartments

NRG Energy Center San Francisco
San Francisco, Calif.
600,000 sq ft – heating, domestic hot water



Trinity Plaza Apartments

School, Hospital, Institution

College of Education (2 buildings)

University of Idaho
Moscow, Idaho
62,600 sq ft – cooling

Dan Abrahams Healthy Living Center/Mayo Clinic

Franklin Heating Station
Rochester, Minn.
124,483 sq ft – heating, cooling, domestic hot water, humidification

**Dorrance H. Hamilton Building –
Thomas Jefferson University**

Trigen-Philadelphia Energy Corporation
Philadelphia, Pa.
125,000 sq ft – heating, domestic hot water

**Indiana University Health Information and
Translational Sciences Building**

Citizens Thermal Energy
Indianapolis, Ind.
166,000 sq ft – heating, cooling, domestic hot water, humidification



Indiana University Health Information and Translational Sciences Building



College of Education

IUPUI Campus Center

Citizens Thermal Energy
Indianapolis, Ind.

261,000 sq ft – heating, cooling, domestic hot water,
humidification

Lab Building Addition

University of Regina
Regina, Sask., Canada

150,000 sq ft – heating, cooling, domestic hot water

Mount Sinai Hospital

Enwave Energy Corporation
Toronto, Ont., Canada

1,200,000 sq ft – cooling

Opus/Mayo Clinic

Franklin Heating Station
Rochester, Minn.

39,267 sq ft – heating, cooling, domestic hot water,
humidification

Perelman Center for the Advancement of Medicine (CAM) Phase 1 – University of Pennsylvania

Trigen-Philadelphia Energy Corporation
Philadelphia, Pa.

360,000 sq ft – heating, domestic hot water,
humidification, process, kitchen

Ryerson University (10 buildings, renewal)

Enwave Energy Corporation
Toronto, Ont., Canada
2,459,700 sq ft – heating

Ryerson University (4 buildings)

Enwave Energy Corporation
Toronto, Ont., Canada
(sq ft included above) – heating

Thomas Jefferson University (6 buildings)

Trigen-Philadelphia Energy Corporation
Philadelphia, Pa.
1,415,000 sq ft – cooling

Toronto Rehabilitation Center

Enwave Energy Corporation
Toronto, Ont., Canada
250,000 sq ft – cooling



IUPUI Campus Center



George Vari Engineering and Computing
Centre, Ryerson University

Beyond North America

Commercial–Office

Al Khawair Project

Tabreed – National Central Cooling Company
Oman
1,070,000 sq ft – cooling

Bahrain Financial Harbour

Tabreed – National Central Cooling Company
Bahrain
10,272,000 sq ft – cooling

BMW Building

Tabreed – National Central Cooling Company
Abu Dhabi, United Arab Emirates
607,760 sq ft – cooling

Business Village

Emirates Central Cooling Systems Corporation “Empower”
Dubai, United Arab Emirates
896,600 sq ft – cooling

Global Village (19 buildings)

Emirates Central Cooling Systems Corporation “Empower”
Dubai, United Arab Emirates
17,400,000 sq ft – cooling



International Media Production
Zone “IMPZ”

International Media Production Zone “IMPZ” (377 buildings)

Emirates Central Cooling Systems Corporation “Empower”
Dubai, United Arab Emirates
48,685,000 sq ft – cooling

Khalid Al Attar

Tabreed – National Central Cooling Company
Dubai, United Arab Emirates
449,400 sq ft – cooling

Rolex Tower

Tabreed – National Central Cooling Company
Dubai, United Arab Emirates
556,400 sq ft – cooling

Studio City - Phase 1 (145 buildings)

Emirates Central Cooling Systems Corporation “Empower”
Dubai, United Arab Emirates
15,918,300 sq ft – cooling

TECOM - Site A & B (46 buildings)

Emirates Central Cooling Systems Corporation “Empower”
Dubai, United Arab Emirates
4,423,560 sq ft – cooling

TECOM - Site C (85 buildings)

Emirates Central Cooling Systems Corporation “Empower”
Dubai, United Arab Emirates
4,741,800 sq ft – cooling



TECOM – Site A & B

Commercial – Office continued

West Bay (47 buildings)

Tabreed – National Central Cooling Company
Qatar
15,622,000 sq ft – cooling

World Trade Center

Tabreed – National Central Cooling Company
Bahrain
1,926,000 sq ft – cooling

Commercial– Mixed Use

Abdali Project (50 buildings)

Tabreed – National Central Cooling Company
Jordan
17,000,000 sq ft – heating, cooling

Raha Beach (80 buildings)

Tabreed – National Central Cooling Company
Abu Dhabi, United Arab Emirates
34,240,000 sq ft – cooling

Shams - Al Reem Island (45 buildings)

Tabreed – National Central Cooling Company
Abu Dhabi, United Arab Emirates
12,840,000 sq ft – cooling

Town Centre

Tabreed – National Central Cooling Company
Abu Dhabi, United Arab Emirates
4,536,800 sq ft – cooling

Yas Island (10 buildings)

Tabreed – National Central Cooling Company
Abu Dhabi, United Arab Emirates
21,400,000 sq ft – cooling

Commercial– Retail/Manufacturing

Khaldiya Mall

Tabreed – National Central Cooling Company
Abu Dhabi, United Arab Emirates
642,000 sq ft – cooling

Entertainment, Cultural or Sporting Center

Snodome (Marina Mall) (2 buildings)

Tabreed – National Central Cooling Company
Abu Dhabi, United Arab Emirates
373,965 sq ft – cooling

Government

Al Minhad (8 buildings)

Tabreed – National Central Cooling Company
Dubai, United Arab Emirates
428,000 sq ft – cooling

Dewan of Sheikh Mohammed (3 buildings, additional)

Tabreed – National Central Cooling Company
Abu Dhabi, United Arab Emirates
372,360 sq ft – cooling

Fujairah Naval Base (28 buildings)

Tabreed – National Central Cooling Company
Fujairah, United Arab Emirates
941,600 sq ft – cooling

Mahawi Camp (15 buildings)

Tabreed – National Central Cooling Company
Abu Dhabi, United Arab Emirates
385,200 sq ft – cooling

Mina Costal Guard (16 buildings)

Tabreed – National Central Cooling Company
Abu Dhabi, United Arab Emirates
428,000 sq ft – cooling

Police Guard Compound (additional)

Tabreed – National Central Cooling Company
Abu Dhabi, United Arab Emirates
192,600 sq ft – cooling

Sharjah Military (55 buildings)

Tabreed – National Central Cooling Company
Sharjah, United Arab Emirates
2,140,000 sq ft – cooling

Zayed Military City T7 (107 buildings)

Tabreed – National Central Cooling Company
Abu Dhabi, United Arab Emirates
2,140,000 sq ft – cooling

Zayed Military City T8 (110 buildings)

Tabreed – National Central Cooling Company
Abu Dhabi, United Arab Emirates
2,568,000 sq ft – cooling

Residential

Al Quoz (33 buildings)

Emirates Central Cooling Systems Corporation "Empower"
Dubai, United Arab Emirates
9,038,000 sq ft – cooling

Merdif (59 buildings)

Emirates Central Cooling Systems Corporation "Empower"
Dubai, United Arab Emirates
3,889,000 sq ft – cooling

Sheikh Hamdan Building W 10 -C71

Tabreed – National Central Cooling Company
Abu Dhabi, United Arab Emirates
770,400 sq ft – cooling

Sheikha Fatima Building W 10 -C67

Tabreed – National Central Cooling Company
Abu Dhabi, United Arab Emirates
288,900 sq ft – cooling

Submit your entries for 2008.

To enter your newly committed, recommitted or connected or customers from 2008, please download and complete the Excel template found at

www.districtenergy.org/08DESpace_entries.xls.

Submit the final document (all buildings listed within one document) to Monica Westerlund, executive editor of District Energy magazine, at mlw@westerlund.com by Fri., April 3, 2009. Please use the form exactly as provided and fill in all cells to expedite information compilation. Be sure to send as many building photographs as possible. Thank you.

To download District Energy Space 2007 or view past issues, visit

www.districtenergy.org/de_space.htm.



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