

Large-scale Natural Refrigerant Heat Pump Market by Refrigerants (Ammonia (R717), Carbon Dioxide (R744), Hydrocarbons), Capacity (20-200 kW, 200-500 kW, 500-1,000 kW, Above 1,000 kW), End Use (Commercial, Industrial), Region - Global Forecast to 2027

https://marketpublishers.com/r/LEFFE6742BC7EN.html

Date: May 2022 Pages: 174 Price: US\$ 4,950.00 (Single User License) ID: LEFFE6742BC7EN

Abstracts

The global large-scale natural refrigerant heat pump market is projected to reach USD 9.1 Billion by 2027 from an estimated market size of USD 5.8 Billion in 2022, at a CAGR of 9.4% during the forecast period. The market has a promising growth potential due to several factors, including the role of large-scale natural refrigerant heat pumps playing in carbon emission reduction and government incentives and regulations to improve energy efficiency.

"Carbon dioxide (R-744) natural refrigerant heat pump: The fastest growing segment of large-scale natural refrigerant heat pump market, by natural refrigerants"

Carbon dioxide (R-744) occurs naturally and can be produced on-site and can be used as both a secondary fluid with phase change and as a refrigerant in different heating and cooling applications. It is one of the best refrigerants used in industries for lowtemperature applications. Carbon dioxide (R-744) can be used along with other natural refrigerants, such as hydrocarbon and ammonia. It is nonflammable and nontoxic in nature; hence, it is ideal for heat pumps used in the commercial as well as industrial sectors.

"200 – 500 kW: The fastest growing segment of large-scale natural refrigerant heat pump market, by capacity"

200–500 kW segment of large-scale natural refrigerant heat pump market will be the



fastest growing segment during forecast period. 200–500 kW segment majorly caters end users like commercial end use such has hotel, malls, retail stores. Growing educational infrastructure and hospitality spaces is propelling the demand of large-scale natural refrigerant heat pump.

"North America: The fastest-growing region in the large-scale natural refrigerant heat pump market.""

The North America region is projected to be the fastest-growing market during the forecast period. The growth of the North American large-scale natural refrigerant heat pump market is expected to be driven by government-led initiatives to reduce air pollution caused by the conventional sources of energy used for heating in the commercial, and industrial sectors.

Breakdown of Primaries:

The study contains insights from various industry experts, ranging from component suppliers to Tier 1 companies and OEMs. The break-up of the primaries is as follows:

By Company Type: Tier I–65%, Tier II–24%, and Tier III–11%

By Designation: C-Level–30%, Director Level–25%, and Others–45%

By Region: Asia Pacific–34%, North America–27%, Europe–20%, South America–12%, Middle East & Africa–7%

The large-scale natural refrigerant heat pumps market is dominated by a few globally established players such as Siemens Energy (Germany), Johnson Controls (Ireland), Emerson Electric Co. (US), GEA Group Aktiengesellschaft (Germany), and Mitsubishi Electric Corporation (Japan).

Research Coverage:

The report segments the large-scale natural refrigerant heat pump market and forecasts its size, based on region (Asia Pacific, Europe, North America, South America, and Middle East & Africa), Natural Refrigerants (Ammonia –(R717), Carbon dioxide (R-744), Hydrocarbons, Other Refrigerants), Capacity (20–200 kW, 200–500 kW, 500–1,000 kW, Above 1,000 kW), End Use (Commercial, Industrial).



The report also provides a comprehensive review of market drivers, restraints, opportunities, and challenges in the large-scale natural refrigerant heat pump market. The report also covers qualitative aspects in addition to the quantitative aspects of these markets.

Key Benefits of Buying the Report

The report will help the leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall market and the sub-segments. This report will help stakeholders understand the competitive landscape and gain more insights to better position their businesses and plan suitable go-to-market





Contents

1 INTRODUCTION

1.1 STUDY OBJECTIVES
1.2 DEFINITION

1.2.1 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY
NATURAL REFRIGERANT: INCLUSIONS & EXCLUSIONS
1.2.2 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY
CAPACITY: INCLUSIONS & EXCLUSIONS
1.2.3 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END
USE: INCLUSIONS & EXCLUSIONS
1.3 MARKET SCOPE
1.3.1 MARKETS COVERED
1.3.2 REGIONAL SCOPE
1.3.3 YEARS CONSIDERED

1.4 CURRENCY

- 1.5 LIMITATION
- 1.6 STAKEHOLDERS

2 RESEARCH METHODOLOGY

2.1 RESEARCH DATA

FIGURE 1 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET:

RESEARCH DESIGN

2.2 MARKET BREAKDOWN AND DATA TRIANGULATION

FIGURE 2 DATA TRIANGULATION METHODOLOGY

- 2.2.1 SECONDARY DATA
- 2.2.1.1 Key data from secondary sources
- 2.2.2 PRIMARY DATA

2.2.2.1 Key data from primary sources

2.2.2.2 Breakdown of primaries

FIGURE 3 BREAKDOWN OF PRIMARY INTERVIEWS: BY COMPANY,

DESIGNATION, AND REGION

2.3 MARKET SIZE ESTIMATION

2.3.1 BOTTOM-UP APPROACH

FIGURE 4 MARKET SIZE ESTIMATION METHODOLOGY: BOTTOM-UP APPROACH 2.3.2 TOP-DOWN APPROACH

FIGURE 5 MARKET SIZE ESTIMATION METHODOLOGY: TOP-DOWN APPROACH



2.3.3 DEMAND-SIDE METRICS

FIGURE 6 MAIN METRICS CONSIDERED FOR ANALYZING AND ASSESSING DEMAND FOR LARGE-SCALE NATURAL REFRIGERANT HEAT PUMPS

2.3.3.1 Main metrics considered to assess demand for large-scale natural refrigerant heat pumps

2.3.3.2 Assumptions for demand side

2.3.3 Calculation for demand side2.3.4 SUPPLY-SIDE ANALYSISFIGURE 7 KEY METRICS CONSIDERED FOR ASSESSING SUPPLY SIDE

OF LARGE-SCALE NATURAL HEAT PUMP MARKET

FIGURE 8 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET: SUPPLY-SIDE ANALYSIS

2.3.4.1 Calculations for supply side

2.3.4.2 Assumptions for supply side

FIGURE 9 COMPANY REVENUE ANALYSIS, 2021

2.3.5 FORECAST

3 EXECUTIVE SUMMARY

TABLE 1 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET SNAPSHOT

FIGURE 10 NORTH AMERICA HELD LARGEST SHARE OF LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET IN 2021

FIGURE 11 CARBON DIOXIDE (R-744) SEGMENT PROJECTED TO LEAD LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY NATURAL

REFRIGERANT, IN 2027

FIGURE 12 20–200 KW SEGMENT PROJECTED TO HOLD LARGEST SHARE OF LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, IN 2027

FIGURE 13 INDUSTRIAL SEGMENT EXPECTED TO DOMINATE LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, IN 2027

4 PREMIUM INSIGHTS

4.1 ATTRACTIVE OPPORTUNITIES IN LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET

FIGURE 14 CONTRIBUTION OF HEAT PUMP TECHNOLOGY IN REDUCING CARBON FOOTPRINT TO BOOST MARKET GROWTH FROM 2022 TO 2027 4.2 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY REGION



FIGURE 15 NORTH AMERICA LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET TO EXHIBIT HIGHEST CAGR DURING FORECAST PERIOD 4.3 NORTH AMERICA LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE AND COUNTRY

FIGURE 16 INDUSTRIAL END USE AND US HELD LARGEST SHARES OF LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET IN NORTH AMERICA IN 2021

4.4 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY NATURAL REFRIGERANT

FIGURE 17 CARBON DIOXIDE (R-744) TO ACCOUNT FOR LARGEST MARKET SHARE, BY NATURAL REFRIGERANT, IN 2027

4.5 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY FIGURE 18 20–200 KW SEGMENT TO HOLD LARGEST MARKET SHARE, BY CAPACITY, IN 2027

4.6 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE FIGURE 19 INDUSTRIAL SEGMENT TO DOMINATE LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, IN 2027

5 MARKET OVERVIEW

5.1 INTRODUCTION

5.2 COVID-19 HEALTH ASSESSMENT

FIGURE 20 COVID-19 GLOBAL PROPAGATION

FIGURE 21 COVID-19 PROPAGATION IN SELECT COUNTRIES

5.3 COVID-19 ECONOMIC ASSESSMENT

FIGURE 22 REVISED GDP FORECASTS FOR SELECT G20 COUNTRIES IN 2020 5.4 MARKET DYNAMICS

FIGURE 23 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET: DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES

5.4.1 DRIVERS

5.4.1.1 Increasing visibility of contribution of heat pump technology in reducing carbon footprint

5.4.1.2 Growing focus on improving operational efficiency in industrial sector 5.4.2 RESTRAINTS

5.4.2.1 Lack of awareness regarding benefits of heat pumps and heat pump standards among system vendors

5.4.3 OPPORTUNITIES

5.4.3.1 Imposition of carbon tax in multiple countries

5.4.4 CHALLENGES



5.4.4.1 Availability of low-cost fossil energy-based alternative technologies5.5 IMPACT OF COVID 19 ON LARGE-SCALE NATURAL REFRIGERANT HEATPUMP MARKET

5.6 SUPPLY CHAIN ANALYSIS

FIGURE 24 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET: SUPPLY CHAIN ANALYSIS

TABLE 2 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET: SUPPLY CHAIN

5.6.1 RAW MATERIAL SUPPLIERS

5.6.2 ORIGINAL EQUIPMENT MANUFACTURERS (OEMS)

5.6.3 DISTRIBUTORS

5.6.4 END USERS

5.7 MARKET MAP

FIGURE 25 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP: MARKET MAP

5.8 TECHNOLOGY ANALYSIS

5.9 INNOVATIONS & PATENT REGISTRATION

5.10 KEY CONFERENCES AND EVENTS IN 2022 & 2023

TABLE 3 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET:

DETAILED LIST OF CONFERENCES & EVENTS

5.11 TRENDS/DISRUPTIONS IMPACTING CUSTOMERS' BUSINESSES

5.11.1 REVENUE SHIFT AND NEW REVENUE POCKETS IN LARGE-SCALE

NATURAL REFRIGERANT HEAT PUMP MARKET

FIGURE 26 REVENUE SHIFT OF LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP PROVIDERS

5.12 CASE STUDY ANALYSIS

5.12.1 DRAMMEN DISTRICT HEATING: WORLD'S LARGEST

LOW GWP REFRIGERANT HEAT PUMP

5.13 TRADE ANALYSIS

5.13.1 EXPORT SCENARIO

TABLE 4 EXPORT SCENARIO FOR HS CODE 8418, BY COUNTRY, 2016–2020 (USD THOUSAND)

5.13.2 IMPORT SCENARIO

TABLE 5 IMPORT SCENARIO FOR HS CODE 8418, BY COUNTRY, 2016–2020 (USD THOUSAND)

5.14 PORTER'S FIVE FORCES ANALYSIS

FIGURE 27 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET:

PORTER'S FIVE FORCES ANALYSIS

TABLE 6 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET: PORTER'S FIVE FORCES ANALYSIS



5.14.1 THREAT OF NEW ENTRANTS 5.14.2 BARGAINING POWER OF SUPPLIERS **5.14.3 BARGAINING POWER OF BUYERS 5.14.4 THREAT OF SUBSTITUTES** 5.14.5 INTENSITY OF COMPETITIVE RIVALRY **5.15 AVERAGE PRICING ANALYSIS** 5.15.1 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP: INDICATIVE CAPITAL COST 5.16 SYNTHETIC REFRIGERANT VS NATURAL REFRIGERANT TABLE 7 COMPARISON BETWEEN SYNTHETIC REFRIGERANT AND NATURAL REFRIGERANT 5.17 INSTALLED BASE OF LARGE-SCALE NATURAL REFRIGERANT HEAT PUMPS TABLE 8 INSTALLED BASE FOR HEAT PUMPS, BY REGION, 2020 (MILLION UNITS) TABLE 9 ADOPTION RATE OF LARGE-SCALE NATURAL REFRIGERANT HEAT PUMPS, BY REGION, 2020 TABLE 10 INSTALLED BASE FOR LARGE-SCALE NATURAL REFRIGERANT HEAT PUMPS, BY REGION, 2020 (THOUSAND UNITS) 5.18 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET: **REGULATORY BODIES** 5.18.1 REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS TABLE 11 NORTH AMERICA: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS TABLE 12 EUROPE: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS TABLE 13 GLOBAL: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS **5.19 KEY STAKEHOLDERS & BUYING CRITERIA** 5.19.1 KEY STAKEHOLDERS IN BUYING PROCESS FIGURE 28 INFLUENCE OF STAKEHOLDERS IN BUYING PROCESS, BY END USE TABLE 14 INFLUENCE OF STAKEHOLDERS IN BUYING PROCESS FOR END USE SEGMENTS (%) 5.19.2 BUYING CRITERIA

FIGURE 29 KEY BUYING CRITERIA FOR END USE

TABLE 15 KEY BUYING CRITERIA FOR END-USE SEGMENTS

6 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY NATURAL REFRIGERANT



6.1 INTRODUCTION

FIGURE 30 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY NATURAL REFRIGERANT, 2021

TABLE 16 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY NATURAL REFRIGERANT, 2020–2027 (USD MILLION)

6.2 AMMONIA (R-717)

6.2.1 LOW CHARGE AMMONIA TECHNOLOGY IS DRIVING MARKET FOR AMMONIA (R-717)

TABLE 17 AMMONIA (R-717): LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY REGION, 2020–2027 (USD MILLION)

6.3 CARBON DIOXIDE (R-744)

6.3.1 CARBON DIOXIDE (R-744) HAS HIGH VOLUMETRIC COOLING CAPACITY TABLE 18 CARBON DIOXIDE (R-744): LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY REGION, 2020–2027 (USD MILLION) 6.4 HYDROCARBONS

6.4.1 HYDROCARBONS HAVE UNIQUE PROPERTIES AND COOLING PERFORMANCE

TABLE 19 HYDROCARBONS: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY REGION, 2020–2027 (USD MILLION)

6.5 OTHER REFRIGERANTS

TABLE 20 OTHER REFRIGERANTS: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY REGION, 2020–2027 (USD MILLION)

7 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY

7.1 INTRODUCTION

FIGURE 31 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2021

TABLE 21 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION)

7.2 20–200 KW

7.2.1 INCREASING USE IN COMMERCIAL SECTOR IS DRIVING MARKET FOR

20-200 KW HEAT PUMPS

TABLE 22 20–200 KW: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY REGION, 2020–2027 (USD MILLION)7.3 200–500 KW7.3.1 200–500 KW HEAT PUMPS ARE MAINLY USED IN LIGHT COMMERCIAL



INDUSTRIAL SECTOR

TABLE 23 200–500 KW: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY REGION, 2020–2027 (USD MILLION)

7.4 500–1,000 KW

7.4.1 500–1,000 KW HEAT PUMPS ARE CHIEFLY USED IN INDUSTRIAL SECTOR TABLE 24 500–1,000 KW: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY REGION, 2020–2027 (USD MILLION)

7.5 ABOVE 1,000 KW

7.5.1 FOCUS ON REDUCING OPERATING COSTS IS FUELING DEMAND FOR HEAT PUMPS ABOVE 1,000 KW

TABLE 25 ABOVE 1,000 KW: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY REGION, 2020–2027 (USD MILLION)

8 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE

8.1 INTRODUCTION

FIGURE 32 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2021

TABLE 26 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

8.2 COMMERCIAL

TABLE 27 COMMERCIAL: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY REGION, 2020–2027 (USD MILLION)

TABLE 28 COMMERCIAL: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COMMERCIAL END USE, 2020–2027 (USD MILLION)

8.2.1 EDUCATIONAL INSTITUTES

8.2.1.1 Adoption of heat pump technology in modern education infrastructure fueling market growth

TABLE 29 EDUCATIONAL INSTITUTES: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP COMMERCIAL MARKET, BY REGION, 2020–2027 (USD MILLION) 8.2.2 HOSPITALITY SPACES

8.2.2 HOSPITALITY SPACES

8.2.2.1 Increasing tourism activities driving market growth TABLE 30 HOSPITALITY SPACES: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP COMMERCIAL MARKET, BY REGION, 2020–2027 (USD MILLION)

8.2.3 OTHER COMMERCIAL BUILDINGS

TABLE 31 OTHER COMMERCIAL BUILDINGS: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP COMMERCIAL MARKET, BY REGION, 2020–2027 (USD MILLION)

8.3 INDUSTRIAL

TABLE 32 INDUSTRIAL: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY REGION, 2020–2027 (USD MILLION)

TABLE 33 INDUSTRIAL: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY INDUSTRIAL END USE, 2020–2027 (USD MILLION)

8.3.1 FOOD & BEVERAGES

8.3.1.1 Increasing demand for packed food projected to fuel market growth TABLE 34 FOOD & BEVERAGES: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP INDUSTRIAL MARKET, BY REGION, 2020–2027 (USD MILLION)

8.3.2 PULP & PAPER

8.3.2.1 Rising demand for packaging is boosting market growth TABLE 35 PULP & PAPER: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP INDUSTRIAL MARKET, BY REGION, 2020–2027 (USD MILLION)

8.3.3 CHEMICALS & PETROCHEMICALS

8.3.3.1 Transition toward sustainability and decarbonization goals driving market growth

TABLE 36 CHEMICALS & PETROCHEMICALS: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP INDUSTRIAL MARKET, BY REGION, 2020–2027 (USD MILLION)

8.3.4 OTHER INDUSTRIES

TABLE 37 OTHER INDUSTRIES: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP INDUSTRIAL MARKET, BY REGION, 2020–2027 (USD MILLION)

9 REGIONAL ANALYSIS

9.1 INTRODUCTION

FIGURE 33 REGIONAL SNAPSHOT: NORTH AMERICA IS PROJECTED TO WITNESS THE HIGHEST GROWTH DURING THE FORECAST PERIOD FIGURE 34 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY REGION. 2021

TABLE 38 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY REGION, 2020–2027 (USD MILLION)

TABLE 39 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY REGION, 2020–2027 (THOUSAND UNITS)

9.2 NORTH AMERICA

FIGURE 35 NORTH AMERICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET REGIONAL SNAPSHOT

9.2.1 BY NATURAL REFRIGERANT

TABLE 40 NORTH AMERICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY NATURAL REFRIGERANT, 2020–2027 (USD MILLION) 9.2.2 BY CAPACITY

TABLE 41 NORTH AMERICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION)

TABLE 42 20–200 KW: NORTH AMERICA LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION)

TABLE 43 200–500 KW: NORTH AMERICA LARGE-SCALE NATURAL

REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) TABLE 44 500–1,000 KW: NORTH AMERICA LARGE-SCALE NATURAL

REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) TABLE 45 ABOVE 1,000 KW: NORTH AMERICA LARGE-SCALE NATURAL

REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) 9.2.3 BY END USE

TABLE 46 NORTH AMERICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

TABLE 47 NORTH AMERICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COMMERCIAL END USE, 2020–2027 (USD MILLION)

TABLE 48 NORTH AMERICA: LARGE-SCALE NATURAL REFRIGERANT HEAT

PUMP MARKET, BY INDUSTRIAL END USE, 2020–2027 (USD MILLION)

TABLE 49 NORTH AMERICA: COMMERCIAL LARGE-SCALE NATURAL

REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) TABLE 50 NORTH AMERICA: INDUSTRIAL LARGE-SCALE NATURAL

REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) 9.2.4 BY COUNTRY

TABLE 51 NORTH AMERICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION)

9.2.4.1 US

9.2.4.1.1 Demand for energy-efficient water heating systems from commercial end users to bolster market growth

TABLE 52 US: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION)

TABLE 53 US: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

9.2.4.2 Canada

9.2.4.2.1 Focus on adoption of energy wastage reduction technologies to fuel demand for heat pumps

TABLE 54 CANADA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION)

TABLE 55 CANADA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)



9.2.4.3 Mexico

9.2.4.3.1 Energy-saving initiatives to drive need for heat pumps TABLE 56 MEXICO: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION) TABLE 57 MEXICO: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020-2027 (USD MILLION) 9.3 ASIA PACIFIC FIGURE 36 ASIA PACIFIC: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET SNAPSHOT 9.3.1 BY NATURAL REFRIGERANT TABLE 58 ASIA PACIFIC: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY NATURAL REFRIGERANT, 2020-2027 (USD MILLION) 9.3.2 BY CAPACITY TABLE 59 ASIA PACIFIC: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION) TABLE 60 20-200 KW: ASIA PACIFIC LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) TABLE 61 200-500 KW: ASIA PACIFIC LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) TABLE 62 500-1,000 KW: ASIA PACIFIC LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) TABLE 63 ABOVE 1,000 KW: ASIA PACIFIC LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020-2027 (USD MILLION) 9.3.3 BY END USE TABLE 64 ASIA PACIFIC: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020-2027 (USD MILLION) TABLE 65 ASIA PACIFIC: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COMMERCIAL END USE, 2020–2027 (USD MILLION) TABLE 66 ASIA PACIFIC: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY INDUSTRIAL END USE, 2020–2027 (USD MILLION) TABLE 67 ASIA PACIFIC: COMMERCIAL LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) TABLE 68 ASIA PACIFIC: INDUSTRIAL LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) 9.3.4 BY COUNTRY TABLE 69 ASIA PACIFIC: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION)

9.3.4.1 China

9.3.4.1.1 Government focus on energy-efficient systems fuels demand for large-



scale natural refrigerant heat pumps

TABLE 70 CHINA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION)

TABLE 71 CHINA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

9.3.4.2 Japan

9.3.4.2.1 Energy conservation initiatives by government to augment market growth TABLE 72 JAPAN: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION)

TABLE 73 JAPAN: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

9.3.4.3 South Korea

9.3.4.3.1 Surging demand for energy-efficient heating technology to propel market growth

TABLE 74 SOUTH KOREA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION)

TABLE 75 SOUTH KOREA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

9.3.4.4 Rest of Asia Pacific

TABLE 76 REST OF ASIA PACIFIC: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION)

TABLE 77 REST OF ASIA PACIFIC: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

9.4 EUROPE

9.4.1 BY NATURAL REFRIGERANT

TABLE 78 EUROPE: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY NATURAL REFRIGERANT, 2020–2027 (USD MILLION)

9.4.2 BY CAPACITY

TABLE 79 EUROPE: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION)

9.4.3 BY END USE

TABLE 80 EUROPE: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

TABLE 81 EUROPE: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COMMERCIAL END USE, 2020–2027 (USD MILLION)

TABLE 82 EUROPE: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY INDUSTRIAL END USE, 2020–2027 (USD MILLION)

9.4.4 BY COUNTRY

TABLE 83 EUROPE: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP



MARKET, BY COUNTRY, 2020–2027 (USD MILLION)

9.4.4.1 Germany

9.4.4.1.1 Developments in automotive, mechanical engineering, and metal processing sectors to drive market growth

TABLE 84 GERMANY: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION)

TABLE 85 GERMANY: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

9.4.4.2 UK

9.4.4.2.1 Renewable energy transition to propel demand for large-scale natural refrigerant heat pumps

TABLE 86 UK: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION)

TABLE 87 UK: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

9.4.4.3 France

9.4.4.3.1 Rising utilization of energy-efficient heating systems to boost market growth

TABLE 88 FRANCE: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION)

TABLE 89 FRANCE: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

9.4.4.4 Rest of Europe

TABLE 90 REST OF EUROPE: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION)

TABLE 91 REST OF EUROPE: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

9.5 SOUTH AMERICA

9.5.1 BY NATURAL REFRIGERANT

TABLE 92 SOUTH AMERICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY NATURAL REFRIGERANT, 2020–2027 (USD MILLION)

9.5.2 BY CAPACITY

TABLE 93 SOUTH AMERICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION)

TABLE 94 20–200 KW: SOUTH AMERICA LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION)

TABLE 95 200–500 KW: SOUTH AMERICA LARGE-SCALE NATURAL

REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) TABLE 96 500–1,000 KW: SOUTH AMERICA LARGE-SCALE NATURAL



REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) TABLE 97 ABOVE 1,000 KW: SOUTH AMERICA LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION)

9.5.3 BY END USE

TABLE 98 SOUTH AMERICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

TABLE 99 SOUTH AMERICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COMMERCIAL END USE, 2020–2027 (USD MILLION) TABLE 100 SOUTH AMERICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY INDUSTRIAL END USE, 2020–2027 (USD MILLION) TABLE 101 SOUTH AMERICA: COMMERCIAL LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) TABLE 102 SOUTH AMERICA: INDUSTRIAL LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION)

9.5.4 BY COUNTRY

TABLE 103 SOUTH AMERICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION)

9.5.4.1 Argentina

9.5.4.1.1 Government initiatives to promote sustainability to boost market growth TABLE 104 ARGENTINA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION)

TABLE 105 ARGENTINA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

9.5.4.2 Brazil

9.5.4.2.1 Transition toward clean energy to fuel market growth TABLE 106 BRAZIL: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION) TABLE 107 BRAZIL: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

9.5.4.3 Rest of South America

TABLE 108 REST OF SOUTH AMERICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION)

TABLE 109 REST OF SOUTH AMERICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

9.6 MIDDLE EAST & AFRICA

9.6.1 BY NATURAL REFRIGERANT

TABLE 110 MIDDLE EAST & AFRICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY NATURAL REFRIGERANT, 2020–2027 (USD MILLION) 9.6.2 BY CAPACITY



TABLE 111 MIDDLE EAST & AFRICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION) TABLE 112 20–200KW: MIDDLE EAST & AFRICA LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) TABLE 113 200–500 KW: MIDDLE EAST & AFRICA LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) TABLE 114 500–1,000 KW: MIDDLE EAST & AFRICA LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) TABLE 114 500–1,000 KW: MIDDLE EAST & AFRICA LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) TABLE 115 ABOVE 1,000 KW: MIDDLE EAST & AFRICA LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) 9.6.3 BY END USE

TABLE 116 MIDDLE EAST & AFRICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

TABLE 117 MIDDLE EAST & AFRICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COMMERCIAL END USE, 2020–2027 (USD MILLION) TABLE 118 MIDDLE EAST & AFRICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY INDUSTRIAL END USE, 2020–2027 (USD MILLION) TABLE 119 MIDDLE EAST & AFRICA: COMMERCIAL LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) TABLE 120 MIDDLE EAST & AFRICA: INDUSTRIAL LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION) 9.6.4 BY COUNTRY

TABLE 121 MIDDLE EAST & AFRICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY COUNTRY, 2020–2027 (USD MILLION)

9.6.4.1 Saudi Arabia

9.6.4.1.1 Increasing investments in industrial sector to boost market growth TABLE 122 SAUDI ARABIA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION)

TABLE 123 SAUDI ARABIA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

9.6.4.2 South Africa

9.6.4.2.1 Abundance of natural resources and expansion of transportation sector to support market growth

TABLE 124 SOUTH AFRICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION)

TABLE 125 SOUTH AFRICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

9.6.4.3 Rest of Middle East & Africa

TABLE 126 REST OF MIDDLE EAST & AFRICA: LARGE-SCALE NATURAL



REFRIGERANT HEAT PUMP MARKET, BY CAPACITY, 2020–2027 (USD MILLION) TABLE 127 REST OF MIDDLE EAST & AFRICA: LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, BY END USE, 2020–2027 (USD MILLION)

10 COMPETITIVE LANDSCAPE

10.1 OVERVIEW

FIGURE 37 KEY DEVELOPMENTS IN LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, 2018 TO 2022

10.2 SHARE ANALYSIS OF KEY PLAYERS, 2021

TABLE 128 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET:

DEGREE OF COMPETITION

FIGURE 38 SHARE ANALYSIS OF TOP PLAYERS IN LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET, 2021

10.3 MARKET EVALUATION FRAMEWORK

TABLE 129 MARKET EVALUATION FRAMEWORK, 2018–2021

10.4 SEGMENTAL REVENUE ANALYSIS OF TOP MARKET PLAYERS, 2018–2021 FIGURE 39 SEGMENTAL REVENUE ANALYSIS, 2018–2021

10.5 RECENT DEVELOPMENTS

10.5.1 DEALS

10.5.1.1 Large-scale natural refrigerant heat pumps market: deals, 2018–2022 10.5.2 OTHERS

10.5.2.1 Large-scale natural refrigerant heat pump market: others, 2018–2022 10.6 COMPETITIVE LEADERSHIP MAPPING

10.6.1 STAR

10.6.2 EMERGING LEADER

10.6.3 PERVASIVE

10.6.4 PARTICIPANT

FIGURE 40 LARGE-SCALE NATURAL REFRIGERANT HEAT PUMP MARKET:

COMPETITIVE LEADERSHIP MAPPING, 2021

TABLE 130 COMPANY NATURAL REFRIGERANT FOOTPRINT

TABLE 131 COMPANY END USE FOOTPRINT

TABLE 132 COMPANY REGION FOOTPRINT

11 COMPANY PROFILES

11.1 KEY PLAYERS

(Business Overview, Products Offered, Recent Developments, and MnM View (Key strengths/Right to Win, Strategic Choices Made, and Weaknesses and Competitive



Threats))*

11.1.1 SIEMENS ENERGY TABLE 133 SIEMENS ENERGY: BUSINESS OVERVIEW FIGURE 41 SIEMENS ENERGY: COMPANY SNAPSHOT TABLE 134 SIEMENS ENERGY: DEALS **11.1.2 JOHNSON CONTROLS** TABLE 135 JOHNSON CONTROLS: BUSINESS OVERVIEW FIGURE 42 JOHNSON CONTROLS: COMPANY SNAPSHOT TABLE 136 JOHNSON CONTROLS: DEALS TABLE 137 JOHNSON CONTROLS: OTHERS 11.1.3 EMERSON ELECTRIC CO. TABLE 138 EMERSON ELECTRIC CO.: BUSINESS OVERVIEW FIGURE 43 EMERSON ELECTRIC CO.: COMPANY SNAPSHOT 11.1.4 GEA GROUP AKTIENGESELLSCHAFT TABLE 139 GEA GROUP AKTIENGESELLSCHAFT: BUSINESS OVERVIEW FIGURE 44 GEA GROUP AKTIENGESELLSCHAFT: COMPANY SNAPSHOT TABLE 140 GEA GROUP AKTIENGESELLSCHAFT: OTHERS 11.1.5 MITSUBISHI ELECTRIC CORPORATION TABLE 141 MITSUBISHI ELECTRIC CORPORATION: BUSINESS OVERVIEW FIGURE 45 MITSUBISHI ELECTRIC CORPORATION: COMPANY SNAPSHOT TABLE 142 MITSUBISHI ELECTRIC CORPORATION: DEALS **11.1.6 MAN ENERGY SOLUTIONS SE** TABLE 143 MAN ENERGY SOLUTIONS SE: BUSINESS OVERVIEW 11.1.7 GUANGDONG PHNIX ECO-ENERGY SOLUTION LTD. TABLE 144 GUANGDONG PHNIX ECO-ENERGY SOLUTION LTD.: BUSINESS **OVERVIEW** 11.1.8 ARANER TABLE 145 ARANER: BUSINESS OVERVIEW **11.1.9 STAR REFRIGERATION** TABLE 146 STAR REFRIGERATION: BUSINESS OVERVIEW 11.1.10 EMICON AC S.P.A. TABLE 147 EMICON AC S.P.A.: BUSINESS OVERVIEW 11.1.11 CLADE ENGINEERING SYSTEMS LTD TABLE 148 CLADE ENGINEERING SYSTEMS LTD: BUSINESS OVERVIEW 11.1.12 AGO GMBH ENERGIE + ANLAGEN

TABLE 149 AGO GMBH ENERGIE + ANLAGEN: BUSINESS OVERVIEW

11.1.13 LYNC

TABLE 150 LYNC: BUSINESS OVERVIEW

11.1.14 SKADEC GMBH



TABLE 151 SKADEC GMBH: BUSINESS OVERVIEW 11.1.15 BUNDGAARD REFRIGERATION TABLE 152 BUNDGAARD REFRIGERATION: BUSINESS OVERVIEW 11.2 OTHER PLAYERS 11.2.1 MAYEKAWA MFG. CO., LTD.

11.2.2 FENAGY A/S

11.2.3 PURE THERMAL

11.2.4 TEKO GMBH

11.2.5 ENERBLUE SR

*Details on Business Overview, Products Offered, Recent Developments, and MnM View (Key strengths/Right to Win, Strategic Choices Made, and Weaknesses and Competitive Threats) might not be captured in case of unlisted companies.

12 APPENDIX

12.1 INSIGHTS OF INDUSTRY EXPERTS

12.2 DISCUSSION GUIDE

12.3 KNOWLEDGE STORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL

12.4 AVAILABLE CUSTOMIZATIONS

12.5 RELATED REPORTS

12.6 AUTHOR DETAILS



I would like to order

- Product name: Large-scale Natural Refrigerant Heat Pump Market by Refrigerants (Ammonia (R717), Carbon Dioxide (R744), Hydrocarbons), Capacity (20-200 kW, 200-500 kW, 500-1,000 kW, Above 1,000 kW), End Use (Commercial, Industrial), Region - Global Forecast to 2027
 - Product link: https://marketpublishers.com/r/LEFFE6742BC7EN.html
 - Price: US\$ 4,950.00 (Single User License / Electronic Delivery) If you want to order Corporate License or Hard Copy, please, contact our Customer Service: <u>info@marketpublishers.com</u>

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <u>https://marketpublishers.com/r/LEFFE6742BC7EN.html</u>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name: Last name: Email: Company: Address: City: Zip code: Country: Tel: Fax: Your message:

**All fields are required

Custumer signature ____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <u>https://marketpublishers.com/docs/terms.html</u>



To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970