

District Cooling Market by Production Technique (Free Cooling, Absorption Cooling, & Electric Chillers), Source (Fossil Fuels, Renewables), Application (Residential, Commercial, & Industrial) and Region - Global Forecast to 2029

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Report description:

The district cooling market size is projected to reach USD 1.3 billion by 2029 at a CAGR of 3.6% from USD 1.1 billion in 2024. The factors fueling the growth of district cooling are rapid urbanization, escalating global temperatures, and the demand for energy-efficient, sustainable cooling solutions. To curtail energy use and greenhouse gas emissions, governments and industries are increasingly investing in district cooling systems, aligning with stringent environmental regulations. Furthermore, advancements in technology and the incorporation of renewable energy sources are boosting the attractiveness of these systems, promoting their widespread adoption across different sectors.

"Fossil Fuels is likely to account for the largest share of district cooling market."

During the forecast period, fossil fuels stands out as the largest by source segment in the district cooling market, both in terms of value. This is because of their well-established infrastructure and general availability. They offer a steady and dependable energy source that is required for extensive cooling operations. Furthermore, fossil fuels are an effective source of energy for running the large machinery needed for district cooling systems due to their high energy density. However, in order to improve sustainability and lessen environmental effect, there is an increasing trend toward the integration of renewable energy sources.

"Free cooling is the fastest growing production technique in district cooling market."

Free cooling represented the fastest growing production technique segment in the district cooling market. Free cooling is a cost-effective and sustainable method that leverages low external temperatures to cool water for district cooling systems. This process utilizes ambient air or cold water from natural sources like lakes, seas, or rivers. Heat exchangers cool the water circulating through district cooling networks, and the now-warm water is released back into the natural source. By incorporating

free cooling, the energy efficiency of new or existing buildings can be significantly enhanced. This method, along with district cooling and heat pumps, consumes less electricity compared to systems relying solely on adsorption or electrical chillers.

"Middle East & Africa, by region is forecasted to be the fastest segment of district cooling market during the forecast period." The Middle East & Africa region is the fastest-growing market for district cooling due to its hot climate, which drives substantial demand for cooling solutions. Countries like the UAE, Saudi Arabia, and Qatar have aggressively adopted district cooling to efficiently meet the cooling needs of their rapidly growing urban populations and extensive commercial developments. The region's investment in large-scale infrastructure projects and commitment to sustainable urban planning further support the growth of district cooling systems, making it a dominant market globally.

The break-up of the profile of primary participants in the district cooling market:

- By Company Type: Tier 1 - 46%, Tier 2 - 36%, and Tier 3 - 18%

-[]By Designation: C Level - 35%, D Level - 25%, and Others - 40%

- By Region: North America - 50%, Europe -30%, Asia Pacific - 20%, South America - 12%, the Middle East & Africa - 8%.

The key companies profiled in this report are Johnson Controls Inc. (US), Daikin Industries, Ltd. (Japan), Trane Technologies plc (Ireland), Mistubishi Heavy Industries, Ltd. (Japan), and Danfoss A/S (Denmark).

Research Coverage:

The district cooling market has been segmented based on Source (Fossil Fuels, Renewables, and Others), Production Technique (Free Cooling, Absorption Cooling, and Electric Chillers), Application (Commercial, Residential, and Industrial), and by Region (Asia Pacific, Europe, North America, South America, and Middle East & Africa).

Reasons to Buy the Report

From an insight perspective, this research report focuses on various levels of analyses - industry analysis (industry trends), market ranking analysis of top players, and company profiles, which together comprise and discuss the basic views on the competitive landscape; emerging and high-growth segments of the market; high growth regions; and market drivers, restraints, opportunities, and challenges.

The report provides insights on the following pointers:

-[Analysis of key drivers (enhanced energy efficiency requirement), restraints (high initial infrastructure costs and investments for district cooling systems), opportunities (technological advancements in smart grid integration and IoT), challenges (difficulties faced during implementation of district cooling systems)

_Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product launches in the market

- Market Development: Comprehensive information about lucrative emerging markets - the report analyzes the market for district cooling across regions

- Market Diversification: Exhaustive information about new products, untapped geographies, recent developments, and investments in the market

- Competitive Assessment: In-depth assessment of market shares, strategies, products, and manufacturing capabilities of leading players in the market.

Table of Contents:

1[INTRODUCTION[25 1.1]STUDY OBJECTIVES[25 1.2]MARKET DEFINITION[25 1.3]STUDY SCOPE[26

1.3.1 MARKETS COVERED AND REGIONAL SCOPE 26 1.3.2 INCLUSIONS AND EXCLUSIONS 26 1.3.3 YEARS CONSIDERED 27 1.4 CURRENCY CONSIDERED 27 1.5 UNITS CONSIDERED 28 1.6 LIMITATIONS 28 1.7 STAKEHOLDERS 28 1.8 SUMMARY OF CHANGES 28 2 RESEARCH METHODOLOGY 30 2.1 RESEARCH APPROACH 30 2.1.1 SECONDARY DATA 31 2.1.1.1 Key data from secondary sources 31 2.1.1.2 List of key secondary sources 31 2.1.2 PRIMARY DATA 32 2.1.2.1 Key data from primary sources 32 2.1.2.2 Key industry insights 33 2.1.2.3 List of primary interview participants 33 2.1.2.4 Breakdown of primaries 34 2.2 MARKET BREAKDOWN AND DATA TRIANGULATION 35 2.3 MARKET SIZE ESTIMATION METHODOLOGY 37 2.3.1 BOTTOM-UP APPROACH 37 2.3.1.1 Demand-side analysis 38 2.3.1.1.1 Regional analysis 38 2.3.1.1.2 Country-level analysis 39 2.3.1.1.3 Demand-side assumptions 39 2.3.1.1.4 Demand-side calculations 39 2.3.2 TOP-DOWN APPROACH 40 2.3.2.1 Supply-side analysis 41 2.3.2.1.1 Supply-side assumptions 42 2.3.2.1.2 Supply-side calculations 42 2.4 FORECAST 42 2.5 RISK ANALYSIS 42 2.6 RESEARCH ASSUMPTIONS 43 2.7 RESEARCH LIMITATIONS 43 3 EXECUTIVE SUMMARY 44 4 PREMIUM INSIGHTS 48 4.1 ATTRACTIVE OPPORTUNITIES FOR PLAYERS IN DISTRICT COOLING MARKET 48 4.2 DISTRICT COOLING MARKET IN ASIA PACIFIC, BY APPLICATION AND COUNTRY 49 4.3 DISTRICT COOLING MARKET, BY APPLICATION 49 4.4 DISTRICT COOLING MARKET, BY PRODUCTION TECHNIQUE 50 4.5 DISTRICT COOLING MARKET, BY SOURCE 50 4.6 DISTRICT COOLING MARKET, BY REGION 51 5⊓MARKET OVERVIEW∏52 5.1 INTRODUCTION 52 5.2 MARKET DYNAMICS 52 5.2.1 DRIVERS 53 5.2.1.1 Increasing focus on achieving sustainability goals 53

5.2.1.2 Rapid urbanization and population growth 53 5.2.1.3 Mounting demand for air conditioning units 54 5.2.2 RESTRAINTS 55 5.2.2.1 High initial infrastructure development costs 55 5.2.2.2 Limited financial support and inconsistent policies 56 5.2.3 OPPORTUNITIES 56 5.2.3.1 Advances in IoT and smart grid technologies 56 5.2.4 CHALLENGES 56 5.2.4.1 Space constraints and operational issues 56 5.3 TRENDS/DISRUPTIONS IMPACTING CUSTOMERS' BUSINESSES 57 5.4 VALUE CHAIN ANALYSIS 58 5.5 COSYSTEM ANALYSIS 59 5.6 CASE STUDY ANALYSIS 60 5.6.1 ARANER IMPLEMENTS WATER-FREE DISTRICT COOLING SOLUTIONS AS PART OF SAUDI ARABIA'S VISION 2030 TOURISM PROJECTS[60 5.6.2 CONCESSION AGREEMENTS HELP OVERCOME CHALLENGES ASSOCIATED WITH IMPLEMENTING DISTRICT COOLING SYSTEMS[61 5.6.3 SOOKE SCHOOL DISTRICT 62 ADOPTS HCMA'S DISTRICT COOLING SYSTEMS TO PROMOTE ENERGY EFFICIENCY AND SUSTAINABILITY[61 5.7 TECHNOLOGY ANALYSIS 61 5.7.1 KEY TECHNOLOGIES 61 5.7.1.1 Absorption chillers 61 5.7.2 ADJACENT TECHNOLOGIES 62 5.7.2.1 Thermal energy storage 62 5.8 TRADE ANALYSIS 62 5.8.1 EXPORT SCENARIO (HS CODE 841989) 62 5.8.2 IMPORT SCENARIO (HS CODE 841989) 64 5.9 PATENT ANALYSIS 66 5.10 KEY CONFERENCES AND EVENTS, 2024 68 5.11 PRICING ANALYSIS 68 5.11.1 ⊓INDICATIVE PRICING TREND, BY APPLICATION ∩68 5.11.2 AVERAGE SELLING PRICE TREND, BY REGION 69 5.12 INVESTMENT AND FUNDING SCENARIO 70 5.13 TARIFF AND REGULATORY LANDSCAPE 70 5.13.1 TARIFF ANALYSIS 70 5.13.2 REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS[71] 5.13.3 CODES AND REGULATIONS 73 5.14 PORTER'S FIVE FORCES ANALYSIS 74 5.14.1 THREAT OF NEW ENTRANTS 75 5.14.2 BARGAINING POWER OF SUPPLIERS 75 5.14.3 BARGAINING POWER OF BUYERS 75 5.14.4 THREAT OF SUBSTITUTES 75 5.14.5 INTENSITY OF COMPETITIVE RIVALRY 75 5.15 KEY STAKEHOLDERS AND BUYING CRITERIA 76 5.15.1 KEY STAKEHOLDERS IN BUYING PROCESS 76 5.15.2 BUYING CRITERIA 77

5.16 IMPACT OF GEN AI/AI ON DISTRICT COOLING MARKET 78 6 DISTRICT COOLING MARKET, BY PRODUCTION TECHNIQUE 80 6.1 INTRODUCTION 81 6.2 FREE COOLING 82 6.2.1 COST-EFFECTIVENESS AND SUSTAINABILITY TO CONTRIBUTE TO SEGMENTAL GROWTH 82 6.3 ABSORPTION COOLING 83 6.3.1 INEED TO ADHERE TO NOISE STANDARDS TO FOSTER SEGMENTAL GROWTH 183 6.4 ELECTRIC CHILLERS 84 6.4.1 REQUIREMENT FOR CENTRALIZED SOLUTIONS TO MEET URBAN COOLING NEEDS TO BOOST SEGMENTAL GROWTH 84 7⊓DISTRICT COOLING MARKET, BY SOURCE∏86 7.1⊓INTRODUCTION⊓87 7.2 FOSSIL FUELS 7.2.1 INCREASING RELIANCE ON NATURAL GAS TO ADDRESS COOLING NEEDS TO AUGMENT SEGMENTAL GROWTH 88 7.3 RENEWABLE ENERGY 89 7.3.1 TRISING GOVERNMENT INITIATIVES TO PROMOTE ENERGY-EFFICIENT BUILDINGS TO FOSTER SEGMENTAL GROWTH 189 7.4 OTHER SOURCES 90 ? 8⊓DISTRICT COOLING MARKET, BY APPLICATION⊓92 8.1 || INTRODUCTION || 93 8.2 RESIDENTIAL 95 8.2.1 INCREASING DEPLOYMENT OF GREEN BUILDING TECHNOLOGIES TO EXPEDITE SEGMENTAL GROWTH 95 8.3 INDUSTRIAL 96 8.3.1 RISING NEED FOR PRECISE TEMPERATURE AND HUMIDITY CONTROL IN WAREHOUSES TO AUGMENT SEGMENTAL GROWTH 8.4 COMMERCIAL 97 8.4.1 HOSPITALS 98 8.4.1.1 [Increasing requirement for maintaining optimal indoor air quality and temperature to boost segmental growth [98 8.4.2 EDUCATIONAL INSTITUTES 99 8.4.2.1 Rising emphasis on effective ventilation to contribute to segmental growth∏99 8.4.3 GOVERNMENT BUILDINGS 100 8.4.3.1 Growing focus on meeting strict energy-efficiency standards to accelerate segmental growth 100 8.4.4 OFFICES 101 8.4.4.1 Increasing awareness about energy conservation to boost segmental growth[]101 8.4.5 AIRPORTS 102 8.4.5.1 Rising emphasis on reducing energy consumption in western countries to fuel segmental growth 8.4.6 RETAIL STORES 103 8.4.6.1 Growing focus on enhancing customer satisfaction to augment segmental growth 103 9⊓DISTRICT COOLING MARKET, BY REGION⊓105 9.1 INTRODUCTION 106 9.2 NORTH AMERICA 108 9.2.1 US 112 9.2.1.1 Growing reliance on renewable energy in educational institutes to foster market growth 9.2.2 CANADA 113 9.2.2.1 Rapid transition toward sustainable energy future to boost market growth[]113

9.3 ASIA PACIFIC 115 9.3.1 CHINA 119 9.3.1.1 [Increasing government initiatives to promote renewable energy consumption to drive market [119 9.3.2 JAPAN 121 9.3.2.1 Rising adoption of decarbonization strategies to accelerate market growth∏121 ? 9.3.3 SOUTH KOREA 123 9.3.3.1 Growing demand for cooling systems in manufacturing facilities to expedite market growth 123 9.3.4 SINGAPORE 124 9.3.4.1 Increasing installation of air conditioners in commercial buildings to augment market growth 124 9.3.5 MALAYSIA 126 9.3.5.1 Rising focus on reducing energy consumption and carbon emissions to boost market growth 126 9.3.6 REST OF ASIA PACIFIC 128 9.4[EUROPE]129 9.4.1 SWEDEN 133 9.4.1.1 Mounting adoption of sustainable energy practices to drive market 133 9.4.2 FRANCE 134 9.4.2.1 Growing commitment to low-carbon energy future to expedite market growth 134 9.4.3 GERMANY 136 9.4.3.1 [Increasing investment in renewable energy sources to contribute to market growth [136 9.4.4 FINLAND 138 9.4.4.1 Expansion of high-density commercial infrastructure to fuel market growth 138 9.4.5 NORWAY 140 9.4.5.1 Increasing implementation of strict emission standards to accelerate market growth 140 9.4.6 || ITALY || 141 9.4.6.1 Rising emphasis on meeting energy security objectives to boost market growth 141 9.4.7 REST OF EUROPE 143 9.5 MIDDLE EAST & AFRICA 144 9.5.1 GCC 149 9.5.1.1 Saudi Arabia 149 9.5.1.1.1 Expanding industrial base and population growth to drive market[]149 9.5.1.2 UAE 151 9.5.1.2.1 Rising initiatives to curb carbon emissions to augment market growth 151 9.5.1.3 Qatar 153 9.5.1.3.1 Growing demand for energy-efficient cooling systems to accelerate market growth 153 9.5.1.4 Bahrain 155 9.5.1.4.1 Rising emphasis on promoting sustainable energy practices to boost market growth 155 9.5.1.5 Oman 157 9.5.1.5.1 [Increasing focus on reducing dependence on hydrocarbons to contribute to market growth]157 9.5.1.6 Kuwait 158 9.5.1.6.1 Rising installation of air conditioning units to expedite market growth 158 9.5.2[EGYPT]160

9.5.2.1 Growing investment in construction projects to drive market 160 9.5.3 AFRICA & REST OF MIDDLE EAST 161 9.6 SOUTH AMERICA 163 9.6.1 BRAZIL 166 9.6.1.1 Increasing reliance on renewable energy sources to foster market growth∏166 9.6.2 ARGENTINA 167 9.6.2.1 Shifting preference from fossil fuels to clean energy sources to accelerate market growth 167 9.6.3 REST OF SOUTH AMERICA 169 10 COMPETITIVE LANDSCAPE 171 10.1 OVERVIEW 171 10.2 KEY PLAYER STRATEGIES/RIGHT TO WIN, 2019?2024 171 10.3 MARKET SHARE ANALYSIS, 2023 172 10.4 REVENUE ANALYSIS, 2019?2023 173 10.5 COMPANY EVALUATION MATRIX: KEY PLAYERS, 2023 174 10.5.1 STARS 174 10.5.2 EMERGING LEADERS 174 10.5.3 PERVASIVE PLAYERS 174 10.5.4 PARTICIPANTS 174 10.5.5 COMPANY FOOTPRINT: KEY PLAYERS, 2023 176 10.5.5.1 Company footprint 176 10.5.5.2 Production technique footprint 177 10.5.5.3 Application footprint 178 10.5.5.4 Region footprint 179 10.6 COMPANY EVALUATION MATRIX: STARTUPS/SMES, 2023 180 10.6.1 PROGRESSIVE COMPANIES 180 10.6.2 RESPONSIVE COMPANIES 180 10.6.3 DYNAMIC COMPANIES 180 10.6.4 STARTING BLOCKS 180 10.6.5 COMPETITIVE BENCHMARKING: STARTUPS/SMES, 2023 182 10.6.5.1 Detailed list of key startups/SMEs 182 10.6.5.2 Competitive benchmarking of key startups/SMEs 182 10.7 COMPETITIVE SCENARIO AND TRENDS 183 10.7.1 PRODUCT LAUNCHES 183 10.7.2 DEALS 184 10.7.3 EXPANSIONS 190 10.7.4 OTHERS 191 10.8 COMPANY VALUATION AND FINANCIAL METRICS 192 10.9 BRAND/PRODUCT COMPARISON 193 11 COMPANY PROFILES 194 11.1 ENGINEERING, PROCUREMENT, AND CONSTRUCTION (EPC) COMPANIES 194 11.1.1 EMIRATES CENTRAL COOLING SYSTEMS CORPORATION PJSC 194 11.1.1.1 Business overview 194 11.1.1.2 District cooling projects 195 11.1.1.3 Recent developments 197 11.1.1.3.1 Deals 197 11.1.1.3.2 Expansions 198

11.1.1.3.3 Others 199 11.1.1.4 MnM view 199 11.1.1.4.1 Key strengths/Right to win 199 11.1.1.4.2 Strategic choices 199 11.1.1.4.3 Weaknesses/Competitive threats 200 11.1.2 TABREED 201 11.1.2.1 Business overview 201 11.1.2.2 District cooling projects 202 11.1.2.3 Recent developments 203 11.1.2.3.1 Deals 203 11.1.2.3.2 Expansions 207 11.1.2.3.3 Others 207 11.1.2.4 MnM view 208 11.1.2.4.1 Key strengths/Right to win 208 11.1.2.4.2 Strategic choices 208 11.1.2.4.3 Weaknesses/Competitive threats 208 11.1.3 EMICOOL 209 11.1.3.1 Business overview 209 11.1.3.2 District cooling projects 209 11.1.3.3 Recent developments 210 11.1.3.3.1 Deals 210 11.1.3.3.2 Expansions 211 11.1.3.4 MnM view 211 11.1.3.4.1 Key strengths/Right to win 211 11.1.3.4.2 Strategic choices 211 11.1.3.4.3 Weaknesses/Competitive threats 211 11.1.4 SHINRYO CORPORATION 212 11.1.4.1 Business overview 212 11.1.4.2 District cooling projects 213 11.1.4.3 MnM view 214 11.1.4.3.1 Key strengths/Right to win 214 11.1.4.3.2 Strategic choices 214 11.1.4.3.3 Weaknesses/Competitive threats 214 11.1.5 ADC ENERGY SYSTEMS 215 11.1.5.1 Business overview 215 11.1.5.2 District cooling projects 215 11.1.5.3 MnM view 216 11.1.5.3.1 Key strengths/Right to win 216 11.1.5.3.2 Strategic choices 217 11.1.5.3.3 Weaknesses/Competitive threats 217 11.1.6 KEPPEL 218 11.1.6.1 Business overview 218 11.1.6.2 District cooling projects 219 11.1.6.3 Recent developments 220 11.1.6.3.1 Deals 220 11.1.6.3.2[Expansions]220 11.1.7 RAMBOLL GROUP A/S 221

11.1.7.1 Business overview 221 11.1.7.2 District cooling projects 222 11.1.7.3 Consulting services 223 11.1.8 STELLAR ENERGY INTERNATIONAL 225 11.1.8.1 Business overview 225 11.1.8.2 District cooling projects 225 11.2 MANUFACTURING COMPANIES 227 11.2.1 JOHNSON CONTROLS INC. 227 11.2.1.1 Business overview 227 11.2.1.2 Products/Services/Solutions offered 228 11.2.2 DAIKIN INDUSTRIES, LTD. 230 11.2.2.1 Business overview 230 11.2.2.2 Products/Services/Solutions offered 231 11.2.3 TRANE TECHNOLOGIES PLC 232 11.2.3.1 Business overview 232 11.2.3.2 Products/Services/Solutions offered 233 11.2.4 MITSUBISHI HEAVY INDUSTRIES, LTD. 234 11.2.4.1 Business overview 234 11.2.4.2 Products/Services/Solutions offered 235 11.2.5 DANFOSS A/S 237 11.2.5.1 Business overview 237 11.2.5.2 Products/Services/Solutions offered 238 11.2.5.3 Recent development 240 11.2.5.3.1 Product launches 240 11.2.5.3.2 Deals 241 ? 11.2.6 ATKINSREALIS 242 11.2.6.1 Business overview 242 11.2.6.2 Products/Services/Solutions offered 243 11.2.7 || FORTUM || 244 11.2.7.1 Business overview 244 11.2.7.2 Products/Services/Solutions offered 245 11.2.8 SIEMENS 246 11.2.8.1 Business overview 246 11.2.8.2 Products/Services/Solutions offered 247 11.2.9 VEOLIA 248 11.2.9.1 Business overview 248 11.2.9.2 Products/Services/Solutions offered 250 11.2.10 LOGSTOR DENMARK HOLDING APS 251 11.2.10.1 Business overview 251 11.2.10.2 District cooling projects 252 11.2.10.3 District cooling pipe networks 253 11.2.10.4 Products/Services/Solutions offered 253 11.2.10.5 Recent developments 255 11.2.10.5.1 Deals 255 11.3 OTHER PLAYERS 256 11.3.1 MULTIPLY GROUP 256

11.3.2 DC PRO ENGINEERING 257 11.3.3 MARAFEQ QATAR 258 11.3.4[]SP GROUP[]259 11.3.5 VATTENFALL AB 260 11.3.6[]HELEN OY[]260 11.3.7 CETETHERM 261 11.3.8 ENGIE 261 11.3.9 DALKIA 262 11.3.10 ENWAVE ENERGY CORPORATION 262 12 APPENDIX 263 12.1 INSIGHTS FROM INDUSTRY EXPERTS 263 12.2 DISCUSSION GUIDE 264 12.3 KNOWLEDGESTORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL 267 12.4 CUSTOMIZATION OPTIONS 269 12.5 RELATED REPORTS 269 12.6 AUTHOR DETAILS 270



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