

Demand Response Management Systems (DRMS): Market Research Report

https://marketpublishers.com/r/DA649C29899EN.html

Date: July 2018

Pages: 298

Price: US\$ 5,600.00 (Single User License)

ID: DA649C29899EN

Abstracts

This report analyzes the worldwide markets for Demand Response Management Systems (DRMS) in US\$ Thousand. The Global market is further analyzed by the following Sectors, Technology Types, and Components - Sectors: Commercial, Industrial, and Residential; Types: Automated, and Conventional; Components: Hardware, Software, and Services. The report provides separate comprehensive analytics for the US, Europe, Asia-Pacific, and Rest of World.

Annual estimates and forecasts are provided for the period 2015 through 2024. Market data and analytics are derived from primary and secondary research.

Company profiles are primarily based on public domain information including company URLs.

The report profiles 70 companies including many key and niche players such as -

ABB Limited

Accenture plc

Aclara Technologies LLC

Ameresco, Inc.

AutoGrid Systems, Inc.

Comverge Inc.







Contents

1. INTRODUCTION, METHODOLOGY & PRODUCT DEFINITIONS

Study Reliability and Reporting Limitations
Data Interpretation & Reporting Level
Quantitative Techniques & Analytics
Product Definition and Scope of Study

2. INDUSTRY OVERVIEW

Demand Response: An Essential Tool for Supporting Economic, Eco-Friendly and

Efficient Optimization of Power Generation and Distribution

Growth Drivers in a Nutshell

Technology Disruptions in the Global Electric Power Industry: The Fundamental Growth Driver

Next-Generation Technology to Favor Energy Saving & Efficiency Efforts

Demand Response Garners Increasing Significance

Myriad Economic and Operational Benefits Drive Widespread Market Adoption

ADR Programs: Benefits

Important Considerations for Implementing ADR Programs

Global Market Outlook

The United States Dominates the Global Demand Response Market

Table 1. Global Demand Response Management Systems (DRMS) Market (2018E): Value Market Shares of Developed Regions/Countries (includes corresponding Graph/Chart)

Favorable Policy Changes and Expanding Renewables Portfolio Drives Growth in Europe

Asia-Pacific to Turbo Charge Current and Future Market Growth

Table 2. Global Demand Response Management Systems (DRMS) Market - Geographic Regions Ranked by Value CAGR for 2015-2024: Asia-Pacific, Europe, Rest of World, and USA (includes corresponding Graph/Chart)

Pockets of Growth Emerging in the Middle East, Latin America, and Africa



3. MARKET TRENDS, ISSUES & DRIVERS

Need for Newer DR Models for Replacing Manual Energy Curtailments Drive Strong Demand for Auto-DR (ADR) Technologies

Advanced Demand Response 3. 0: The Future of DR

DR 1. 0 to DR 3. 0: Tracing the Progression of DR

Integration of Internet of Things (IoT) with Demand Response Drive the Evolution of Connected Utilities

Sub-Greedient: The IoT-Based DR Approach

Growing Prominence of Smart Homes and Smart Cities of the Future Necessitates Adoption of DRMS

Table 3. Global Spending on Smart City Infrastructure by End-use (2017 & 2020): Breakdown of Spend (Hardware, Software, and Services) in US\$ Million for Buildings & Homes, Education, Industry Automation, Power Supply, Security, and Others (includes corresponding Graph/Chart)

Table 4. Number of Smart Cities Worldwide (2013-2020) (includes corresponding Graph/Chart)

Table 5. Number of Smart Cities Worldwide by Geographic Region (2025) (includes corresponding Graph/Chart)

Table 6. Number of Smart Homes Worldwide (in 000 Households) by Select Country for the Years 2015 & 2020 (includes corresponding Graph/Chart)

Integration of Smart Buildings into Smart Grids Using ADR

Growing Use of Big Data Analytics by Utilities Benefit Prospects for Analytical and Behavioral DSM

DR Offers Immense Potential in Curtailing Unnecessary Expenditure on New Distribution Grid Infrastructure

Enhancing Profitability of DR on the Small-Scale

Surging Demand for DRMS from Electric Utilities Worldwide Benefit Market Expansion Ever Changing Electricity Demand Dynamics Compel Utilities to Adopt DRMS Key Energy Trends



Table 7. Global Energy Consumption (Billion Toe): Growth Trajectory for the Period 1995-2035 (includes corresponding Graph/Chart)

Table 8. Global Electricity Demand by Region/ Country (2016-2040): Breakdown of Demand (Thousand TWh) for Australia, Brazil, Canada, China, Europe, India, Japan, Middle East & North Africa, South East Asia, USA, and Rest of World (includes corresponding Graph/Chart)

Table 9. Global Delivered Energy Consumption (Billion Toe) by End-use Sector (2005, 2015, 2025, and 2035) (includes corresponding Graph/Chart)

Utility and Grid Operator Leverage DR Resources for Stabilizing Electricity Supply

DR Reduces Investment into New Power Generation and Grid Infrastructure

DR Provides Opportunities for Differentiation in Service Offerings

DR Ropes in Consumers into the Power Price Formation Process

DR Innovations & Advancements: Spearheading Market Growth

Innovative Demand Response and Power Management Concept

Smart Thermostats and BYOT DR Programs

Behind-the-Meter Batteries to Find Application in Demand Response

Cloud Computing and Big Data Analytics: Key Game Changers for the DR Market

OPower's Device Agnostic Cloud Based Behavioral Demand Response (BDR) Service

Attractive Incentives for Electricity-usage Curtailments Drive Strong Penetration in Industrial, Commercial, and Residential Sectors

Demand for Commercial and Industrial (C&I) Demand Response (DR) Register Robust Growth

Commercial Buildings Offer Huge Untapped Market Potential for Demand Response Residential Sector to Exhibit Fastest Growth in the Near Term

Stringent Government Carbon and Climate-Change Policies and Laws Benefit DRMS Deployments

The Inevitable Shift to Intermittent Renewable Sources of Energy Drives Demand for DRMS

Table 10. World Energy Production (In Billion Kilowatt Hours) by Energy Source for the Years 2017, 2020, 2030 and 2040 (includes corresponding Graph/Chart)

Table 11. Global Energy Investments by Technology: Breakdown of New Power Generating Capacity Investments (US\$ Billion) over the Period 2017-2040 for Wind, Solar, Nuclear, Hydro, Gas, and Coal (includes corresponding Graph/Chart)



Table 12. Renewable Power's Share (%) in Global Power Capacity and Global Power Generation: 2007-2017 (includes corresponding Graph/Chart)

DRMS Remain a Vital Computing Platform for Enhancing Operation of Smart Grids Smart Grid Landscape: List of Components & Systems for Power T&D Infrastructure, Communication Network, and Computing Platform

Table 13. Global Investments in Smart Grids (In US\$ Billion) for the Years 2013, 2017, and 2020 (includes corresponding Graph/Chart)

Increasing Establishment of Microgrids to Spur Demand for DRMS

Multiple Benefits Drive Increasing Participation of Load Aggregators in the DR Market

Load Aggregators Enable Effective Matching of Customer Requirements and Utility

Capability

Reduce Performance Risk

Customer Education and Training

Development of Open Standards Critical for Boosting DR Adoption

Favorable Demographic & Urbanization Trends Strengthen Market Prospects

Table 14. World Population by Geographic Region (2000-2050) (in Millions) (includes corresponding Graph/Chart)

Table 15. Total Population Worldwide by Urban and Rural Population in Thousands: 1950-2050P (includes corresponding Graph/Chart)

4. DEMAND RESPONSE OVERVIEW

Demand Response Management Systems (DRMS): A Prelude

Primary Objectives of Demand Response

DR Measures Differs from Energy Efficiency and Dynamic Demand Activities

Approaches to Implement Demand Response Programs

Classification of Demand Response Programs

Energy and Capacity Programs

Direct Load Control

Interruptible Loads

Demand 'Bidding' or 'Buy-back'

Emergency/Standby Demand Response Program



Economic DR Programs or Price-based DR Programs

Types of Price-based Demand Response Programs

Ancillary Services Programs

Types of Ancillary Services

Key Components/Technologies Enabling Demand Response

Metering Solutions

Load Control Hardware

Dispatching Notices and Monitoring Compliance

Smart Meters and AMI

5. COMPETITIVE LANDSCAPE

Leading DR Incentive Program Providers Globally & their DR Resources

EnerNOC

Honeywell

Eaton

CPower

Siemens

Comverge

Demand Response and Energy Efficiency Initiatives Attract Higher Funding

5.1 Focus on Select Global Players

ABB Limited (Switzerland)

Accenture plc (Ireland)

Aclara Technologies LLC (USA)

Ameresco, Inc. (USA)

AutoGrid Systems, Inc. (USA)

Comverge Inc. (USA)

CPower, Inc. (USA)

Direct Energy, LP (USA)

DXC Technology Company (USA)

Eaton Corporation plc (Ireland)

Cooper Industries plc (Ireland)

EnerNOC, Inc. (USA)

General Electric Company (USA)

Honeywell International, Inc. (USA)

Elster Group SE (Germany)

Itron, Inc. (USA)

Silver Spring Networks, Inc. (USA)

Johnson Controls International Plc (Ireland)



Landis+Gyr AG (Switzerland)

Lockheed Martin Corporation (USA)

Nexant, Inc. (USA)

NRG Energy, Inc. (USA)

Open Access Technology International, Inc. (OATI) (USA)

OPOWER, Inc. (USA)

Schneider Electric S. E. (France)

Siemens AG (Germany)

Tantalus Systems Corp. (Canada)

Trilliant Holdings, Inc. (USA)

5.2 Product Introductions

SRP Rolls Out New Bring Your Own Thermostat (BYOT) Program

NEDO and Daikin Completes ADR Demonstration System in Portugal

ISO New England Launches a PRD Structure

OPEN ENERGI Launches Dynamic Demand 2. 0 Platform

5.3 Recent Industry Activity

Honda Partners with eMotorWerks to Offer Fit Electric Vehicle (EV)

Leap Supplies 90 MW of Demand Response Capacity to Investor-owned Utilities

Enel Signs an Agreement with Glenwood to Provide DR Services

Hubbell Acquires Aclara

Demand Energy and EnerNOC Enter into Merger

Itron Acquires Silver Spring Networks

Trivest Acquires NuEnergen

Centrica Acquires REstore

Itron Extends Contract with SMECO for Demand Response Solutions

CPower Contracts with Southern California Edison to Provide 35 MWs of DR Capacity

EnerNOC Secures 50 MW DR Contract with ARENA and NSW

Tantalus Acquires Energate

Stem Partners with CPower to Deliver Demand-Side Energy Solution

Enel Group Acquires EnerNOC

CPower Acquires eCap Network

Energy Pool Partners with TEPCO Energy to Deploy ADR Services in Japan

Itron Acquires Comverge

National Grid Selects AutoGrid to Unify Management of (DR) and (DER) Programs

CSC and HP's Enterprise Services Division Merges to Form DXC Technology

Ormat Acquires Viridity Energy

EnerNOC Signs Four Year DR Contract with FirstEnergy

6. GLOBAL MARKET PERSPECTIVE



Table 16. World Recent Past, Current and Future Analysis for Demand Response Management Systems (DRMS) by Geographic Region - US, Europe, Asia-Pacific, and Rest of World Markets Independently Analyzed with Annual Revenues in US\$ Thousand for Years 2015 through 2024 (includes corresponding Graph/Chart)

Table 17. World 10-Year Perspective for Demand Response Management Systems (DRMS) by Geographic Region - Percentage Share Breakdown of Annual Revenues for US, Europe, Asia-Pacific, and Rest of World Markets for Years 2015, 2018 and 2024 (includes corresponding Graph/Chart)

By Sector

Table 18. World Recent Past, Current and Future Analysis for Demand Response Management Systems (DRMS) by Sector - Commercial, Industrial and Residential Markets Independently Analyzed with Annual Revenues in US\$ Thousand for Years 2015 through 2024 (includes corresponding Graph/Chart)

Table 19. World 10-Year Perspective for Demand Response Management Systems (DRMS) by Sector - Percentage Share Breakdown of Annual Revenues for Commercial, Industrial and Residential Markets for Years 2015, 2018 and 2024 (includes corresponding Graph/Chart)

By Technology Type

Table 20. World Recent Past, Current and Future Analysis for Demand Response Management Systems (DRMS) by Technology Type - Automated and Conventional Markets Independently Analyzed with Annual Revenues in US\$ Thousand for Years 2015 through 2024 (includes corresponding Graph/Chart)

Table 21. World 10-Year Perspective for Demand Response Management Systems (DRMS) by Technology Type - Percentage Share Breakdown of Annual Revenues for Automated and Conventional Markets for Years 2015, 2018 and 2024 (includes corresponding Graph/Chart)

By Component



Table 22. World Recent Past, Current and Future Analysis for Demand Response Management Systems (DRMS) by Component - Hardware, Software, and Services Markets Independently Analyzed with Annual Revenues in US\$ Thousand for Years 2015 through 2024 (includes corresponding Graph/Chart)

Table 23. World 10-Year Perspective for Demand Response Management Systems (DRMS) by Component - Percentage Share Breakdown of Annual Revenues for Hardware, Software, and Services Markets for Years 2015, 2018 and 2024 (includes corresponding Graph/Chart)

7. REGIONAL MARKET PERSPECTIVE

7.1 The United States

A. Market Analysis

Huge Cost Savings Offered by Advanced DR Programs Drive Healthy Market Growth

Table 24. AMI Usage Pattern Rates among US Utilities (2017) (includes corresponding Graph/Chart)

Major DR Trends & Drivers Summarized

Increasing Significance of BDR

Maturing of Domestic Energy Management Systems

Increasing Importance of Big Data Management

Disruptive Competition from Retailers

EVs to Emerge as a Viable Alternative

Growing Influence of Millennials

Residential Consumers to Play an Increasingly Important Role

DER Aggregation to Increase

Increasing Relevance of Third Party Service Providers

Surging Popularity of Smart Thermostats with DR Strategies Benefit Market Adoption

Evolution of Smart Thermostats

Types of Smart Thermostat-DR Programs

Fast Evolving Smart Thermostats Market

The Many Challenges

Opportunities Galore for Software Platform Developers

Opportunities for Smart Thermostat Vendors



Need to Save Electricity during High Demand Periods Drive DRMS Deployments Steady Electric Vehicles Penetration Drive Demand for Managed Charging US Utilities' Reliance on Conventional DR Initiatives Increases

US Utilities Adopt Demand Response Initiatives to Balance Energy Supply and Demand Situation

Smarter Attributes of DR 2. 0 over Traditional DR Program Drive Robust Demand DR 2. 0 Program: A Part of Emerging Transactive Power Market Operators Switch to Aggregated Distributed Energy Resources (DERs) for Enhanced Reliability

MISO

CAISO

PJM

ERCOT

US DR Market Makes Major Strides Driven by Favorable Policy Development Smart Grid Initiatives and Increase in AMI Installations Provides the Perfect Platform for DR Adoption

Role of DR Expands, to Attain Mainstream Status from a Niche Offering DER-as-DR

Two-Way Devices Hold Immense Potential

Aging Grid Infrastructure Augments Utility Distribution Spending, Augurs Well for the DRMS Market

DR Management System Providers to Lead Growth

PRD Offers Promise

Energy Storage and DR Offer Huge Market Growth Potential

Demand Response Remains Underutilized

Increasing Focus on Renewables and Natural Disasters: A Strong Business Case for DR

Noteworthy Utility and Industrial DR Deployment Initiatives for Balancing Intermittent Renewables

DR Market to Significantly Benefit from Grid Modernization Initiatives

Demand Response: A Major Component of the Future Energy Cloud in the US

FERC Order 745 and Supreme Court Rulings: Market Implications

Future Prospects of the DR Market in View of the Ruling on FERC Order

DR Ecosystem Continues to Expand



Major DR Aggregators in the US Major Utilities Offering DR Resources in the US B. Market Analytics

Table 25. US Recent Past, Current and Future Analysis for Demand Response Management Systems (DRMS) Market Analyzed with Annual Revenues in US\$ Thousand for Years 2015 through 2024 (includes corresponding Graph/Chart)

7.2 Europe

A. Market Analysis

Growing Interest in Energy Sustainability Drives Demand for DRMS Significance of Demand Response

Opportunities Galore for DR Providers in Capacity Markets and Primary Reserves Markets

Industrial, Commercial, and Residential Consumers Offer Huge Untapped Growth Potential

Smart Metering and Home Automation: Important Enablers of DR
Key Regulatory Roadblocks to Implementation of Demand Response in Europe
DR Aggregators to Play a Critical Role in the European Market
Demand Response Aggregators in Europe Focus Mostly on Industrial Customers
Favorable Demand Scenario Provides Expansion Opportunities for Vendors
Regulatory Framework for Demand Response in the European Union
Current State of Regulatory Framework for DR

2009/72/EC - THE ELECTRICITY DIRECTIVE

2012/27/EU - THE ENERGY EFFICIENCY DIRECTIVE

ENTSO-E Network Codes

Energy and Environment Guidelines at the State Level in European Union Select Regional Markets Summarized

Austria

Belgium

Denmark

Finland

France

Ireland

Italy



Germany

Norway

Poland

Spain

Sweden

Switzerland

The Netherlands

The United Kingdom

UK's STOR Programs Losing Appeal

Turkey

B. Market Analytics

Table 26. European Recent Past, Current and Future Analysis for Demand Response Management Systems (DRMS) Market Analyzed with Annual Revenues in US\$ Thousand for Years 2015 through 2024 (includes corresponding Graph/Chart)

7.3 Asia-Pacific

A. Market Analysis

Select Regional Markets Summarized

Limited Generation Drives Japan to Focus on Demand Side Management Chinese Government Eyes Demand Side Management as Part of Power Sector Reforms

Pilot DR in China

Demand Response to Witness Widespread Adoption in Australian Wholesale Market Major Challenges Impeding Adoption of Demand Response in India B. Market Analytics

Table 27. Asia-Pacific Recent Past, Current and Future Analysis for Demand Response Management Systems (DRMS) Market Analyzed with Annual Revenues in US\$ Thousand for Years 2015 through 2024 (includes corresponding Graph/Chart)

7.4 Rest of World

A. Market Analysis

Select Markets Summarized

Strong Potential for Demand Response in Canada

Rising Investment into Power Sector to Drive DR Market in Latin America Industrialization and Government Initiatives to Fuel DR Demand in Middle East & Africa



B. Market Analytics

Table 28. Rest of World Recent Past, Current and Future Analysis for Demand Response Management Systems (DRMS) Market Analyzed with Annual Revenues in US\$ Thousand for Years 2015 through 2024 (includes corresponding Graph/Chart)

8. COMPANY PROFILES

Middle East (1)

Total Companies Profiled: 70 (including Divisions/Subsidiaries - 80)
The United States (58)
Canada (2)
Japan (1)
Europe (17)
France (4)
Germany (2)
The United Kingdom (3)
Rest of Europe (8)
Asia-Pacific (Excluding Japan) (1)



I would like to order

Product name: Demand Response Management Systems (DRMS): Market Research Report

Product link: https://marketpublishers.com/r/DA649C29899EN.html

Price: US\$ 5,600.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/DA649C29899EN.html

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 https://marketpublishers.com/docs/terms.html

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