

# **Commercial and Industrial DC Microgrid Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 to 2032**

<https://marketpublishers.com/r/C4ECF1C90885EN.html>

Date: September 2024

Pages: 80

Price: US\$ 4,365.00 (Single User License)

ID: C4ECF1C90885EN

## **Abstracts**

The Global Commercial and Industrial DC Microgrid Market was valued at USD 724 million in 2023 and is projected to grow at a CAGR of 22.8% by 2032. DC microgrid systems enable efficient energy distribution, storage, and management, making them ideal for commercial and industrial settings where energy efficiency, cost savings, and reliability are crucial. These help reduce energy conversion losses and provide seamless integration with DC-powered devices and renewable energy sources. The rising demand for energy-efficient microgrid solutions that minimize conversion loss is set to drive adoption, particularly in industries with high energy demands. The need for reliable and consistent power in commercial and industrial applications also fuels growth, as DC microgrids provide stable, uninterrupted power, benefiting sensitive equipment and critical operations.

In terms of storage devices, the market is segmented into lithium-ion, lead-acid, flow battery, flywheels, and others. The lithium-ion segment is expected to surpass USD 3,198 million by 2032, thanks to its high energy density, making it an ideal choice for commercial and industrial applications where space is limited. The compact nature of lithium-ion storage allows for significant energy storage in smaller areas, which makes it easier to integrate into existing infrastructures. Additionally, the growing need for fast-charging and discharging storage solutions that efficiently manage peak loads is boosting the demand for these devices.

Based on connectivity, the market is categorized into grid-connected and off-grid systems. The off-grid segment is projected to grow at a CAGR of over 23.1% by 2032, as industries seek greater control over their energy consumption and reduce reliance on traditional power grids. This trend is particularly important in areas where grid access is unreliable or non-existent. The demand for cost-effective solutions that offer scalability and flexibility drives this growth, allowing businesses to adjust their energy systems

according to their needs without the constraints of grid capacity or regulations. The Asia Pacific market is expected to grow by over USD 3,354 million by 2032, driven by rapid industrialization and urbanization. The increasing strain on grid infrastructure is prompting demand for efficient energy solutions, while the shift towards renewable energy integration is fostering growth in the region.

## Contents

### Report Content

#### **CHAPTER 1 METHODOLOGY & SCOPE**

- 1.1 Research Design
- 1.2 Base estimates & calculations
- 1.3 Forecast model
- 1.4 Primary research & validation
  - 1.4.1 Primary sources
  - 1.4.2 Data mining sources
- 1.5 Market definitions

#### **CHAPTER 2 EXECUTIVE SUMMARY**

- 2.1 Industry 360° synopsis, 2021 – 2032

#### **CHAPTER 3 INDUSTRY INSIGHTS**

- 3.1 Industry ecosystem
- 3.2 Regulatory landscape
- 3.3 Industry impact forces
  - 3.3.1 Growth drivers
  - 3.3.2 Industry pitfalls & challenges
- 3.4 Growth potential analysis
- 3.5 Porter's analysis
  - 3.5.1 Bargaining power of suppliers
  - 3.5.2 Bargaining power of buyers
  - 3.5.3 Threat of new entrants
  - 3.5.4 Threat of substitutes
- 3.6 PESTEL analysis

#### **CHAPTER 4 COMPETITIVE LANDSCAPE, 2023**

- 4.1 Introduction
- 4.2 Strategic dashboard
- 4.3 Innovation & sustainability landscape

## **CHAPTER 5 MARKET SIZE AND FORECAST, BY CONNECTIVITY, 2021 – 2032 (USD MILLION & MW)**

- 5.1 Key trends
- 5.2 Grid connected
- 5.3 Off grid

## **CHAPTER 6 MARKET SIZE AND FORECAST, BY POWER SOURCE, 2021 – 2032 (USD MILLION & MW)**

- 6.1 Key trends
- 6.2 Diesel generators
- 6.3 Natural gas
- 6.4 Solar PV
- 6.5 CHP
- 6.6 Others

## **CHAPTER 7 MARKET SIZE AND FORECAST, BY STORAGE DEVICE, 2021 – 2032 (USD MILLION & MW)**

- 7.1 Key trends
- 7.2 Lithium-ion
- 7.3 Lead acid
- 7.4 Flow battery
- 7.5 Flywheels
- 7.6 Others

## **CHAPTER 8 MARKET SIZE AND FORECAST, BY REGION, 2021 – 2032 (USD MILLION & MW)**

- 8.1 Key trends
- 8.2 North America
  - 8.2.1 U.S.
  - 8.2.2 Canada
  - 8.2.3 Mexico
- 8.3 Europe
  - 8.3.1 Germany
  - 8.3.2 France
  - 8.3.3 UK

8.3.4 Russia

8.4 Asia Pacific

8.4.1 China

8.4.2 Japan

8.4.3 South Korea

8.4.4 India

8.4.5 Australia

8.5 Middle East and Africa

8.5.1 Saudi Arabia

8.5.2 UAE

8.5.3 South Africa

8.6 Latin America

8.6.1 Brazil

8.6.2 Argentina

8.6.3 Chile

## **CHAPTER 9 COMPANY PROFILES**

9.1 ABB

9.2 AEG International

9.3 ARDA Power

9.4 Deutsche Messe AG

9.5 Eaton

9.6 EnSync Energy Systems

9.7 Nextek Power Systems

9.8 Sumitomo Electric Industries, Ltd.

9.9 SolarWorX

9.10 Victron Energy

## I would like to order

Product name: Commercial and Industrial DC Microgrid Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 to 2032

Product link: <https://marketpublishers.com/r/C4ECF1C90885EN.html>

Price: US\$ 4,365.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/C4ECF1C90885EN.html>