

# Global Thermoelectric Material Market Size, Manufacturers, Opportunities and Forecast to 2030

<https://marketpublishers.com/r/G281142149A6EN.html>

Date: April 2024

Pages: 101

Price: US\$ 3,450.00 (Single User License)

ID: G281142149A6EN

## Abstracts

Thermoelectric materials show the thermoelectric effect in a strong or convenient form.

The thermoelectric effect refers to phenomena by which either a temperature difference creates an electric potential or an electric potential creates a temperature difference. These phenomena are known more specifically as the Seebeck effect (converting temperature to current), Peltier effect (converting current to temperature), and Thomson effect (conductor heating/cooling). While all materials have a nonzero thermoelectric effect, in most materials it is too small to be useful. However, low-cost materials that have a sufficiently strong thermoelectric effect (and other required properties) could be used in applications including power generation and refrigeration. A commonly used thermoelectric material in such applications is bismuth telluride.

Thermoelectric materials are used in thermoelectric systems for cooling or heating in niche applications, and are being studied as a way to regenerate electricity from waste heat.

According to APO Research, The global Thermoelectric Material market was estimated at US\$ million in 2023 and is projected to reach a revised size of US\$ million by 2030, witnessing a CAGR of xx% during the forecast period 2024-2030.

Global Thermoelectric Material key players include Ferrotec, Laird, KELK, etc. Global top three manufacturers hold a share over 55%.

China is the largest market, with a share over 40%, followed by Japan and North America, both have a share over 35 percent.

In terms of product, Bi-Te is the largest segment, with a share over 85%. And in terms of application, the largest application is Automotive, followed by Electronics, Biomedical, etc.

## Report Scope

This report aims to provide a comprehensive presentation of the global market for Thermoelectric Material, with both quantitative and qualitative analysis, to help readers develop business/growth strategies, assess the market competitive situation, analyze their position in the current marketplace, and make informed business decisions regarding Thermoelectric Material.

The Thermoelectric Material market size, estimations, and forecasts are provided in terms of sales volume (MT) and revenue (\$ millions), considering 2023 as the base year, with history and forecast data for the period from 2019 to 2030. This report segments the global Thermoelectric Material market comprehensively. Regional market sizes, concerning products by Type, by Application, and by players, are also provided. For a more in-depth understanding of the market, the report provides profiles of the competitive landscape, key competitors, and their respective market ranks. The report also discusses technological trends and new product developments.

## Key Companies & Market Share Insights

In this section, the readers will gain an understanding of the key players competing. This report has studied the key growth strategies, such as innovative trends and developments, intensification of product portfolio, mergers and acquisitions, collaborations, new product innovation, and geographical expansion, undertaken by these participants to maintain their presence. Apart from business strategies, the study includes current developments and key financials. The readers will also get access to the data related to global revenue, price, and sales by manufacturers for the period 2019-2024. This all-inclusive report will certainly serve the clients to stay updated and make effective decisions in their businesses. Some of the prominent players reviewed in the research report include:

Ferrotec

Laird

KELK

Thermonamic Electronics

Marlow

RMT

EVERREDtronics

Crystal

Hi-Z

Tellurex

#### Thermoelectric Material segment by Type

Bi-Te

Pb-Te

Other Materials

#### Thermoelectric Material segment by Application

Automotive

Electronics

Biomedical

Other Industry

#### Thermoelectric Material Segment by Region

North America

U.S.

Canada

Europe

Germany

France

U.K.

Italy

Russia

Asia-Pacific

China

Japan

South Korea

India

Australia

China Taiwan

Indonesia

Thailand

Malaysia

Latin America

Mexico

Brazil

Argentina

Middle East & Africa

Turkey

Saudi Arabia

UAE

### Key Drivers & Barriers

High-impact rendering factors and drivers have been studied in this report to aid the readers to understand the general development. Moreover, the report includes restraints and challenges that may act as stumbling blocks on the way of the players. This will assist the users to be attentive and make informed decisions related to business. Specialists have also laid their focus on the upcoming business prospects.

### Reasons to Buy This Report

1. This report will help the readers to understand the competition within the industries and strategies for the competitive environment to enhance the potential profit. The report also focuses on the competitive landscape of the global Thermoelectric Material market, and introduces in detail the market share, industry ranking, competitor ecosystem, market performance, new product development, operation situation, expansion, and acquisition. etc. of the main players, which helps the readers to identify the main competitors and deeply understand the competition pattern of the market.
2. This report will help stakeholders to understand the global industry status and trends of Thermoelectric Material and provides them with information on key market drivers, restraints, challenges, and opportunities.
3. This report will help stakeholders to understand competitors better and gain more insights to strengthen their position in their businesses. The competitive landscape

section includes the market share and rank (in volume and value), competitor ecosystem, new product development, expansion, and acquisition.

4. This report stays updated with novel technology integration, features, and the latest developments in the market

5. This report helps stakeholders to gain insights into which regions to target globally

6. This report helps stakeholders to gain insights into the end-user perception concerning the adoption of Thermoelectric Material.

7. This report helps stakeholders to identify some of the key players in the market and understand their valuable contribution.

## Chapter Outline

Chapter 1: Introduces the study scope of this report, executive summary of market segments by type, market size segments for North America, Europe, Asia Pacific, Latin America, Middle East & Africa.

Chapter 2: Introduces the market dynamics, latest developments of the market, the driving factors and restrictive factors of the market, the challenges and risks faced by manufacturers in the industry, and the analysis of relevant policies in the industry.

Chapter 3: Detailed analysis of Thermoelectric Material manufacturers competitive landscape, price, sales, revenue, market share and ranking, latest development plan, merger, and acquisition information, etc.

Chapter 4: Sales, revenue of Thermoelectric Material in regional level. It provides a quantitative analysis of the market size and development potential of each region and introduces the future development prospects, and market space in the world.

Chapter 5: Introduces market segments by application, market size segment for North America, Europe, Asia Pacific, Latin America, Middle East & Africa.

Chapter 6: Provides profiles of key players, introducing the basic situation of the main companies in the market in detail, including product sales, revenue, price, gross margin, product introduction, recent development, etc.

Chapter 7, 8, 9, 10 and 11: North America, Europe, Asia Pacific, Latin America, Middle East & Africa, sales and revenue by country.

Chapter 12: Analysis of industrial chain, key raw materials, manufacturing cost, and market dynamics.

Chapter 13: Concluding Insights of the report.

## Contents

### 1 MARKET OVERVIEW

- 1.1 Product Definition
- 1.2 Global Market Growth Prospects
  - 1.2.1 Global Thermoelectric Material Market Size Estimates and Forecasts (2019-2030)
  - 1.2.2 Global Thermoelectric Material Sales Estimates and Forecasts (2019-2030)
- 1.3 Thermoelectric Material Market by Type
  - 1.3.1 Bi-Te
  - 1.3.2 Pb-Te
  - 1.3.3 Other Materials
- 1.4 Global Thermoelectric Material Market Size by Type
  - 1.4.1 Global Thermoelectric Material Market Size Overview by Type (2019-2030)
  - 1.4.2 Global Thermoelectric Material Historic Market Size Review by Type (2019-2024)
  - 1.4.3 Global Thermoelectric Material Forecasted Market Size by Type (2025-2030)
- 1.5 Key Regions Market Size by Type
  - 1.5.1 North America Thermoelectric Material Sales Breakdown by Type (2019-2024)
  - 1.5.2 Europe Thermoelectric Material Sales Breakdown by Type (2019-2024)
  - 1.5.3 Asia-Pacific Thermoelectric Material Sales Breakdown by Type (2019-2024)
  - 1.5.4 Latin America Thermoelectric Material Sales Breakdown by Type (2019-2024)
  - 1.5.5 Middle East and Africa Thermoelectric Material Sales Breakdown by Type (2019-2024)

### 2 GLOBAL MARKET DYNAMICS

- 2.1 Thermoelectric Material Industry Trends
- 2.2 Thermoelectric Material Industry Drivers
- 2.3 Thermoelectric Material Industry Opportunities and Challenges
- 2.4 Thermoelectric Material Industry Restraints

### 3 MARKET COMPETITIVE LANDSCAPE BY COMPANY

- 3.1 Global Top Players by Thermoelectric Material Revenue (2019-2024)
- 3.2 Global Top Players by Thermoelectric Material Sales (2019-2024)
- 3.3 Global Top Players by Thermoelectric Material Price (2019-2024)
- 3.4 Global Thermoelectric Material Industry Company Ranking, 2022 VS 2023 VS 2024
- 3.5 Global Thermoelectric Material Key Company Manufacturing Sites & Headquarters



- 3.6 Global Thermoelectric Material Company, Product Type & Application
- 3.7 Global Thermoelectric Material Company Commercialization Time
- 3.8 Market Competitive Analysis
  - 3.8.1 Global Thermoelectric Material Market CR5 and HHI
  - 3.8.2 Global Top 5 and 10 Thermoelectric Material Players Market Share by Revenue in 2023
  - 3.8.3 2023 Thermoelectric Material Tier 1, Tier 2, and Tier

## **4 THERMOELECTRIC MATERIAL REGIONAL STATUS AND OUTLOOK**

- 4.1 Global Thermoelectric Material Market Size and CAGR by Region: 2019 VS 2023 VS 2030
- 4.2 Global Thermoelectric Material Historic Market Size by Region
  - 4.2.1 Global Thermoelectric Material Sales in Volume by Region (2019-2024)
  - 4.2.2 Global Thermoelectric Material Sales in Value by Region (2019-2024)
  - 4.2.3 Global Thermoelectric Material Sales (Volume & Value), Price and Gross Margin (2019-2024)
- 4.3 Global Thermoelectric Material Forecasted Market Size by Region
  - 4.3.1 Global Thermoelectric Material Sales in Volume by Region (2025-2030)
  - 4.3.2 Global Thermoelectric Material Sales in Value by Region (2025-2030)
  - 4.3.3 Global Thermoelectric Material Sales (Volume & Value), Price and Gross Margin (2025-2030)

## **5 THERMOELECTRIC MATERIAL BY APPLICATION**

- 5.1 Thermoelectric Material Market by Application
  - 5.1.1 Automotive
  - 5.1.2 Electronics
  - 5.1.3 Biomedical
  - 5.1.4 Other Industry
- 5.2 Global Thermoelectric Material Market Size by Application
  - 5.2.1 Global Thermoelectric Material Market Size Overview by Application (2019-2030)
  - 5.2.2 Global Thermoelectric Material Historic Market Size Review by Application (2019-2024)
  - 5.2.3 Global Thermoelectric Material Forecasted Market Size by Application (2025-2030)
- 5.3 Key Regions Market Size by Application
  - 5.3.1 North America Thermoelectric Material Sales Breakdown by Application (2019-2024)

- 5.3.2 Europe Thermoelectric Material Sales Breakdown by Application (2019-2024)
- 5.3.3 Asia-Pacific Thermoelectric Material Sales Breakdown by Application (2019-2024)
- 5.3.4 Latin America Thermoelectric Material Sales Breakdown by Application (2019-2024)
- 5.3.5 Middle East and Africa Thermoelectric Material Sales Breakdown by Application (2019-2024)

## **6 COMPANY PROFILES**

### **6.1 Ferrotec**

- 6.1.1 Ferrotec Company Information
- 6.1.2 Ferrotec Business Overview
- 6.1.3 Ferrotec Thermoelectric Material Sales, Revenue and Gross Margin (2019-2024)
- 6.1.4 Ferrotec Thermoelectric Material Product Portfolio
- 6.1.5 Ferrotec Recent Developments

### **6.2 Laird**

- 6.2.1 Laird Company Information
- 6.2.2 Laird Business Overview
- 6.2.3 Laird Thermoelectric Material Sales, Revenue and Gross Margin (2019-2024)
- 6.2.4 Laird Thermoelectric Material Product Portfolio
- 6.2.5 Laird Recent Developments

### **6.3 KELK**

- 6.3.1 KELK Company Information
- 6.3.2 KELK Business Overview
- 6.3.3 KELK Thermoelectric Material Sales, Revenue and Gross Margin (2019-2024)
- 6.3.4 KELK Thermoelectric Material Product Portfolio
- 6.3.5 KELK Recent Developments

### **6.4 Thermonamic Electronics**

- 6.4.1 Thermonamic Electronics Company Information
- 6.4.2 Thermonamic Electronics Business Overview
- 6.4.3 Thermonamic Electronics Thermoelectric Material Sales, Revenue and Gross Margin (2019-2024)
- 6.4.4 Thermonamic Electronics Thermoelectric Material Product Portfolio
- 6.4.5 Thermonamic Electronics Recent Developments

### **6.5 Marlow**

- 6.5.1 Marlow Company Information
- 6.5.2 Marlow Business Overview
- 6.5.3 Marlow Thermoelectric Material Sales, Revenue and Gross Margin (2019-2024)

6.5.4 Marlow Thermoelectric Material Product Portfolio

6.5.5 Marlow Recent Developments

6.6 RMT

6.6.1 RMT Company Information

6.6.2 RMT Business Overview

6.6.3 RMT Thermoelectric Material Sales, Revenue and Gross Margin (2019-2024)

6.6.4 RMT Thermoelectric Material Product Portfolio

6.6.5 RMT Recent Developments

6.7 EVERREDtronics

6.7.1 EVERREDtronics Company Information

6.7.2 EVERREDtronics Business Overview

6.7.3 EVERREDtronics Thermoelectric Material Sales, Revenue and Gross Margin (2019-2024)

6.7.4 EVERREDtronics Thermoelectric Material Product Portfolio

6.7.5 EVERREDtronics Recent Developments

6.8 Crystal

6.8.1 Crystal Company Information

6.8.2 Crystal Business Overview

6.8.3 Crystal Thermoelectric Material Sales, Revenue and Gross Margin (2019-2024)

6.8.4 Crystal Thermoelectric Material Product Portfolio

6.8.5 Crystal Recent Developments

6.9 Hi-Z

6.9.1 Hi-Z Company Information

6.9.2 Hi-Z Business Overview

6.9.3 Hi-Z Thermoelectric Material Sales, Revenue and Gross Margin (2019-2024)

6.9.4 Hi-Z Thermoelectric Material Product Portfolio

6.9.5 Hi-Z Recent Developments

6.10 Tellurex

6.10.1 Tellurex Company Information

6.10.2 Tellurex Business Overview

6.10.3 Tellurex Thermoelectric Material Sales, Revenue and Gross Margin (2019-2024)

6.10.4 Tellurex Thermoelectric Material Product Portfolio

6.10.5 Tellurex Recent Developments

## **7 NORTH AMERICA BY COUNTRY**

7.1 North America Thermoelectric Material Sales by Country

7.1.1 North America Thermoelectric Material Sales Growth Rate (CAGR) by Country:

## 2019 VS 2023 VS 2030

7.1.2 North America Thermoelectric Material Sales by Country (2019-2024)

7.1.3 North America Thermoelectric Material Sales Forecast by Country (2025-2030)

## 7.2 North America Thermoelectric Material Market Size by Country

7.2.1 North America Thermoelectric Material Market Size Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030

7.2.2 North America Thermoelectric Material Market Size by Country (2019-2024)

7.2.3 North America Thermoelectric Material Market Size Forecast by Country (2025-2030)

## 8 EUROPE BY COUNTRY

### 8.1 Europe Thermoelectric Material Sales by Country

8.1.1 Europe Thermoelectric Material Sales Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030

8.1.2 Europe Thermoelectric Material Sales by Country (2019-2024)

8.1.3 Europe Thermoelectric Material Sales Forecast by Country (2025-2030)

### 8.2 Europe Thermoelectric Material Market Size by Country

8.2.1 Europe Thermoelectric Material Market Size Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030

8.2.2 Europe Thermoelectric Material Market Size by Country (2019-2024)

8.2.3 Europe Thermoelectric Material Market Size Forecast by Country (2025-2030)

## 9 ASIA-PACIFIC BY COUNTRY

### 9.1 Asia-Pacific Thermoelectric Material Sales by Country

9.1.1 Asia-Pacific Thermoelectric Material Sales Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030

9.1.2 Asia-Pacific Thermoelectric Material Sales by Country (2019-2024)

9.1.3 Asia-Pacific Thermoelectric Material Sales Forecast by Country (2025-2030)

### 9.2 Asia-Pacific Thermoelectric Material Market Size by Country

9.2.1 Asia-Pacific Thermoelectric Material Market Size Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030

9.2.2 Asia-Pacific Thermoelectric Material Market Size by Country (2019-2024)

9.2.3 Asia-Pacific Thermoelectric Material Market Size Forecast by Country (2025-2030)

## 10 LATIN AMERICA BY COUNTRY

## 10.1 Latin America Thermoelectric Material Sales by Country

10.1.1 Latin America Thermoelectric Material Sales Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030

10.1.2 Latin America Thermoelectric Material Sales by Country (2019-2024)

10.1.3 Latin America Thermoelectric Material Sales Forecast by Country (2025-2030)

## 10.2 Latin America Thermoelectric Material Market Size by Country

10.2.1 Latin America Thermoelectric Material Market Size Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030

10.2.2 Latin America Thermoelectric Material Market Size by Country (2019-2024)

10.2.3 Latin America Thermoelectric Material Market Size Forecast by Country (2025-2030)

## 11 MIDDLE EAST AND AFRICA BY COUNTRY

### 11.1 Middle East and Africa Thermoelectric Material Sales by Country

11.1.1 Middle East and Africa Thermoelectric Material Sales Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030

11.1.2 Middle East and Africa Thermoelectric Material Sales by Country (2019-2024)

11.1.3 Middle East and Africa Thermoelectric Material Sales Forecast by Country (2025-2030)

### 11.2 Middle East and Africa Thermoelectric Material Market Size by Country

11.2.1 Middle East and Africa Thermoelectric Material Market Size Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030

11.2.2 Middle East and Africa Thermoelectric Material Market Size by Country (2019-2024)

11.2.3 Middle East and Africa Thermoelectric Material Market Size Forecast by Country (2025-2030)

## 12 VALUE CHAIN AND SALES CHANNELS ANALYSIS

### 12.1 Thermoelectric Material Value Chain Analysis

12.1.1 Thermoelectric Material Key Raw Materials

12.1.2 Key Raw Materials Price

12.1.3 Raw Materials Key Suppliers

12.1.4 Manufacturing Cost Structure

12.1.5 Thermoelectric Material Production Mode & Process

### 12.2 Thermoelectric Material Sales Channels Analysis

12.2.1 Direct Comparison with Distribution Share

12.2.2 Thermoelectric Material Distributors

12.2.3 Thermoelectric Material Customers

## **13 CONCLUDING INSIGHTS**

## **14 APPENDIX**

14.1 Reasons for Doing This Study

14.2 Research Methodology

14.3 Research Process

14.4 Authors List of This Report

14.5 Data Source

14.5.1 Secondary Sources

14.5.2 Primary Sources

14.6 Disclaimer

## I would like to order

Product name: Global Thermoelectric Material Market Size, Manufacturers, Opportunities and Forecast to 2030

Product link: <https://marketpublishers.com/r/G281142149A6EN.html>

Price: US\$ 3,450.00 (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/G281142149A6EN.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**

Customer 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

