Particleboard and Medium Density Fibreboard in the Pacific Rim and Europe: 2013 – 2017

Market opportunities, strategies and prospects for trade and investment

“The markets for both products grew at an enormous pace in the decade preceding the financial crisis, medium density fibreboard much more rapidly than particleboard. The forthcoming upturn will present unparalleled opportunities for market expansion in new geographic regions, investment in existing and new facilities and exporting to new and established markets.”
Volume 1: Particleboard

Particleboard is a mature product in the established regions of North America, Western Europe, Japan and Australasia. However, in the developing regions of South America, China, Russia, other parts of Asia and Eastern Europe there will be significant opportunities for growth in consumption and production as the world economy recovers over the forecast period.

In the established regions, particleboard was developed well before MDF, which has replaced particleboard for many applications on the basis of better performance and quality. In newly developing regions the MDF industry has preceded the development of particleboard, and reversed the substitution of the products with particleboard replacing MDF for many applications as a cost effective alternative.

As the world economy strengthens, the dynamic markets of China, Russia, India and South America will change the nature of the industry. Producers need to understand these markets, and their own markets, to take advantage of opportunities for production, investment and trade.

Volume 2: Medium density fibreboard

The rapid growth in demand for MDF during the 1990’s led to huge investments in new production capacity, with production capacity increasing by 250 per cent in North America, 700 per cent in North Asia, and 300 per cent in Europe. MDF markets are now more mature, and price competitive, which has driven producers to improve quality and develop new products and markets. There has been significant change in ownership structure during the world economic downturn, and further changes can be expected.

The development of new geographic markets has been remarkable. China has been transformed from a major importer, to the world’s largest producer and consumer. Competition from furniture production in China has resulted in the development of new composite products such as laminate flooring. Production and consumption in Russia, South America and Eastern Europe is on the verge of a major expansion.

Producers, suppliers and traders will need to understand these changes to take advantage of the opportunities this presents for production, investment and trade, as the global economy recovers.
The global economy is now entering an upturn and producers will need to respond with improvements in quality, the development of new products, and new markets. The upturn will result in strong growth in Russia and Eastern Europe, South America and other low cost regions such as Vietnam. Considerable change will occur in China as it shifts to higher cost, higher quality industry structure and larger scale production. There will be many opportunities for expanding trade, for investing, and for developing new products as these global changes take place.

### Report objectives

These two reports will analyse trends and provide projections for consumption, production, trade and prices in each of the key regions. The reports will:

- Identify the key driving factors affecting production, consumption and trade
- Forecast prices, production, consumption and trade, and analyse the competitive dynamics between and within each of the key regions
- Analyse prospects for the resource and key end use sectors, including furniture, and building construction within each consuming region
- Identify potential new applications for particleboard and MDF
- Identify the optimum timing for investment in new production capacity in each region based on capacity utilization and projected new projects.

### Contents of each Volume:

An executive summary highlighting the main conclusions, providing a global overview and projections for all the regions.

Separate chapters providing a detailed profile and forecasts for the major producing and consuming regions including:

- An economic overview
- An overview of the forest industry and resource base
- An overview of the particleboard and MDF industries by region/country
- Details of existing and planned particleboard and MDF production facilities and capacities
- Five year histories and forecasts of prices, production, consumption, imports, exports, excess capacity by region/country
- Industry variable cost structures where available
- Five year histories and forecasts of end use markets (furniture, industrial, construction)
- Potential new applications for particleboard and MDF
- Quality assessment of particleboard and MDF
- Overview of distribution channels by region/country
- Approaches to product promotion by region/country

The focus of the reports will be on **major producing and consuming countries** in each of the key regions, as follows:

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<td>Other Europe (including Russia)</td>
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**South America**
- Argentina
- Brazil
- Chile

**North America**
- Canada
- Mexico
- United States
Methodology

The general methodology used for these two reports is the product of more than 40 years of methods research and development.

The reports will utilize three basic sources of information:

• Field research based on interviews and strategic discussions in key producing and consuming regions with producers, end-users, equipment suppliers, distributors, industry associations and associate companies

• Published data, as well as information from government and industry organisations

• BIS Shrapnel studies will be used as references.

Among the most relevant are:

– Particleboard in the Pacific Rim and Europe
– Medium density fibreboard in the Pacific Rim and Europe
– Wood based forest products in China
– Structural engineered wood products in the Pacific Rim and Europe
– Oriented strand board and plywood in the Pacific Rim and Europe
– Sawn timber in Australia

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Medium Density Fibreboard in the Pacific Rim & Europe
2013 – 2017

EXTRACT TO INDICATE THE GENERAL NATURE OF THE REPORT

FORESTRY

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1. **INTRODUCTION**

MDF, invented and first produced in the United States in the early 1960s, is today produced and consumed worldwide and is internationally traded. It is in a phase of the product life cycle where cyclical factors are determining market supply and demand balances, prices, and profitability. It is important that the market is clearly understood, so that producers, investors and traders can plan their operations effectively, enhance profitability and reduce risk in the short to medium term. A world wide perspective on the industry is an important element of strategic planning and ensuring that companies operating in this industry remain viable and profitable in the long term.

This is the eighth edition of this report. It is a companion report to “Particleboard in the Pacific Rim and Europe: 2013-2017”. The two reports in combination provide a comprehensive world wide assessment of the non structural panels industry, with five year forecasts, and strategic implications for operations, trade and investment.

Medium density fibreboard (MDF) is a composite panel product typically consisting of cellulose fibres combined with a synthetic resin or other suitable bonding system and joined together under heat and pressure. Additives may be introduced during manufacturing to impart additional characteristics.

The surface of MDF is flat, smooth, uniform, dense and free of knots and grain patterns. The homogeneous density profile of MDF allows intricate and precise machining and finishing techniques for superior finished products. Trim waste is significantly reduced when using MDF compared to other substrates. Stability and strength are important assets of MDF, which can be machined into complex patterns that require precise tolerances.

MDF is widely used in the manufacturing of furniture, kitchen cabinets, door parts, mouldings, millwork and laminate flooring. MDF panels are manufactured with a variety of physical properties and dimensions suited to the design of the end product. Common end products include doors, jambs, millwork, edge shaping and machining, embossing, laminate flooring, laminating and finishing, moulding, office and residential furniture, panelling and store fixtures.

1.1 **Objectives**

The main purpose of this report is to provide an assessment of the global prospects for MDF, so that key players in the industry can identify market opportunities and devise strategies for production, trade and investment. A further aim is to bring to the fore today’s key issues and to determine the relationship of suppliers with the main markets.

Additional objectives are to:

- identify current and projected production, consumption and trade flows, competitive dynamics, cost structures and prices over the next five years.
- identify the key driving factors which influence buyer response to the use of MDF, to assist producers to establish defensive and offensive marketing strategies.
- identify prospects for new MDF products and other factors influencing future demand.
1.2 Methodology

The general methodology used for this study is the product of 30 years of methods research and development by BIS Shrapnel. The methodology utilizes the unique experience and background of the author, and combines forecasting techniques with high level market research to develop a product that provides an analysis of the industry over the past five years, the present, and the expected direction over the next five years. The report is updated every two years, and provides a solid basis for forward planning.

Each country and regional assessment begins with an analysis of the economies, the key end use sectors, and the forest industry and is followed by an overview and detailed analysis of the MDF industry. A global overview is provided in the executive summary.

The countries in this edition are grouped by geographic region, as follows:

- Australasia (Australia, New Zealand)
- Europe (European Union, East Europe and Russia)
- North America (Canada, United States, Mexico)
- North Asia (China, South Korea, Japan)
- South America (Argentina, Brazil, Chile, and other)
- South Asia (India, Indonesia, Malaysia, Thailand, Vietnam)
- South Africa

A key element of the methodology is the field research based on interviews with producers, consumers, distributors, associations and research organisations in key regions. The field research, combined with an expertise in economics, forecasting methodology and strategic market research and published data, is the basis for the analysis and forecasts for the MDF industry in each region and country.

1.3 Organisation of the report

The report is organised on a geographic basis, with one chapter for each region.

Each chapter provides an economic overview of the economies and end use sectors (furniture and building) of the key countries and an overview of the MDF industry, including the resource base, production facilities, production capacity, cost of production estimates where possible, and forecasts for production, consumption, trade and prices. In addition, there is an analysis of MDF usage by end-use sector (housing and furniture), an assessment of product quality and prospects for new applications for MDF, distribution channels and of promotion.

A global overview of the prospects for MDF and an interregional comparison is provided in the executive summary.
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