

## Greenply Industries

### A Sturdy Build

Greenply Industries (GIL) is the leading player in the Rs13,000cr wood panels industry in India, with a 35% organised marketshare in plywood and 18% in laminates. Given its strong expansion plans and high-RoE business model, we assign a target multiple of 8x FY2012E EPS of Rs36.4 to arrive at a target price of Rs291, implying an upside of 57%. **Hence, we Initiate Coverage on the stock with a Buy.**

#### Banking on MDF and Laminates

GIL is foraying into the lucrative, high-growth MDF market, with the largest MDF plant in India (1,80,000m<sup>3</sup>/yr capacity), while continuing its strong expansion in laminates (88% capacity expansion), that is estimated to drive 25% CAGR in sales over FY2010-12E. GIL is witnessing very strong demand for its laminate products, with both its new production lines running at full capacity. The MDF opportunity is especially huge: MDF constitutes 20% of wood panel consumption in India while plywood constitutes 80% - the reverse holds true globally. China alone consumes about 10-11mn m<sup>3</sup>/yr of MDF v/s 0.6mn m<sup>3</sup>/yr in India. Going forward, with a strict control on issue of new plywood licenses and 5-7% CAGR in panel demand, MDF is likely to meet this demand, translating into 25-30% CAGR for MDF. Moreover, even out of present consumption, 80% is being met through imports, which GIL can substitute given high freight costs and 25% anti-dumping duty on imports.

#### Strong brand, high ad-spend and massive distribution

GIL has leading plywood and laminates brands, supported by ad-spend as high as 3.3% of sales. The company also has the largest distribution network of over 15,000 dealers in this industry. These advantages underpin the strong RoE profile of the company's brand-driven business model (20% over FY2010-12E).

#### Key Financials

Y/E March (Rs cr)	FY2009	FY2010E	FY2011E	FY2012E
<b>Net Sales</b>	<b>725</b>	<b>825</b>	<b>1,044</b>	<b>1,292</b>
% chg	33.8	13.8	26.6	23.7
<b>Net Profit</b>	<b>37</b>	<b>46</b>	<b>52</b>	<b>88</b>
% chg	(3.7)	22.9	14.1	67.8
<b>FDEPS (Rs)</b>	<b>22.0</b>	<b>19.0</b>	<b>21.7</b>	<b>36.4</b>
EBITDA Margin (%)	10.9	13.0	14.0	15.0
P/E (x)	1.9	9.7	8.5	5.1
RoE (%)	22.7	20.4	17.3	23.3
RoCE (%)	13.7	11.0	13.3	17.6
P/BV (x)	0.4	1.5	1.3	1.1
EV/Sales (x)	0.4	1.0	0.8	0.7
EV/EBITDA (x)	4.0	7.9	5.9	4.3

Source: Company, Angel Research, Price as on February 6, 2010

## BUY

CMP	Rs184
Target Price	Rs291

Investment Period	15 months
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#### Stock Info

Sector	Laminates
Market Cap (Rs cr)	407
Beta	0.9
52 Week High / Low	206/37
Avg Daily Volume	27894
Face Value (Rs)	5
BSE Sensex	15,916
Nifty	4,757
Reuters Code	GRPL.BO
Bloomberg Code	MTLM@IN

#### Shareholding Pattern (%)

Promoters	55.0
MF / Banks / Indian FIs	16.7
FII / NRIs / OCBs	7.3
Indian Public / Others	21.0

Abs.	3m	1yr	3yr
Sensex (%)	(1.5)	71.1	9.9
Greenply (%)	63.2	291.0	54.3

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## Investment Arguments

### Banking on MDF growth

#### Transition from Plywood to MDF

**MDF is expected to post a CAGR of 25-30% over the next 3-5 years**

Currently, the estimated consumption of plywood in India is around 25 lakh m<sup>3</sup>/yr, and the demand is expected to grow at a CAGR of 5-7%. However, the government has reduced the issue of new licenses on on addition of new capacities of plywood, which will result in a shortage and increase the prices of plywood. Thus, as the production of plywood cannot be increased from the current levels, we expect this 5-7% increase in plywood demand to be substituted by MDF (and allied products), which will result in a huge demand for MDF in the coming years. Currently, the estimated demand for MDF is around 600,000 m<sup>3</sup>/yr, which is set to grow at a CAGR of around 25-30% (to substitute for the increasing demand in plywood).

#### Around 80% of Global Wood-Panel Market Constituted by MDF

**Globally 80% of the market is constituted by MDF and particleboard and only 20% by plywood, reverse holds true in India.**

In most countries, around 80% of the wood panelmarket is constituted by MDF and particleboard products and only 20% by plywood. However, the situation is reverse in India, where around 80% of the market is controlled by plywood. With the government controlling the issue of new licenses on plywood, there has been an additional growing demand for engineered panel products like MDF. The fact that these engineered panels have a very high utilization of raw-material resources as opposed to plywood, and considering India's scarce supplies of raw-material, has resulted in the government strongly promoting the manufacturing of these products.

**MDF is widely used by furniture manufactures globally, and the same trend is being adopted by Indian furniture manufacturers**

MDF is widely used by furniture manufactures globally, and the same trend is being adopted by Indian furniture manufacturers, as it is cost-effective, easier to apply and more flexible than plywood. We believe that MDF will slowly but surely substitute plywood in various applications (thin plywood can be substituted by MDF in the production of cabinet backs, drawer bottoms, door-skins, panelling applications in house building, internal decoration etc, while thicker plywood can be substituted in table tops, cabinet construction, moulding production etc). Globally, MDF is widely used in furniture, architecture, indoor decorations, loud speaker boxes, TV boxes, musical instruments, flooring, sports equipments and isolated panels.

#### Consumption Pattern to Change

**India has around 20% of the world's population, but only consumes 1% of the total MDF produced**

Currently, India has around 20% of the world's population, but only consumes 1% of the total MDF produced, even though it's a cheaper, more environment-friendly and versatile product. This was partly attributable to the fact that plywood was relatively cheap in India and was well-accepted in the largely custom-made furniture market in India. However, going forward, with the control on plywood capacity, as plywood prices keep going up, MDF is likely to increasingly substitute the lower and mid-range plywood demand in the country, offering a more attractive price vs. quality trade-off. This is also likely to coincide with an increasing preference for cheaper, factory-manufactured, modular furniture by the Indian consumer, which compulsorily requires MDF rather than plywood as an input. Accordingly, we expect demand for MDF to pick up significantly in the future; thus, we believe that GIL will be well poised to benefit from the future growth in this segment.

China is currently the largest manufacturer of MDF in the world by a wide margin, with a massive production of about 24.9mn m<sup>3</sup>/yr (as compared to just 0.3mn m<sup>3</sup>/yr in India). While direct exports of MDF in China account for about 15% of total production, a large chunk of the MDF is consumed by the furniture and other household fixtures and accessories industries. China is also the world's largest exporter of furniture and allied products and industry data indicates that about half of the output is exported. This still means that almost about 40% of MDF manufactured in China is currently being used to manufacture furniture and allied products that are domestically consumed. This translates into an approximate MDF consumption of about 10-11mn m<sup>3</sup>/yr in China as against just about 0.6mn m<sup>3</sup>/yr in India at present, indicating the vast potential market for MDF in India.

#### Exhibit 1: Top Five Producers of MDF in the World

Producers	Production	Exports	Imports	Consumption
China*	24,986,000	3,841,102	1,324,877	22,469,775
Germany*	4,380,000	613,992	1,274,440	5,040,448
United States of America*	3,334,680	306,977	3,059,303	6,087,006
Turkey*	1,952,000	515,000	184,000	1,621,000
Brazil*	1,879,000	120,000	4,000	1,763,000
World*	57,313,163			
India**	200,000	1,600	420,000	618,400

Source: FAO.org Company, Angel Research \*(2008 Data) \*\* (2010E)

#### The Indian Furniture Industry

Greenply Industry (GIL) expects to sell around 40% of its MDF products to Indian Furniture manufacturers. The India furniture industry is a Rs36,000cr industry, and is highly unorganised (85% of the market is unorganised). India is ranked among the top 14 furniture markets in the world (CSIL Milano), and the wooden home furniture segment has the biggest market share in the industry. In FY2009, the Indian Organised Furniture Industry registered a healthy growth of about 13-15%, and is expected to grow around 25-30% over the next five years, on the back of the real estate and housing boom, tourism and hospitality Growth, increasing per capita income, and the increasing consumption of lifestyle products, including furniture. Some of the leading Furniture manufacturers in India are Godrej & Boyce, BP Ergo, Featherlite, Haworth, Style Spa, Yantra, Renaissance and Millenium Lifestyles.

#### Greenply launches India's Largest MDF plant

To meet the growing demand for MDF in India, Greenply will establish a new line of business through the introduction of Medium Density Fiberboard (MDF) in FY2011E. MDF is an environment-friendly product made from 100% sustainable plantation timber. The company has installed India's largest MDF board plant, with an annual production capacity of 180,000 cu mt. The total cost of the plant (including machinery) stands at Rs250cr, which has been raised through 70% debt and 30% equity. The plant is located at Pantnagar, Uttarakhand.

From this plant, the company will manufacture thin panel size MDF (2.5mm-6mm) and thick panel size MDF (6mm-35mm). Out of the total production, around 35% is expected to be Thin MDF and 65% Thick MDF.

**The Indian Organised Furniture Industry registered a healthy growth of about 13-15% in FY2009, and is expected to grow at around 25-30% over the next five years**

**Greenply launches India's Largest MDF plant with an annual production capacity of 180,000 cu mt**

### Capturing the dominant market share of imported Thin MDF

The total demand for MDF in India is said to be around 600,000 cu mt, and, as of now, only 200,000 cu mt is produced domestically, while the rest of the demand is met through imports. Almost 100% of the thin MDF in India is presently imported from various countries. Greenply has a huge potential in this segment, as it will reduce the dependence on imports of the current buyers, and as MDFs of these thicknesses can easily marketed and sold (Greenply has an extensive distribution network, of 32 branches across the country, with a strong dealer/distributors/sub dealers and retailers network of more than 15,000).

### MDF Anti-Dumping duty and High Freight rates create challenges for Importers

**Nearly 70% of the country's MDF requirements are currently met by imports. Imports of MDF are quite costly, since the freight component in MDF is around 30-35%**

Nearly 70% of the country's MDF requirements are currently met by imports. Imports of MDF are quite costly, since the freight component in MDF is around 30-35%. Further, the Government has imposed an additional 24.42% anti-duty on the import of plain MDF boards of 6+ mm thickness, making imported MDF products more expensive, which has added to the already existing challenges for importers of MDF. The most popular size of MDF is 8x4 ft; GIL will be the first company in India to produce 8x6 and 7x6 sizes in India, which will give it a competitive advantage over its competitors. GIL's customers include Godrej Boyce, BlowPlast and Featherlite, who are among the leading modular furniture manufacturers in India.

Currently, there are only four other major MDF manufacturers, with an installed capacity of around 325,000 cu mt. With the commencement of the MDF plant, the company will become the market leader (in terms of capacity) in India.

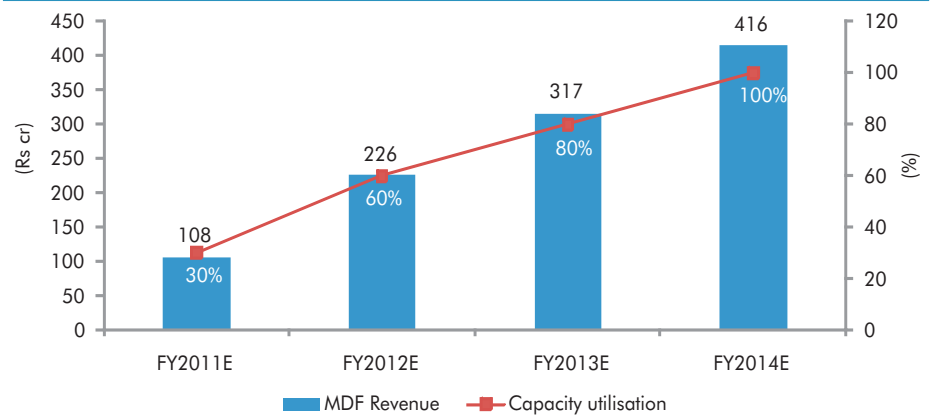
#### Exhibit 2: MDF manufacturers in India

Manufacturer	Prodn. Capacity (m3/yr)	Prodn. Capacity (m3/day)
Greenply	180,000	600
Bajaj Hindustan	160,000	570
Managalam Timber	60,000	200
Nuchem LTD	60,000	200
Shirdi Industries	45,000	150
Total	505,000	1720

Source: Company, Angel Research

The MDF unit will be one of the major growth drivers for the company, and will add around Rs107cr and Rs226cr to the top-line in FY2011E and FY2012E, respectively. The plant at Uttarakhand is eligible for corporate-tax and excise exemptions, which will result in higher operating and net profit margins, and boost GIL's bottom-line. We expect the company's operating margin to increase from the existing 11% to 15% in FY2012E.

**Exhibit 3: Revenues Generated and Capacity Utilised - MDF plant**



Source: Company, Angel Research

We have assumed only a 30% capacity utilisation for FY2011E in our estimates, because of the lack of awareness regarding the benefits of MDF in India. In order to spread information regarding this, GIL has set up a new team totally devoted to marketing MDF, while educating carpenters, dealers and distributors about the benefits of MDF. It also plans on having a separate dedicated team to educate architects and large format builders. GIL is already one step ahead of its competitors, with a strong brand name and a pan-India presence, with 32 branches across the country, complemented by a strong dealer/distributor/sub-dealer and retailer network of more than 15,000.

**GIL has installed a new laminate plant in FY2010 in Nalagarh (Himachal Pradesh), with an annual production capacity of 33 lakh sheets**

**Increasing the capacity of laminates and boosting utilisation**

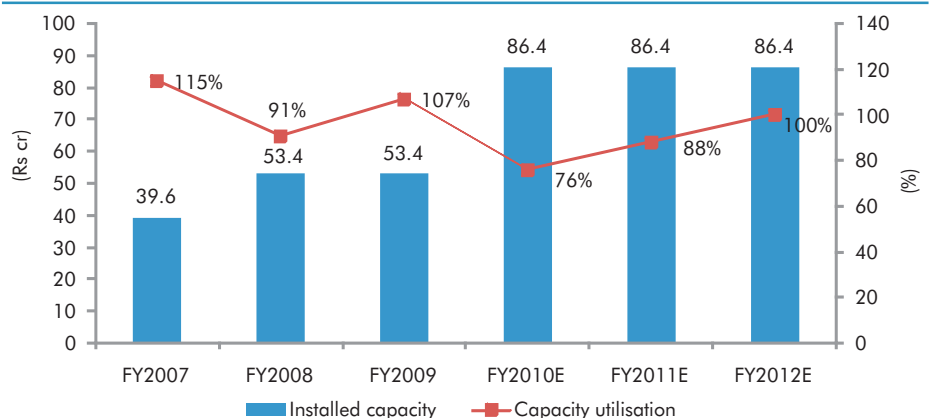
In FY2009, the actual capacity utilisation of laminates was at 107%. To meet the growing demand for its laminates products in the future, GIL has installed a new laminate plant in FY2010 in Nalagarh (Himachal Pradesh), with an annual production capacity of 33 lakh sheets, taking its total capacity of laminates to 83.4 lakh sheets. With the addition of the new capacity, GIL has become India’s largest manufacturer of laminates and will be ranked amongst the top 5 manufacturers in the world.

The new manufacturing unit will produce products like compact laminates and laminates in 3 different formats (6’x12’, 5’x12’, 4.25x10’, and 4’x10’), apart from the existing (4’ x 8’) format of laminates. The additional 33 lakh sheets will help the company increase its international presence, as the company plans to export 65% of the total new production capacity. With a total installed capacity of 83.4 lakh sheets, Greenply will gain an additional 15-20% of the organised market share, bringing its total market share to around 30% of the organised laminate industry. In FY2009, around 8% of the revenues were generated from exports. We expect the company to generate around 10% of its revenues from exports in FY2010E. GIL has two, fully-owned subsidiaries, Greenlam Asia Pacific and Greenlam America to market and distribute its products internationally. The manufacturing of these new products will strengthen the position of the company in international markets such as the US, Europe, parts of Asia, South Africa and Australia. Greenply exports its laminate products to over 50 countries, including the US, Australia, Malaysia, Singapore, UAE, Russia, Israel and New Zealand, among others.

**In FY2009, the actual capacity utilisation of laminates was 107%**

The laminate plant will be fully functional by the end of FY2010. The first press commenced its production in June 2009, while the second press started production in October 2009. The third press will start production by the end of FY2010. The three production lines will add nearly Rs70cr to the top-line in FY2010. Going forward, the laminate segment will add nearly Rs370cr and Rs442cr to the top-line in FY2011E and FY2012E, respectively. In FY2009, the actual capacity utilisation of laminates was 107%. Going forward, with the additional production coming on stream, the capacity utilisation will be expected to be around 88% and 100%, in FY2011E and FY2012E, respectively. With higher capacity utilisation, better realisations and introduction of MDF to its product-mix, we expect an improvement in the company’s EBITDA margin, from 13% in FY2010E, to 14% and 15% in FY2011E and FY2012E, respectively.

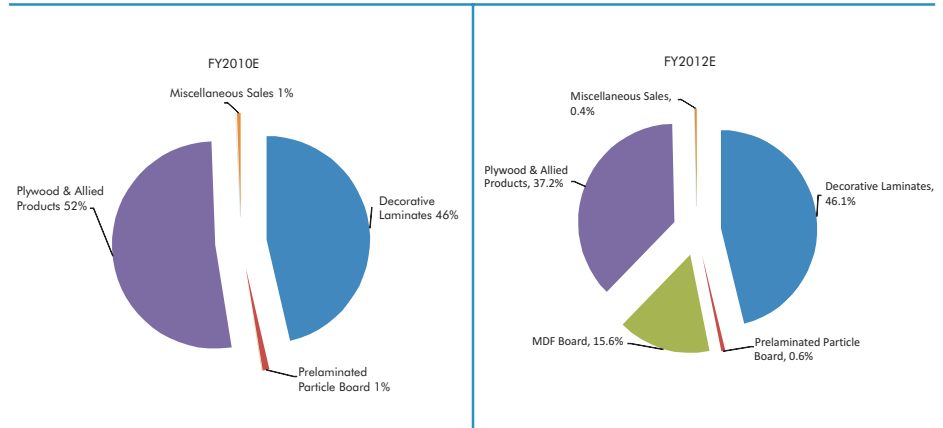
**Exhibit 4: Laminate Capacity and Utilisation**



Source: Company, Angel Research

From FY2011E onwards, with the introduction of MDF to the product-mix, GIL's sales will receive a major boost from their MDF unit and New Laminate plant, resulting in a change in the revenue-mix.

**Exhibit 5: Revenue Wise Break-up**



Source: Company, Angel Research

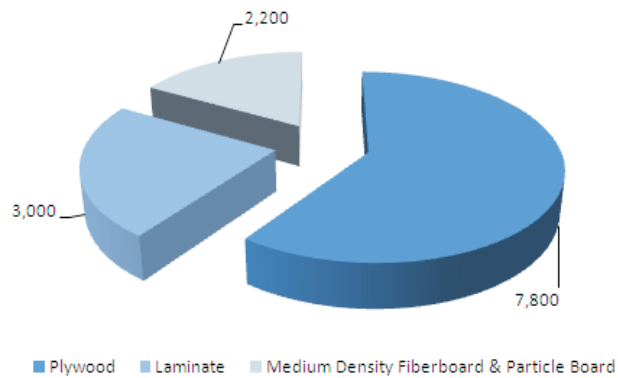
**Robust Growth to continue**

**Indian Interior Infrastructure Industry is around Rs13,000cr, and is growing at 5-7% annually**

The total size of the Indian Interior Infrastructure Industry is around Rs 13,000cr, and is growing at 5-7% annually, with plywood having a share of around Rs7,800cr (20% organised), laminates, Rs3,000cr (50% organised), and MDF and particle boards, around Rs2,200cr.

**Exhibit 6: Interior Infrastructure Industry Break-up**

(Rs cr)

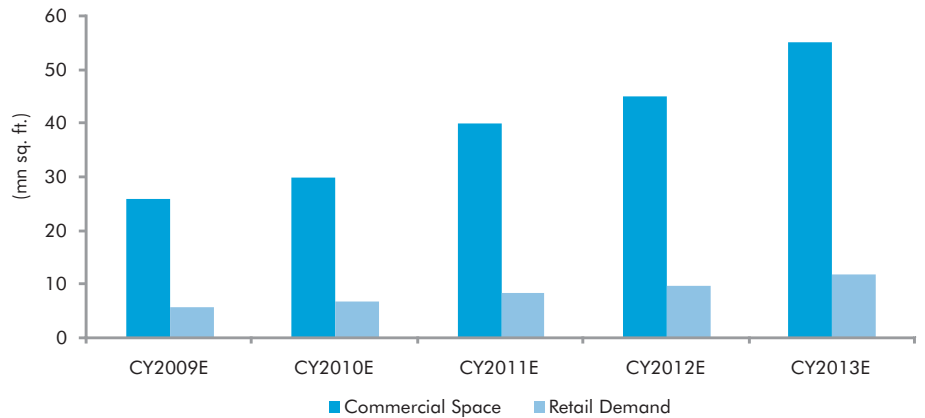


Source: Annual Report 08-09, Angel Research

**Growth in Retail and Commercial Space**

According to Cushman and Wakefield, pan-India office commercial space and retail space is expected to grow at a CAGR of 18% and 20% over CY2009-13E, respectively. As GIL's 70% revenues are generated from these segments we expect GIL to register a CAGR of 25% in revenues from FY2010E-12E.

**Exhibit 7: Pan-India Retail/Commercial Real-Estate Demand (next five years)**



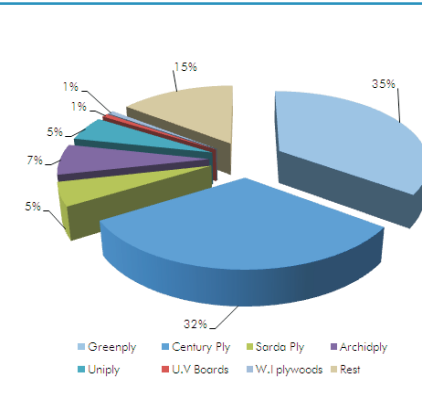
Source: Cushman & Wakefield, Angel Research

**Market leader, with the highest market share among peers**

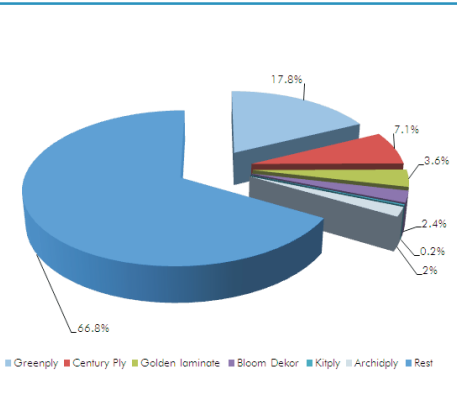
**Greenply accounts for 35% of the organised plywood industry and 18% of the organised laminate industry**

Greenply, the market leader in the Interior infrastructure Industry, is well positioned to profit from the expected boom in the real estate sector. Currently, Greenply accounts for 35% of the organised plywood industry and 18% of the organised laminate industry. With the addition of the new laminate plant, and backed by the improving macro-economic conditions, Greenply is set to increase its market share in the laminate industry. With the commencement of the Medium Density Fiberboard (MDF) unit in March 2010, GIL will capture around 15% of the market share by FY2012E.

**Exhibit 8: Organised Plywood Ind.**



**Organised Laminate Ind.**



Source: Company, Angel Research



**Greenply's top-line is expected to grow at a CAGR of 25% over FY2010E-12E**

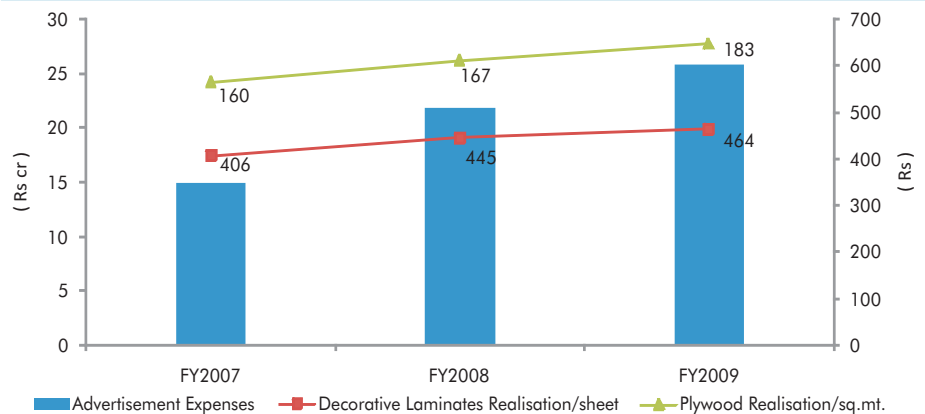
Despite the adverse market conditions, GIL has been able to sustain exponential growth, using multiple innovations and the expansion of production units. Greenply has registered a robust CAGR of 41% over FY2006-09. The company's net sales have risen significantly, fuelled by India's growing middle class and buoyant real estate sector. Greenply's top line is expected to grow at a CAGR of 25% over FY2010E-12E. The New Laminates and MDF units will help the company maintain its growth trajectory. We estimate the MDF unit to add nearly Rs 107cr and Rs226cr to the top-line in FY2011E and FY2012E, and the new laminate unit at Nalagarh to add around Rs115cr and Rs170cr in FY2011E and FY2012E, respectively.

**Largest distribution network of over 15,000 dealers/distributors in this industry**

**Extensive distribution network and brand promotion**

Greenply commands a strong brand name, and has a pan-India presence, with 32 branches across the country, and a strong dealer/distributor/sub-dealer and retailer network of more than 15,000. The company has spent around 3.3% of its total expenditure on advertising in FY2009, and has launched Green Studio and Green Esplanade in India. These efforts towards Brand promotion have resulted in an increase in average realisations for the company, which have increased by 37.6% to Rs183/sq. metre for plywood, by 26.4% to Rs464/sheet for laminates, and by 119.5% for decorative veneers to Rs598/sq metre, in FY2009. Even during the current slowdown, through effective brand promotion and an extensive network of dealers and distributors, the company has managed to maintain its realisations in 9MFY2010. For 9MFY2010, average realisation for plywood were quite stable at Rs184/sq.metre, and it increased around 17% to 731/sq.metre for decorative veneers.

**Exhibit 9: Increase in promotional activities leading to higher average realisations**



Source: Company, Angel Research

The industry is mainly divided into four segments: low, lower-mid, upper-mid and premium. Greenply's presence is mainly in the upper-mid and premium segments. GIL has a 45% presence in upper-middle segment, and the remaining 55% in the premium segment for plywood, while for laminates, it accounts for 80% in the premium segment and rest 20% in the upper-middle segment, resulting in higher realisations and profit margins.

### **Gradual Shift in preference**

This industry is largely dominated by the unorganised sector, which commands around 70% of the market share. The overall industry has a growth rate of around 5-7%, while Greenply has a CAGR of 41% from 2006-2009. This shows that the trend is slowly changing, with a growing market share of the organised industry. One of the drivers for growth is the increase in per capita income, which has resulted in a gradual shift in demand towards high quality and branded products. Greenply's Green Club is the first Indian brand to offer a lifetime guaranty.

### **Strategic location advantage, complemented by tax and excise exemptions**

#### **Greenply's units are in close proximity to raw material sources**

Timber is the most important raw material required to produce plywood, and Greenply's plywood units are in close proximity to raw material sources in Nagaland and Uttarakhand. The raw material is directly marketed by the farmers and contractors to Greenply. The company enters into long-term contracts with these farmers and contractors, to safeguard itself against the risk of higher raw material prices and to protect the bottom-line.

The Kraft paper required for laminate manufacture is primarily sourced from the neighbouring states of Uttar Pradesh and Uttarakhand. With most of the phenol manufacturers based in western India, the Behror unit at Rajasthan enjoys an uninterrupted availability of phenol. The Kriparampur unit in West Bengal is close to the Kolkata port, thereby facilitating the procurement of timber, phenol and other chemicals at a lower logistic cost.

#### **100% corporate tax and excise exemptions at Nagaland, Uttarakhand and Himachal Pradesh**

### **Benefiting from Excise and Corporate Tax Exemptions**

The plant at Nagaland enjoys 100% corporate tax and excise exemptions for ten years, from FY2006 onwards. This plant has a total production capacity of 45 lac sq. metres, which accounts for an 18.8% share of the total plywood production. The plant at Uttarakhand also enjoys the same exemptions, but their corporate tax exemption will come down to 30% in FY2012E. This plant has a total production capacity of 105 sq. metres, which accounts for nearly 43.8% of the total plywood production. The two plants together account for around 62.6% of the total plywood production capacity of GIL.

The MDF Unit will also enjoy Fiscal benefits in the form of excise duty exemption for ten years and corporate tax exemption on 100% of profits for the first five years, and 30% for the next five.

The new Laminate plant is also exempted from corporate tax for five years and from excise duty for 10 years from the time of commencement (FY2010). These exemptions will boost the bottom line of the company.

## Concerns

### Development of Domestic MDF Market

The MDF plant constitutes a significant investment (Rs250cr, 34% of the Balance Sheet in FY2010E) for GIL. There are inherent risks in this proposition, considering that the market for MDF is relatively underdeveloped in India, and the segment's revenues may not scale-up as fast as we have projected. That said, we believe that MDF has great potential to grow in India, and GIL, being the largest player in the industry, with a very strong brand name, is best-placed to tap the MDF opportunity.

### Raw Material Availability

The main raw material for plywood is timber, and for laminates the chief raw materials are paper and chemicals. As these raw materials are scarce in nature, any reduction in their availability could consequently increase Greenply's raw material costs and could significantly affect the operating results. The delay or failure to procure these raw materials may adversely affect the company's production processes, thereby leading to contractual penalties or liabilities, and a loss of customers, while affecting the company's reputation. Any of these factors could adversely affect Greenply's business, financial condition and the results of operations.

### Real Estate Demand

Greenply's growth is mainly dependent on the real estate sector. Any further downturn in the real estate industry and/or changes in governmental policies affecting the growth of this sector may have an adverse effect on the demand for plywood, laminates and other infrastructure products, and on the results of the company's operations, as a whole.

### Competition from the unorganised and organised sectors, and from imports

The Indian plywood industry is highly fragmented, with over 70% constituted of the unorganised sector, from which the company can face intense competition. The unorganised sector can offer their products at highly competitive prices, which may not be matched by GIL, and, consequently, affect its sales volumes and growth prospects. The company can also face stiff competition from the organized sector in the future, which could exert pressure on the company's growth. The MDF sector can also face competition from imported MDF, which would impact the company's growth and profitability.

### Changes in environmental laws and regulations

Greenply's manufacturing operations are subject to environmental laws and regulations. With the environmental law becoming stricter year by year, any changes in these laws and regulations could have a significant impact on the growth of the company. Any changes in these laws could result in heavy capital expenditure for the installation of costly pollution control equipment.

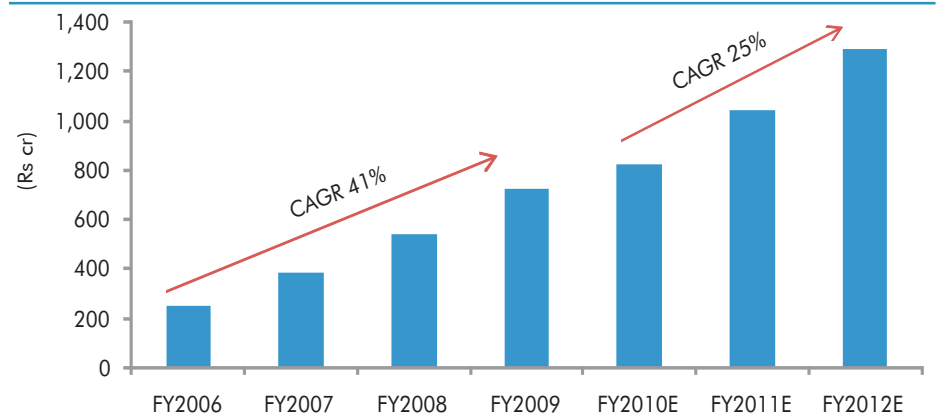
## Financial Overview

In FY2009, the company registered a robust growth of 31% in sales, even during the economic downturn. In 9MFY2010, GIL's net sales increased by 10% to Rs613.6cr from Rs557.8cr, aided by strong volume growth. The average realisation for plywood were quite stable at Rs184/sq. metre, and the average realisation for decorative veneers increased from Rs626/sq. metre to Rs731/sq. metre.

### GIL Top-line to register a CAGR of 25% over FY2010E-FY12E

Going ahead in 4QFY2010E, we estimated the sales volume to be quite stable yoy, as the economy is back on track, with an estimated GDP growth of around 7%. Most of the major real estate projects that were either stuck or scraped due to the liquidity crisis were back on track in FY2009. We expect an increase of around Rs70cr yoy in the top-line in FY2010E, mainly due to the additional laminate capacity added during the year. For FY2010E, we expect a marginal growth of 14% in the top-line. In absolute terms, we estimate the net sales to increase from Rs724.9cr to Rs824cr in FY2010E. Going ahead, we expect the net sales to increase to Rs1,043cr and to Rs1,291cr in FY2011E and FY2012E, respectively. After FY2010E, volume growth will be mainly driven by the new MDF and Laminate units, and complemented by improving average realisations. We expect the company's Top-line to register a CAGR of 25% over FY2010E-12E.

### Exhibit 10: Net Sales Trend

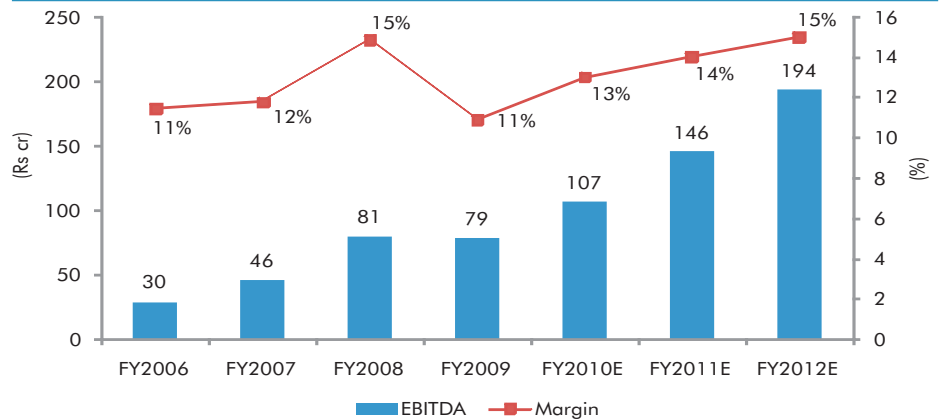


Source: Company, Angel Research

### Operating margins

Operating margins took a hit in FY2009 and dropped to 11% (15%), largely because of forex losses to the tune of Rs16cr and higher employee expenses to sales 8.2% (7.2%). However, in 9MFY2010, the operating margins reduced marginally by 4% to 12.5% yoy. We believe that the operating margins will increase in 4QFY2010E to 14%, on the back of lower raw material consumption, excise exemptions and the additional, expected Rs70cr revenue from the new laminate unit. We estimate the company to register an OPM of 13% in FY2010E, which will gradually increase to 14% and 15% in FY2011E and FY2012E, respectively. In absolute terms, the operating profit is estimated to increase from Rs78.9cr in FY2009 to Rs194cr in FY2012E, because of the expected revenues generated by the new MDF and Laminate units, and complemented by the 100% excise exemptions on these two units.

**Exhibit 11: Operating Profit and Margin Trends**



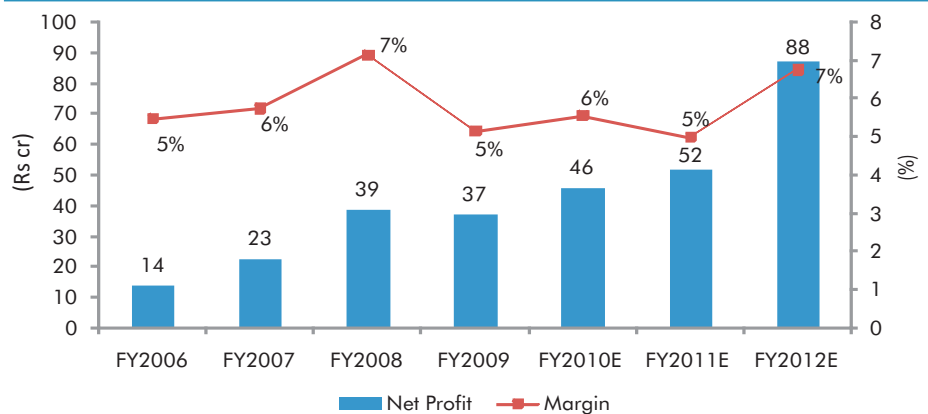
Source: Company, Angel Research

**Net Profit Margins**

**Net Profits to increase to Rs87.8cr in FY2012E on back of higher volumes, better realisations, increase in operating margins, reduced interest costs and 100% corporate Tax exemption on the new units**

GIL's net profit declined by 3.7% to Rs37.3cr in FY2009, primarily because of lower operating margins, forex losses and a higher depreciation cost. For 9MFY2010, the net profit increased by 26%, from Rs28.7cr to Rs36.3cr, due to the increase in operating margins. For FY2010E, we estimate net profit margins to remain flat, due to high depreciation and interest costs. We have estimated higher depreciation and interest costs, because of the huge capital expenditure that will be incurred by the company in FY2010E, and 70% of the capex will be funded through debt. In absolute terms, we expect the net profit to increase from Rs37.3cr to Rs45.9cr in FY2010E. For FY2011E and FY2012E, we estimate the net profit margins to improve to 5% and 6.8%, respectively. We estimate the interest cost to reduce from Rs43cr in FY2011E to Rs41.3cr in FY2012E, and expect the net profit to be Rs52.3cr and Rs87.8cr in FY2011E and FY2012E, respectively, due to higher volumes, better realisations, increase in operating margins, reduced interest costs and 100% corporate Tax exemption on the new units.

**Exhibit 12: Earnings to improve**



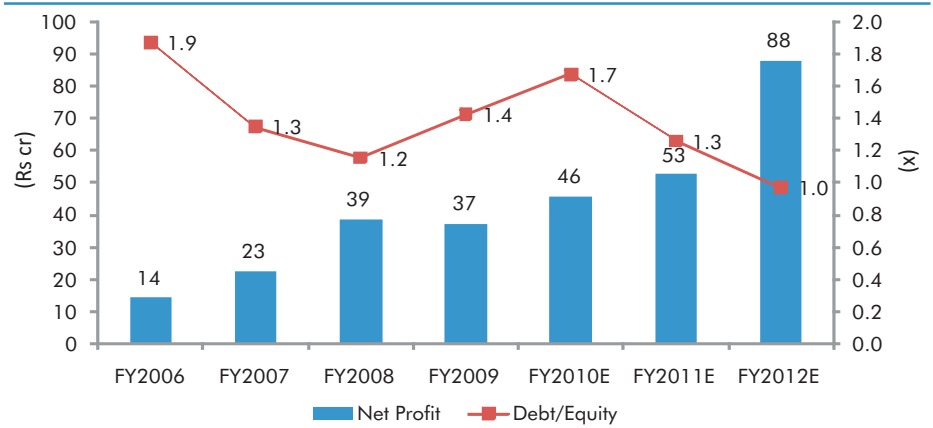
Source: Company, Angel Research

**Debt to Equity ratio to gradually come down to 1:1 in FY2012E**

**Reducing Debt**

Currently, GIL is in expansion mode, and 70% of the required Rs350cr Capex (Rs100cr for Laminates and Rs250cr for MDF) has been funded through debt. We estimate the company to have a higher debt to equity ratio of 1.7:1 (1.4:1 in FY2009) in FY2010E. During the year, the company has issued 2,039,694 warrants, which are convertible before March 31, 2011 at Rs90; thus, we expect the company to generate around Rs18cr from the conversion of warrants in FY2011E, which will be utilised to lower its debt. Going forward, we expect the debt to equity ratio to come down to 1:1 in FY2012E, resulting in lower interest expenses.

**Exhibit 13: Reducing Debt to Equity**



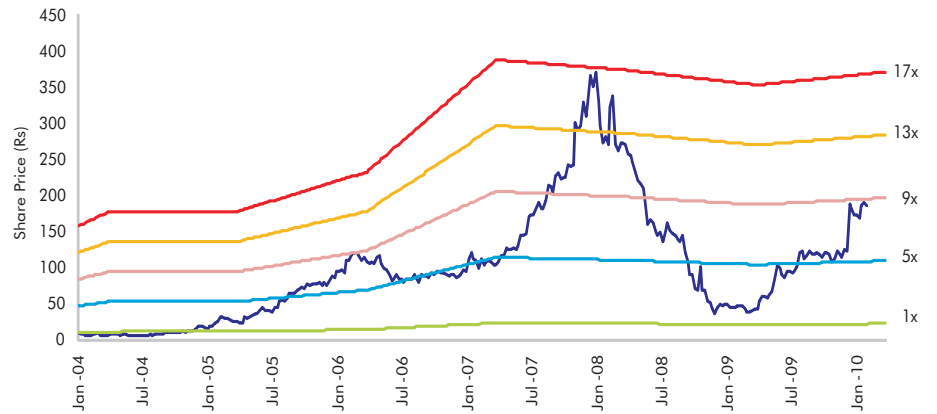
Source: Company, Angel Research

**Outlook and Valuation**

Greenply is present in a high growth industry with a lot of potential, and is expected to register a CAGR of 25% from FY2010E-12E. GIL is well placed to service future demand, as it has the largest production capacity in India, which is complemented by the largest distribution network in the industry. The laminate capacity expansion and the introduction of the MDF unit will also lend a fillip to the company's expansion plans in the coming years.

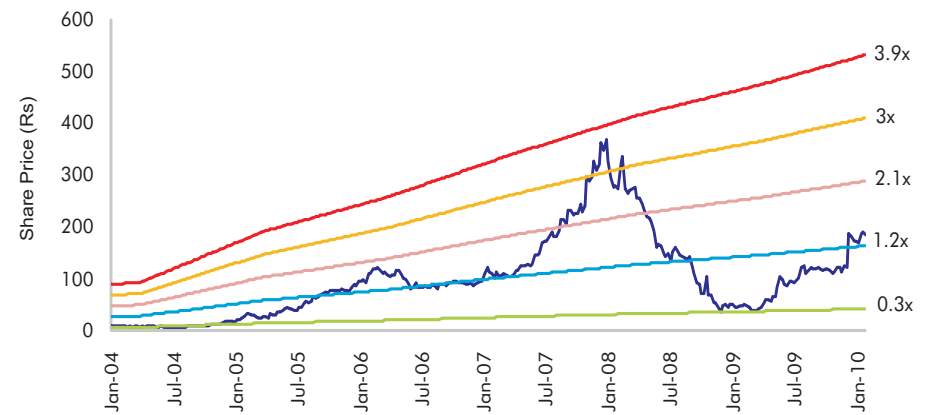
The GIL stock has traded between a range of 0.4-3.7x its 1-year forward P/BV multiple, with a 5-year median of 2x. Currently, the stock is trading at 1.1x P/BV FY2012E, which is below its 5-year average of 2x. On a P/E basis, the stock has traded between a wide range of 0.6-17x its 1-year forward Earnings multiple in the past 5 years, with an average P/E of 9.3x. Presently, the stock is trading at a P/E multiple of 5.1x FY2012E Earnings. Looking at the strong RoE profile of the company (with a brand-driven business model), as well as the substantial expansion in the lucrative organised markets of MDF and laminates, **we assign a target multiple of 8x FY2012E EPS of Rs36.4 to arrive at a 15-month target price of Rs291, implying an upside of around 57%. We Initiate Coverage on the stock with a Buy.**

**Exhibit 14: One-Year Forward P/E**



Source: Company, Angel Research

**Exhibit 15: One-Year Forward P/BV**



Source: Company, Angel Research

**GIL is primarily engaged in the manufacture of plywood and other value-added products, such as laminates and Medium Density Fiberboard (MDF)**

**Greenply has 32 branches across India, with a strong dealer/distributor/sub-dealer/retailer network of over 15,000, and a presence in over 300 cities**

## Company Background

Greenply Industries Limited (GIL) is an Rs877cr, professionally managed Interior Infrastructure Company, primarily engaged in the manufacture of plywood and other value-added products such as laminates and medium density fiberboard (MDF). The company has six, state-of-the-art manufacturing facilities located at Nagaland, West Bengal, Uttarakhand and Rajasthan, and also caters to overseas markets from their two, wholly-owned subsidiaries, Greenlam Asia Pacific and Greenlam America. GIL currently manufactures a host of renowned brands such as Greenply Plywood, Green Club Premium Ply (which comes with a lifetime guarantee), Greenlam Laminates, Green Decowood and Green Lamieboard. The product range comprises of plywood and boards (all ranges), flush doors, decorative veneers, decorative laminates and pre-laminated MDF and particleboards.

### Extensive distribution network and marketing

Greenply has 32 branches across India, with a strong dealer/distributor/sub-dealer/retailer network of over 15,000, and a presence in over 300 cities. The company has introduced a novel concept by launching the Green Studio at Bangalore, Delhi NCR and Ludhiana. The Green Studio is designed like a gallery displaying the entire range of Greenlam Laminates, the Dekodur range of high-end metal laminates, Green Decowood veneers, and a host of edging solutions like Post-forming laminates and edge blends under one roof. The company plans to open around 20 new Green studios. Greenply has also come up with a new concept of Green Esplanade at their Behror plant, where they display various products of different ranges; this concept is the first of its kind in India.

### Plywood and Allied Products

Plywood and allied products are the main revenue generators for the company, accounting for 58% of the total sales, 52% to the total EBIT for FY2009. Two wholly-owned subsidiaries were amalgamated with Greenply in FY2009, adding 30 lakh sq. metres to its already existing capacity of 210 lakh sq. metres, bringing its total capacity to 240 lakh sq. metres. Greenply possesses the highest production capacity in the industry in this segment. The company registered a 39.25% growth in value and a 29.9% growth in volume in FY2009, and has also started exporting plywood during the year. The company manufactures plywood from Tizit (Nagaland), Kriparampur (West Bengal), Pantnagar (Uttarakhand) and Bamanbore (Gujarat). The Pantnagar and Nagaland plant are strategically located, and enjoy an abundance of timber resources within 100-200 km. These two plants also enjoy corporate tax and excise exemptions.



**Exhibit 16: Manufacturing units and installed capacity**

<b>Manufacturing Unit</b>	<b>Installed Capacity</b>
Tizit (Nagaland) Plywood	45 lac sq m
Kripampur (West Bengal) Plywood	60 lac sq m
Bamanbore (Gujarat) Plywood	30 lac sq m
Pantnagar (Uttarakhand) Plywood	105 lac sq m
<b>Total</b>	<b>240 lac sq m</b>

Source: Company, Angel Research

**Laminates and Allied Products**

Laminates and allied products account for 42% of the total sales and 48% of the total EBIT for FY2009. During the FY2010, the company has commenced operations at its new laminate unit at Nalagarh, with a total production capacity of 33 lakh sheets, expanding its total capacity to 86.4 lakh sheets. The Nalagarh plant will manufacture high-pressured laminates of 0.50-12mm thickness, and 8'x4', 4.25'x10', 5'x12' and 12'x 6' sizes. After commencement of the new plant, GIL is expected to have the country's largest production capacity, and will account for nearly 25-30% of the total Indian production capacity. GIL registered an increase in revenue of 23.2% to Rs349.87cr in FY2009. Decorative veneers revenues also increased by 11.15% to Rs77.79cr in FY2009, due to improved realisations, which increased by 12.9% to Rs598/sq. metre. In 9MFY2010, the realisations further increased by 17% to Rs731/sq. metre.

**Exhibit 17: Manufacturing units and installed capacity**

<b>Manufacturing Unit</b>	<b>Capacity</b>
Behror (Rajasthan)	53.4 lac sheets
Nalagarh (Himachal Pradesh)	33.0 lac sheets
Total	86.4 lac sheets
Behror (Rajasthan) Veneers	42.0 lac sq m

Source: Company, Angel Research

**Medium Density Fibreboard**

MDF is a very versatile product, with applications primarily in paneling. It is also used in a wide range of furniture, windows, doors, frames, handicraft items, display or exhibition stands and signs, ceiling, toys, carving, partitions, maritime applications and educational equipment. MDF will be the latest addition at GIL in FY2011. In its first year of operations, this segment is expected to contribute around 9.5% to the total revenue. The MDF plant is installed at Uttarakhand, and has a total production capacity of 180,000m<sup>3</sup>/yr. GIL is estimated to generate around Rs375cr of revenue at full capacity from this plant. This will be India's first production line of MDF, incorporating world leader, Dieffenbacher's state-of-the-art CPS, continuous-pressing technology. The line will also incorporate Metso's latest generation EVO refiner, a latest Steinemann Satos 8-head sanding line (the first in India), and the unique Lukki 2 dimensional panel storage system supplied by Dieffenbacher.

**Profit & Loss Statement**

Rs crore

Y/E March	FY2009	FY2010E	FY2011E	FY2012E
<b>Gross sales</b>	<b>829.5</b>	<b>939.6</b>	<b>1,177.8</b>	<b>1,447.2</b>
Less: Excise duty	104.7	114.8	133.8	155.4
Net Sales	724.9	824.9	1,043.9	1,291.8
Other operating income				
<b>Total operating income</b>	<b>724.9</b>	<b>824.9</b>	<b>1,043.9</b>	<b>1,291.8</b>
% chg (%)	33.8	13.8	26.6	23.7
Total Expenditure	646.0	717.6	897.8	1,098.1
Net Raw Materials	408.6	466.0	584.6	717.0
Other Mfg costs	37.5	53.6	62.6	71.1
Personnel	59.3	74.2	94.0	116.3
Other	140.7	123.7	156.6	193.8
<b>EBITDA</b>	<b>78.9</b>	<b>107.2</b>	<b>146.2</b>	<b>193.8</b>
% chg (%)	(2.1)	36.0	36.3	32.6
(% of Net Sales) (%)	10.9	13.0	14.0	15.0
Depreciation & Amortisation	17.0	26.2	42.5	45.2
<b>EBIT</b>	<b>61.8</b>	<b>81.0</b>	<b>103.7</b>	<b>148.6</b>
% chg	(8.3)	31.1	28.0	43.3
(% of Net Sales)	8.5	9.8	9.9	11.5
Interest & other Charges	19.6	26.7	43.0	41.3
Other Income	2.2	2.3	2.4	2.5
(% of PBT)	5	4	4	2
Share in profit of Associates	-	-	-	-
<b>Recurring PBT</b>	<b>44.3</b>	<b>56.6</b>	<b>63.0</b>	<b>109.7</b>
% chg	(11.6)	27.7	11.3	74.1
Extraordinary Expense/(Inc.)	-	-	-	-
<b>PBT (reported)</b>	<b>44.3</b>	<b>56.6</b>	<b>63.0</b>	<b>109.7</b>
Tax	7.0	10.8	10.7	21.9
(% of PBT)	15.9	19.0	17.0	20.0
<b>PAT (reported)</b>	<b>37.3</b>	<b>45.9</b>	<b>52.3</b>	<b>87.8</b>
Share of earnings of associate	-	-	-	-
Minority interest (MI)	-	-	-	-
Prior period items	-	-	-	-
<b>PAT after MI (reported)</b>	<b>37.3</b>	<b>45.9</b>	<b>52.3</b>	<b>87.8</b>
<b>ADJ. PAT</b>	<b>37.3</b>	<b>45.9</b>	<b>52.3</b>	<b>87.8</b>
% chg	(3.7)	22.9	14.1	67.8
(% of Net Sales)	5.1	5.6	5.0	6.8
<b>Basic EPS (Rs)</b>	<b>21.9</b>	<b>20.8</b>	<b>21.7</b>	<b>36.4</b>
<b>Fully Diluted EPS (Rs)</b>	<b>21.9</b>	<b>19.0</b>	<b>21.7</b>	<b>36.4</b>
% chg	(3.7)	(5.4)	4.5	67.8

**Balance Sheet**

Rs crore

Y/E March	FY2009	FY2010E	FY2011E	FY2012E
<b>SOURCES OF FUNDS</b>				
Equity Share Capital	8.5	11.0	12.1	12.1
Preference Capital	-	-	-	-
Reserves & Surplus	172.4	257.7	323.1	406.5
<b>Shareholders Funds</b>	<b>180.9</b>	<b>268.7</b>	<b>335.1</b>	<b>418.6</b>
Minority Interest	-	-	-	-
Total Loans	258.0	457.1	430.4	413.4
Deferred Tax Liability	12.6	12.6	12.6	12.6
<b>Total Liabilities</b>	<b>451.5</b>	<b>738.4</b>	<b>778.1</b>	<b>844.6</b>
<b>APPLICATION OF FUNDS</b>				
Gross Block	269.6	638.3	675.9	720.1
Less: Acc. Depreciation	73.7	100.0	142.5	187.8
<b>Net Block</b>	<b>195.8</b>	<b>538.3</b>	<b>533.4</b>	<b>532.3</b>
Capital Work-in-Progress	51.7	-	-	-
Goodwill	3.4	3.4	3.4	3.4
<b>Investments</b>	<b>2.2</b>	<b>2.2</b>	<b>2.2</b>	<b>2.2</b>
<b>Current Assets</b>	<b>386.4</b>	<b>396.6</b>	<b>483.0</b>	<b>597.4</b>
Cash	16.2	15.6	16.1	17.4
Loans & Advances	68.7	33.0	52.2	77.5
Inventories	166.1	185.3	223.1	276.1
Debtors	135.4	162.7	191.6	226.5
Other	-	-	-	-
<b>Current liabilities</b>	<b>188.1</b>	<b>202.1</b>	<b>243.9</b>	<b>290.8</b>
<b>Net Current Assets</b>	<b>198.3</b>	<b>194.5</b>	<b>239.1</b>	<b>306.7</b>
Misc. Exp. not written off	0.1	-	-	-
<b>Total Assets</b>	<b>451.5</b>	<b>738.4</b>	<b>778.1</b>	<b>844.6</b>

**Cash Flow Statement**
**Rs crore**

Y/E March	FY2009	FY2010E	FY2011E	FY2012E
Profit before tax	44.3	56.6	63.0	109.7
Depreciation	17.0	26.2	42.5	45.2
Change in Working Capital	(24.1)	(32.5)	(24.9)	(41.0)
Less: Other income	2.2	2.3	2.4	2.5
Direct taxes paid	7.0	10.8	10.7	21.9
<b>Cash Flow from Operations</b>	<b>28.1</b>	<b>37.3</b>	<b>67.5</b>	<b>89.5</b>
Inc./ (Dec.) in Fixed Assets	(89.7)	(317.1)	(37.6)	(44.2)
Inc./ (Dec.) in Investments	2.8	-	-	-
Inc./ (Dec.) in loans and advances	(18.4)	35.7	(19.2)	(25.3)
Other income	2.2	2.3	2.4	2.5
<b>Cash Flow from Investing</b>	<b>(103.2)</b>	<b>(279.2)</b>	<b>(54.4)</b>	<b>(67.0)</b>
Issue of Equity	-	45.9	18.4	-
Inc./ (Dec.) in loans	86.9	199.1	(26.7)	(17.0)
Dividend Paid (Incl. Tax)	(3.0)	(3.9)	(4.2)	(4.2)
Others	(1.8)	0.1	-	-
<b>Cash Flow from Financing</b>	<b>82.1</b>	<b>241.2</b>	<b>(12.5)</b>	<b>(21.3)</b>
Inc./ (Dec.) in Cash	7.0	(0.6)	0.5	1.3
<b>Opening Cash balances</b>	<b>9.2</b>	<b>16.2</b>	<b>15.6</b>	<b>16.1</b>
<b>Closing Cash balances</b>	<b>16.2</b>	<b>15.6</b>	<b>16.1</b>	<b>17.4</b>

**Key Ratios**

Y/E March	FY2009	FY2010E	FY2011E	FY2012E
<b>Valuation Ratios (x)</b>				
P/E (on FDEPS)	1.9	9.7	8.5	5.1
P/E (on basic, reported EPS)	1.9	8.9	8.5	5.1
P/CEPS	1.3	5.7	4.7	3.4
P/BV	0.4	1.5	1.3	1.1
Dividend yield (%)	3.6	0.8	0.8	0.8
Market cap. / Sales	0.1	0.5	0.4	0.3
EV/Sales	0.4	1.0	0.8	0.7
EV/EBITDA	4.0	7.9	5.9	4.3
EV / Total Assets	0.7	1.2	1.1	1.0
<b>Per Share Data (Rs)</b>				
EPS (Basic)	21.9	20.8	21.7	36.4
EPS (fully diluted)	21.9	19.0	21.7	36.4
Cash EPS	32.0	32.6	39.3	55.1
DPS	1.5	1.5	1.5	1.5
Book Value	106.4	121.6	138.8	173.4
<b>Du Pont Analysis</b>				
EBIT margin (%)	8.5	9.8	9.9	11.5
Tax retention ratio (%)	84.1	81.0	83.0	80.0
Asset turnover (x)	1.9	1.4	1.4	1.6
RoIC (%)	13.7	11.3	11.6	15.0
Cost of Debt (Post-tax, %)	7.7	6.0	8.1	7.8
Leverage (x)	1.2	1.5	1.4	1.1
Operating RoE (%)	16.2	13.2	15.3	20.8
<b>Return Ratios (%)</b>				
RoCE (Pre-tax)	13.7	11.0	13.3	17.6
RoCE (Post-tax)	11.5	8.9	11.1	14.1
RoIC	13.7	11.3	11.6	15.0
Angel RoIC	14.9	11.9	11.6	15.0
RoE	22.7	20.4	17.3	23.3
<b>Turnover Ratios (x)</b>				
Asset Turnover (Gross Block)	2.0	1.4	1.1	1.2
Asset Turnover (Net Block)	3.9	2.2	1.9	2.4
Asset Turnover (Total Assets)	1.9	1.4	1.4	1.6
Operating Inc./Invnt. Capital (%)	20.8	18.5	19.7	24.4
Inventory / Sales (days)	78.2	77.7	71.4	70.5
Receivables (days)	58.2	66.0	61.9	59.1
Payables (days)	82.5	83.2	75.0	72.6
Working capital cycle (days)	166.3	166.2	148.2	147.9
<b>Solvency Ratios (x)</b>				
Gross debt to equity	1.4	1.7	1.3	1.0
Net debt to equity	1.3	1.6	1.2	0.9
Net debt to EBITDA	3.1	4.1	2.8	2.0
Interest Coverage (EBIT / Interest)	3.1	3.0	2.4	3.6

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**Note: Please refer important 'Stock Holding Disclosure' report on Angel web-site (Research Section)**

Disclosure of Interest Statement	Greenply Industries
1. Analyst ownership of the stock	No
2. Angel and its Group companies ownership of the stock	Yes
3. Angel and its Group companies' Directors ownership of the stock	No
4. Broking relationship with company covered	No

*Note: : We have not considered any Exposure below Rs 5 lakh for Angel, its Group companies and Directors.*

<b>Ratings (Returns) :</b>	Buy (> 15%) Reduce (-5% to -15%)	Accumulate (5% to 15%) Sell (< -15%)	Neutral (-5 to 5%)
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