

# **REBOUND**

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# VISION

Touching every life across the globe through high technology products and services

# **MISSION**

We will drive growth through our excellence in mass manufacturing we will move up the value chain through rapid development of technology, products and services. We will leverage our relationships, distribution, cost leadership and "can do'attitude to become a global market leader in every business

# YEAR AT A GLANCE

#### **BUILDING STRENGTH**

- Continues to remain amongst the leading players in the Optical Media industry globally
- Maintained its leadership position in the EPC business with over 250 MW installed across technologies
- Execution of definitive agreements with domestic lenders and implemented CDR scheme
- Secured number one position in J&K with the installation of off-grid projects in Ladakh and Kargil regions
- Established solar in a Box concept with 1 KW systems to begin with and entered solar pump segment

# LEADING THE WAY

- MBSL emerged as India's Largest Solar EPC Company in 2012-13
- Emerged as one of the top players in Kerala's ANERT residential roof top system through newly established channel partners
- Launched pen drives preloaded with security software
- Introduced signature collection of bejeweled pen drives during festive season
- Created benchmarks in completing large ground mounted projects in record timing

# CORPORATE SOCIAL RESPONSIBILITY

- Moser Baer Trust, the community development arm of Moser Baer India Limited has mainstreamed 284 out of school children in the formal education system through various initiatives
- 145 illiterate girls got benefitted through nonformal education classes
- During 2012-13, the Trust has reached out to 1972 youths and children from 65 villages of Noida and Greater Noida through 8 digital literacy centres. During the last 3 years, about 4431 trainees has completed various computer and IT related courses
- 8175 patients were catered to though community based OPDs and specialized camps
- New and 2nd AAKAR Centre has been established, benefiting 92 women directly through empowerment through livelihood initiative for women

#### RECOGNITIONS

- Moser Baer Solar has been conferred with the prestigious "5 Star Rating" by TÜV Rheinland for maintaining highest standards of quality in manufacturing for third consecutive year, the only Solar company in the world to achieve the feat
- Moser Baer has been conferred with 'EFY Reader's choice Award' for the Best solar modules brand in the country
- The company has won the prestigious JET, JIS and JPEC certification



# CHAIRMAN'S MESSAGE

In this turbulent economic environment, I do not underestimate the scale of challenges that companies around the world are facing today. In one of the most recent forecasts, the International Monetary Fund has slashed its growth forecasts for 2013 and 2014 and has warned of a slowdown in key emerging markets and a more protracted recession in the euro area as well. If one looks at country by country, it is quite evident that China seems to be afflicted with unproductive investments, Brazil looks saddled with low investments and in India it looks like political and administrative uncertainty!

So what does it mean for us? A slower growth rate in big developing countries is likely to have profound repercussions for the world economy which will translate into weaker growth for advanced countries as well. It also means that there will be slower recovery than expected.

While it is apparent that overall the recovery to growth path will be slow, however, I do not believe this is the time for defeatism. Yes, I agree we are currently passing through a phase of restructuring and transition at Moser Baer, but we are confident of a strong rebound. As you know due to several externalities, we had had a patch of rough weather. Since not every challenge could have been foreseen and even if it could be predicted, it cannot always be averted. We have withstood challenges with great resilience and now we are already set to be on the path of recovery and are confident of bouncing back.

Now coming to the business in FY 2013, we find that while the overall market sentiment was stable, we transitioned into a more mature optical media market with focus on higher value products. In this FY the company's total revenue including other income stood at INR 15,463 million on a standalone basis and the EBITDA (including other income) stood at INR 774 million during the year.

Your company continues to be one of the market leaders in the global storage media industry. We consistently offer a wide range of high quality products at low cost and have proven time and again that we are a unique techmanufacturing company in that sense. We notice increasing demand for new generation optical media products like Blu-ray in mature markets (USA and Europe). While emerging markets show continued higher preference for DVDs and an increase in demand for Bluray products, the development of non- OEM channels in regions like Africa and West Asia are boosting demand for optical media products especially for DVDs and CDs.

Our solid state media (SSM) segment – flash drives, SD and Micro SD cards is a part of the storage media business that has witnessed high growth in India and is growing popular globally. According to an industry estimate global shipments of solid state media are likely to reach 937 million units in 2014. In the near future, the SSM segment will be a key growth driver for the business on account of rapid penetration of personal computing devices in the developing markets. Needless to underscore that we shall continue to focus on product innovation, high quality, cost competitiveness and widening of our distribution network.

Coming to Solar, we all know that solar energy has great future. It is also well known that solar radiation striking the Earth's surface each year is equivalent to more than 10,000 times the world's annual energy use. In theory, it is notable that the solar radiation that hits about 1% of the world's desert area alone could be sufficient to meet the world's entire electricity demand! Still we have few issues in Solar that need to be addressed at the policy level

Due to a massive capacity buildup by Chinese companies, the Indian solar manufacturers were massively hit. Taking cue from the US Department of Commerce (DOC) and the European Commission, India too initiated antidumping investigations against imports of PV equipments from China, Taiwan, Malaysia and USA. The proceedings are currently in progress and an announcement on the same is expected to be made in the near term. Anti dumping duties and such other measures adopted by the USA, Europe and India are likely to result in increase in cost competitiveness of non-Chinese solar PV manufacturers.

In India, we are hopeful of a strong Government policy support in the form of protection from dumped products and local content regulation for creation of a level playing field. This will help develop a strong self sustaining domestic sector capable of serving the growing demand for solar energy in India.

At present your company is serving the lucrative high margin and quality conscious markets like Japan through its solar manufacturing operations. We are optimizing production processes weaving in material efficiencies to create sustainable competencies for the business.

Your company has continued to maintain its leadership position in the Indian solar EPC space with over 250 MW projects installed till date. Though it may appear that the

short term PV market is challenged due to the prevalent demand supply imbalance and waning demand from the European markets, the future outlook remains promising on account of strong emergence of the new markets.

In the entertainment sector, we continue to dominate the home video segment. We have adopted unique marketing strategies for targeting different market segments. Catering to the premium segment, we offer high quality DVD catalogues marketed through the large format retail outlets to this segment. To the mass market we offer value products at affordable prices. We are aiming to enthuse consumers to buy our branded high quality offerings at marginally higher prices than go for pirated versions.

Notably, your company is taking sound steps towards strengthening its core businesses. We have taken a slew of steps to cut costs, be innovative and employ technologically superior processes to weave in better efficiencies.

I must thank all Moser Baer employees who are its real strength and who are working incessantly in these challenging times to tide over all odds.

I have come to firmly believe that the key to the next phase of development at Moser Baer lies in innovationand efficiency-led productivity enhancement, which will essentially result in a strong rebound, led by smart people.

Best Regards,

(Deepak Puri)

# **BOARD OF DIRECTORS**

MR. DEEPAK PURI

Chairman & Managing Director

MRS. NITA PURI

Whole Time Director

MR. JOHN LEVACK

Non-Executive and Nominee Director

MR. BERNARD GALLUS

Independent and Non-Executive Director

MR. FRANK E. DANGEARD

Independent and Non-Executive Director

MR. VINEET SHARMA

Independent and Non-Executive Director

MR. SANJAY JAIN

Alternate Director to Mr. Bernard Gallus

# **MANAGEMENT DISCUSSION & ANALYSIS**

# INTRODUCTION

FY 2012-13, a challenging year for businesses globally, was a phase of transitioning, consolidation and restructuring for Moser Baer. During the year, we undertook several measures aimed at improving operational efficiencies that are expected to have a positive impact on the business in the near to medium term. We continued to focus on our core competencies in the Storage Media business and develop strengths in other businesses to chart out a sustainable future and to recreate value for our stakeholders in the long term.

During the past year, challenges to the global economy persisted due to slowdown in the emerging economies and recession in the Euro Area. As per IMF's World Economic Outlook (April 2013) report, World output growth declined for the second consecutive year to 3.2% in 2012 from 4.0% in 2011. For the second year in succession, Emerging Markets' output growth lowered to 5.1% in 2012 from 6.4% in 2011. In 2012, the Euro Area witnessed negative output growth of 0.6%. While the last two years have been difficult for countries and businesses globally, year 2013 appears to be the transitioning period through which the global economy is expected to stabilize for the near to medium term. As per IMF, strong recovery is expected in 2014 for the global economy, Euro Area and Emerging Markets.

# **COMPANY OVERVIEW**

In FY 2012-13, Moser Baer India Limited witnessed certain constraints due to business re-organization that affected its operating performance. While the overall market demand sentiment was stable, we transitioned into a more mature optical media market with focus on higher value products.

- Total Revenue: In FY 2012-13, the Company's total revenue including other income stood at INR 15,463 million on a standalone basis
- EBITDA (including other income) stood at INR 774 million during the year
- Cash and Liquidity: Net cash flows from operating activities stood at INR 450 million during the year

In FY 2012-13, Moser Baer's Storage Media Business was affected by financial constraints that affected operations during the year. During this year, the global Storage Media industry remained largely stable; however, there was a secular decline in demand for optical media products in developed markets. A positive trend during the year was stability in prices of key input materials. During FY 2012-13, Moser Baer's Storage Media business undertook several steps aimed at lowering the overheads and aligning resources with current levels of operations. The Company continues to enjoy the trust of its global customers including OEM partners on the back of its low cost structure, high quality profile, diversified product portfolio and strong R&D capabilities. The Company is well placed to leverage the current and emerging market opportunities.

The Corporate Debt Restructuring (CDR) schemes of Moser Baer India Ltd. and its PV companies have been

approved and are under implementation. Post successful implementation of the CDR scheme, the Storage Media business is expected to ramp up quickly resulting in improved operational and financial performance.

In the Solar PV segment, the global Solar PV industry amid a difficult macro-economic environment, continued to witness robust demand through 2012 leading to record installations (31.1 GW) during the year. The Indian market too witnessed strong increase in PV installations during 2012-13 with cumulative capacity reaching 1,686 MW by end March 2013, up from 17.8 MW in early 2010. However, while demand remained strong, the massive global oversupply scenario persisted through the year resulting in significant price declines that adversely affected PV manufacturers globally as well as in India. As a result of this, several countries/regions adopted protectionist measures aimed at safeguarding their domestic solar industry.

In view of the current challenging industry environment, we are operating our manufacturing facilities at lower capacity utilization levels and are focusing on high margin markets such as Japan for module sales.

While the short term industry environment remains challenging, the long term potential remains intact and signs of recovery appear to be on the horizon with price declines tapering off from the start of 2013 and increase in utilization levels especially amongst the global Tier I players.

Our solar EPC business has consolidated its position as one of the leading players in the solar EPC market with over 250 MW of projects executed till date and with over 4 MW of Off-grid projects in operation. The business has developed rich experience and expertise in executing solar EPC projects of different sizes across terrains and technologies in record timeframes.

Moser Baer's Entertainment business is one of the leading players in the home entertainment space in India due to its diverse content portfolio and broad distribution network. The business is focused on providing high quality content at reasonable prices to consumers across the country. The Entertainment business is exploring several options to tap the rapidly growing digital content market in India and to add value to consumer experience in this space.

# STORAGE MEDIA

# STORAGE MEDIA INDUSTRY

During FY 2012-13, while demand for Optical Media products declined in the developed markets, the Asia Pacific, Africa, Middle East & Latin America regions continued to develop as stable demand centers. The supply rationalization in the Optical Media industry which slowed during the year is expected to pick up again with several manufacturers expected to exit and curtail manufacturing capacities in the near future.

The trend of increasing demand for new generation Optical Media products like Blu-ray in mature markets such as USA and Europe continued with simultaneous softening of demand for the first generation products like CDs. Emerging Markets on the other hand continued to show higher preference for DVDs and also witnessed

increase in demand for Blu-ray products. Development of non-OEM channels in some other regions such as Africa and Middle East is broad-basing demand for optical media products especially for DVDs and CDs.

The Storage Media business, which includes Solid State Media segment (Flash Drives, SD and Micro SD cards) has witnessed high growth in India and is witnessing an increase in popularity globally due to ease of use and declining per unit costs. Rapid penetration of personal computing devices in the developing markets and robust increase in demand for smart phones globally is also driving up demand for the segment.

# MOSER BAER'S STORAGE MEDIA BUSINESS

Moser Baer continues to remain one of the leading players in the global Storage Media industry both in terms of low cost mass manufacturing and in offering a wide range of high quality products. The Company on the back of its high quality standards and strong service profile continues to maintain business alliances with leading OEMs across the world. The Company continues to supply products in over 95 countries globally.

As one of the select few suppliers of advanced Blu-ray formats globally, we expanded our presence in this high margin product category during the year. We continue to reduce manufacturing costs of Blu-ray disc to maintain segment profitability.

Operations within our Solid State Media (SSM) segment were affected due to liquidity constraints during the year. However, the demand for company's products remains robust and we expect an upswing in FY 2013-14.

During the year, we continued to expand our product offerings with a range of innovative products towards our existing OEM customers as well as towards the Non-OEM market. We continue to focus on Corporate segment and retail products for gifting on special occasions and festivals. The Data Security products of the Company also witnessed strong growth. During the year we launched several exciting products within the Solid State Media (SSM) segment such as the 'Silico' and 'Ripple' models, which have been very well received by market. On the technology front, Moser Baer's Storage Media business made a strategic technology initiative to co-develop the NAND flash controller (a key high cost component used in SSM products) to significantly drive down the costs.

During the year, Moser Baer's Storage Media business undertook several steps aimed at lowering the overheads and aligning resources with current levels of operations. The company consolidated all its manufacturing facilities to cut down on overheads and to extract supply chain synergies. Our current leaner setup benefits us through lower power consumption and lower fixed overheads. The Company also optimised its employee base to align scale with current level of operations. These steps are expected to positively impact the company's operations in the near to medium term.

Further during the financial year, we worked on several productivity improvement initiatives leveraging our strong R&D capabilities and were able to significantly improve process efficiencies and output yields. We are also working towards rationalising our power sourcing for further cost optimization.

We are aggressively pursuing new geographies for incremental markets and customer acquisition and expect our Non-OEM market share to increase in the coming quarters.

#### OUTLOOK

In the medium term, the Optical Media industry within the developed markets is expected to witness decline in demand for the first generation products CDs/DVDs and a simultaneous increase in demand for the high margin advanced formats such as Blu-ray discs. In the emerging markets, such as Africa, Latin America etc demand for DVDs is expected to remain stable in the near to medium term

In the near future, the Solid State Media segment is expected to be a key growth driver for the business on account of rapid penetration of personal computing devices in the developing markets and robust increase in demand for smart phones globally.

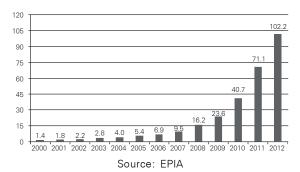
The Company continues to focus on product innovation, upholding of its high quality standards, increase in its cost competitiveness and on widening of its distribution network.

#### SOLAR PHOTOVOLTAIC

#### PHOTOVOLTAIC (PV) INDUSTRY

The global Solar PV industry exhibited resilience with over 31 GW of PV systems installed during 2012 led by sustained demand from the German market and robust increase in installations in the emerging markets such as USA, China, Japan and India. As per European Photovoltaic Industry Association (EPIA), global cumulative solar PV installed capacity crossed 102 GW by end 2012.

Evolution of Global Cumulative Installed PV Capacity - 2000-2012 (Figures in GW)



As per EPIA, in 2012 Germany again topped the global market with 7.6 GW of installations. China, Italy, USA and Japan were amongst the other top 5 markets that witnessed 5 GW, 3.4 GW, 3.3 GW and 2 GW of PV installations, respectively.

#### Persistent Oversupply during 2012

The global PV market witnessed persistent oversupply throughout 2012 which led to substantial price declines, in turn affecting profitability and operations of PV manufacturers across the world. This market environment was triggered as a result of massive capacity build up by Chinese manufacturers led by State support which adversely affected all the industry players including the Tier I manufacturers. Majority of the Tier II and Tier III

players either stopped operations or were operating at very low capacity utilization through 2012.

# Fast Approaching Grid Parity

A positive fallout of the global overcapacity and price decline was that it compelled PV manufacturers to innovate and reduce their cost structures resulting in significant improvement in cost competitiveness of solar power vis-à-vis conventional energy and consequent acceleration towards grid-parity.

According to NPD Solarbuzz, Levelized Cost of Energy for solar photovoltaic (PV) systems is coming closer to retail electricity prices in the US, where Solar PV is already competitive with Tier 4 or 5 electricity rates at which power is consumed by commercial customers. As per a recent report by Deutsche Bank, grid parity has already been achieved in parts of Italy and India.

According to Bridge to India (BTI), an India based solar focused consulting firm, solar power is already cheaper than grid power for commercial consumers in Maharashtra, Delhi and Kerala, even without subsidies. In other States such as Andhra Pradesh, Odisha, Gujarat, West Bengal and Rajasthan, solar power for commercial consumers is competitive with grid electricity with the help of subsidies.

#### Emergence of New Growth Centers

2012 stood out as the year in which reliance of the global PV industry on Europe as the key growth driver waned, while prominence of the emerging markets increased. As per EPIA, in 2012 Europe's share of the annual global PV installations declined to 55% (17.2 GW) down from 73.6% (22.4 GW) in 2011.

This trend is expected to continue in 2013 with over 50% of annual global PV installations forecast by EPIA to take place outside of Europe. This decline in the European market is expected to be compensated by the robust growth expected in the emerging markets of China, USA, India and Japan. China alone has set a target of 10 GW of solar PV installation during 2013. As per industry estimates, in 2013, Japan, USA and India are expected to witness 6.9 GW, 4.3 GW and 1 GW of PV installations, respectively.

#### Increase in Trade Barriers in Key Regions/Countries

The persistent oversupply scenario in the global PV industry on account of massive capacity build up by Chinese manufacturers resulted in initiation of protectionist measures by various regions/countries to protect their domestic PV industries.

In September 2012, the European Commission initiated antidumping investigation against Chinese PV imports to the region. In August 2013, the annual Chinese PV exports to the European Union were limited by the European Commission to 7 GW and were mandated to be exported at a minimum price of € 0.56/watt.

In October 2012, the US Department of Commerce (DOC) announced Antidumping Duties (ADD) ranging from 18.3% to 249.9% and Countervailing Duties ranging from 14.78% to 15.97% on Chinese solar PV exports to the US.

In November 2012, India too initiated antidumping investigations against imports of PV equipments from China, Taiwan, Malaysia and USA. The proceedings are currently in progress, and an announcement on the same is expected to be made in the near term.

These measures adopted by USA, Europe and India are likely to result in increase in cost-competitiveness of non-Chinese solar PV manufacturers.

Improving Environment at the turn of the year

Since early 2013, the operating environment for PV manufacturers has begun to show signs of positive traction on account of consolidation amongst the Tier II and Tier III players and higher demand from emerging markets such as Japan, China and the US. PV module prices are showing signs of stabilizing, reflecting some restoration of the global demand-supply balance.

This improved market environment is resulting in improvement in capacity utilization levels, especially for the global Tier I manufacturers amid high demand from the US, China and Japan markets.

#### Indian Solar Market

The Indian PV market driven by the Jawaharlal Nehru National Solar Mission (JNNSM) and individual State Solar Policies continued to witness robust growth touching 1.7 GW of cumulative grid connected capacity by March, 2013. Of the total capacity, close to 80% of the PV installations have taken place in Gujarat and Rajasthan. A number of other States such as Tamil Nadu, Andhra Pradesh, Punjab and Kerala have also announced Solar policies aimed at rapid penetration of solar power.

While the Indian market witnessed robust growth in PV installations over the last one year, the domestic PV manufacturing environment remained depressed on account of the huge surge in imports. Continued dumping of solar panels led by China resulted in manufacturing operations becoming unviable for domestic players, majority of which have either halted manufacturing operations or are operating at low capacity utilization levels.

The domestic manufacturing industry is in need of strong policy support in the form of protection from dumped products and local content regulation for creation of a level playing field. Policy stimulus for the solar manufacturing industry would help in the development of a robust self sustaining domestic sector capable of serving the growing demand for solar energy in the India. Over the long term, a strong and vibrant domestic manufacturing industry is also essential to ensure energy security of the country.

Jawaharlal Nehru National Solar Mission (JNNSM)

Under the JNNSM, the Ministry of New and Renewable Energy (MNRE) has targeted the development of 10,000 MW of solar capacity in India by 2017. MNRE is also targeting development of a domestic solar manufacturing base with capacity of 5,000 MW by 2017. In view of the higher success and faster completion cycles of the solar PV technology-based projects, MNRE has enhanced Solar PV's share in Phase II of JNNSM to 70% from the Phase I target of 50% of the total solar projects (Source: JNNSM Phase II Draft Policy document)

Under Phase II of the JNNSM, MNRE has also increased the cumulative target for development of Off-grid solar applications in India by 2017 to 1,000 MW. This would include deployment of 1 million Off-grid lighting systems, 25,000 solar pumps and 25,000 solar integrated telecom towers.

In April 2013, the MNRE announced draft guidelines for the development of 750 MW of projects under Batch I Phase II of the JNNSM through the viability gap funding mechanism. About 75% of these installations are expected to be met through domestic procured panels.

In the near to medium term, the domestic manufacturing industry is expected to witness strong growth opportunities on account of:

- Strong impetus on rapid penetration of solar power in India under the Phase II of the JNNSM
- Focus on development of a domestic solar manufacturing base
- Policy support through protection from dumped products along with imposition of domestic content regulation

State Solar Policies

Several States in India, following the lead taken earlier by Gujarat and Rajasthan, have announced or are formulating Solar Policies aimed at leveraging solar power to address chronic power shortages and to meet their Solar Purchase Obligations (SPOs).

In 2013, as part of its Solar Policy announced in 2012, Tamil Nadu awarded letters of intent to developers to install over 700 MW of solar PV projects in the State by end March 2014. The State has set an ambitious target of development of 3,000 MW of solar power by 2015.

In June 2013, the Andhra Pradesh government as part of its policy to develop 1,000 MW of solar PV capacity in the State allocated 350 MW of projects to various developers at a tariff of INR 6.49/kWh.

In February 2013, Kerala released a draft solar policy aimed at developing a solar capacity of 500 MW by 2017 and 1,500 MW by 2030. Kerala's Solar Policy seeks to distinguish itself from the other State policies through its focus on the promotion of distributed solar power. In 2013, Kerala launched a rooftop programme aimed at deployment of 10,000 number of 1kW rooftop systems in the state.

#### REC Mechanism

As per India's National Tariff Policy, a mandatory Solar Purchase Obligation (SPO) has been imposed on obligated entities starting from 0.25% in 2012 and going up to 3% by 2022. This will result in robust demand for solar power, a part of which would be met by the Renewable Energy Certificates (REC) mechanism.

The REC mechanism — that allows obligated entities, such as distribution companies, captive consumers and open access users, to meet their SPO obligations through purchase of these certificates — continued to gain prominence during FY 2013. During the year, demand for the solar RECs increased substantially with 3,183 certificates traded in March 2013, up from 10 in May 2012.

The REC Certificates are tradable on the Power Exchange India Ltd. and on the Indian Energy Exchange.

As per the MNRE estimates, demand for solar power required to meet SPOs is likely to reach about 30 GW in 2022.

Currently, one of the key concerns under the REC mechanism is the implementation or enforceability of the SPOs on the obligated entities. The regulatory agencies are in process of developing policies to address this concern.

#### MOSER BAER'S PV BUSINESS

Moser Baer's PV business is one of the largest players in the Indian market with presence across the value chain and requisite infrastructure to benefit from the rapidly growing Indian market. The PV business has an annual capacity of ~200 MW in Cell and Module manufacturing across multiple technologies and rich experience in the downstream solar EPC business.

In view of the difficult operating environment, the PV business is currently operating at low utilization levels and is serving the lucrative high-margin and quality conscious markets like Japan through its module manufacturing operations. The PV business is also focusing on its R&D capabilities to optimize production processes to drive material efficiencies in its efforts to create sustainable competencies for the business.

During FY 2012-13, Moser Baer undertook several cost reduction measures including rightsizing of the organization that was aimed at aligning resources with current levels of operations.

The Company's PV business plans to ramp up operations in line with the emerging opportunities in the Indian market & announcement of Government policy initiatives and with the implementation of the CDR scheme.

The expected policy as well as regulatory environment with the likely imposition of Anti-dumping Duties on Solar PV imports from specific foreign countries including China and the likely inclusion of Thin Film under the DCR regulations is expected to boost the domestic manufacturing base in India.

Moser Baer's PV business maintains its leadership position in the Indian solar EPC space with over 250 MW projects installed till date. The EPC business enjoys strong presence in the off-grid market as well with over 4 MW of installations already commissioned. The company has developed strong expertise in the EPC business resulting in rapid decline in project execution times and reduction in project costs.

The EPC business has created a strong competitive advantage in the domestic market on the strength of a broad project portfolio, pan-India presence and has established itself as a highly competitive player.

In 2013, Moser Baer's PV subsidiary was empanelled by ANERT (Agency for Non Conventional Energy and Rural Technology) for supply of 1 KW rooftop solar systems in Kerala. Total requirement of the 1 kW systems under the programme is 10,000.

The Corporate Debt Restructuring (CDR) schemes of Moser Baer's PV subsidiaries (Moser Baer Solar Ltd. and Moser Baer Photovoltaic Ltd.) aimed at optimizing the current resources and aligning the current debt obligations with the expected future cash flows are currently under implementation. Definitive agreements have been signed for both the subsidiaries by majority of the lenders and other implementation formalities are currently being worked upon.

#### **OUTLOOK**

While the short term PV market is challenged primarily due to the prevalent demand-supply imbalance and waning demand from the European markets, the future outlook remains promising on account of strong emergence of the new markets as the future growth drivers. As per IHS, about 242 GW of installations are expected during 2013-17, an average of 48.4 GW annually.

# Global Annual PV Installation Forecast-IHS (GW, 2013-17)



The Indian PV market too driven by the high levels of solar irradiance across the country, increasing cost competitiveness of solar power and National and State Solar policies is expected to witness robust growth over the next few years. Current growth momentum in the Indian PV market is expected to continue with over 1 GW and over 2 GW of PV capacity expected to be installed in 2013 and 2014, respectively (BTI).

Our strong R&D capabilities, rich technology manufacturing heritage, presence across the solar value chain and credible quality profile would enable us to maintain our leadership position in the domestic PV market in the medium to long term. With all the basic fundamentals in place, Moser Baer is preparing to leverage the evolving policy framework in the domestic environment and is bracing itself to launch itself on to the path of recovery and sustainability.

In the medium-term, the PV business is focused on leveraging its R&D and execution capabilities and restructuring and upgrading its existing assets to produce higher efficiency modules that are expected to command a pricing premium due to advantages on yield, space and reduced mounting infrastructure expenses at System levels. At the same time, it expects to be able to continue to reduce its production costs through improved system processes and increased efficiencies.

#### **ENTERTAINMENT**

### **ENTERTAINMENT INDUSTRY**

In 2012, the Indian Media & Entertainment (M&E) industry grew by 12.6% Y-o-Y to reach INR 821 billion on the back of strong growth within the 'Films' sector and continued rise in digitization. The Indian M&E industry is expected to continue its growth momentum in the medium term and is forecast to double by 2017.