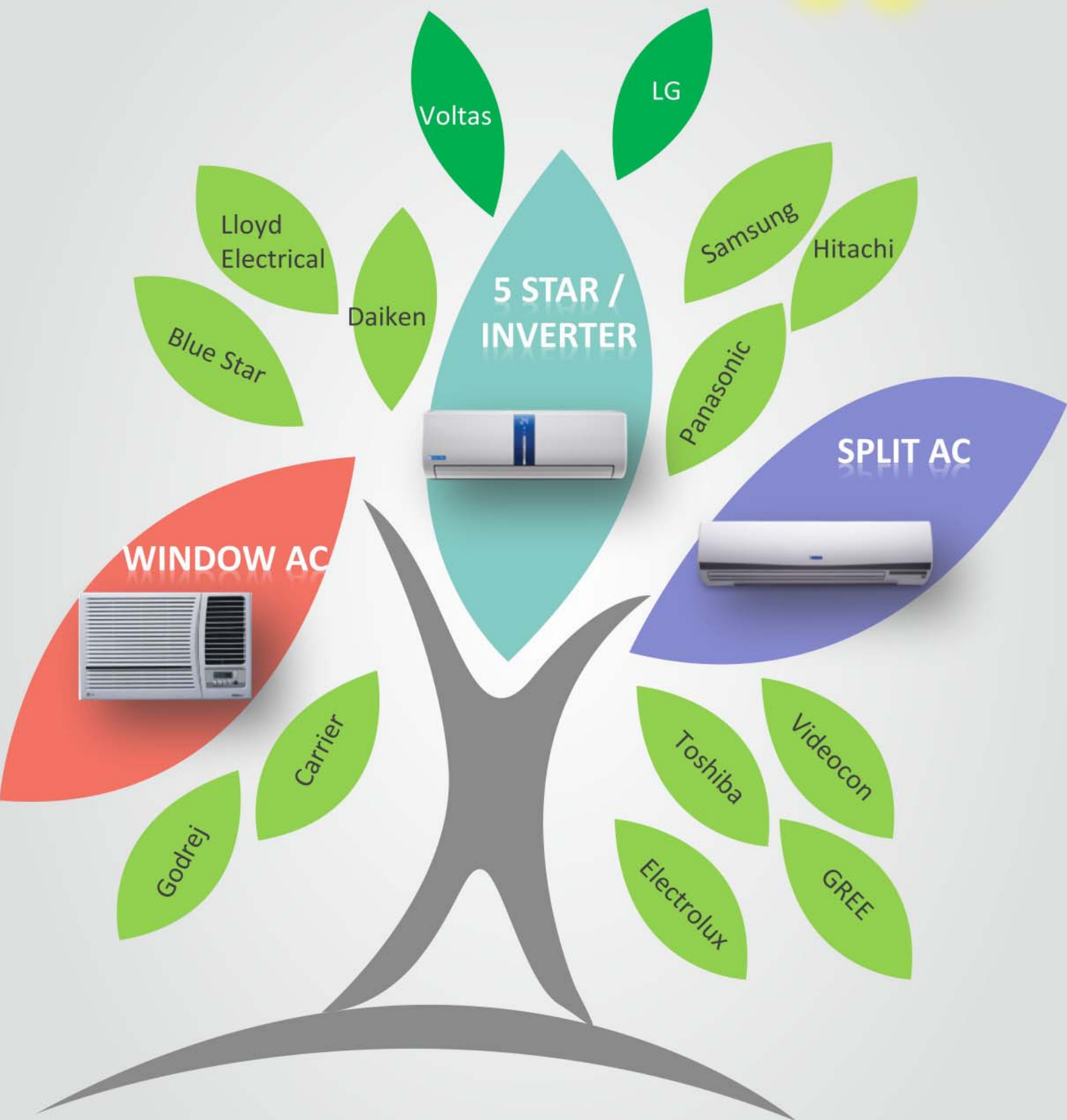


Capital Goods



Room air conditioners | At an inflection point

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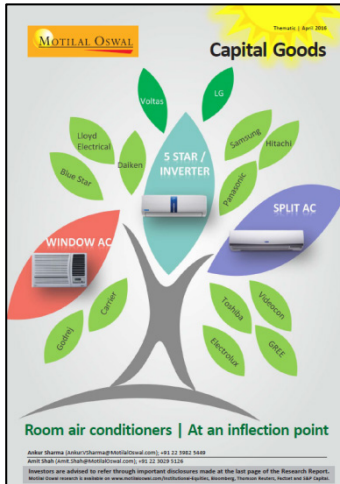
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Capital Goods



Room air conditioners

At an inflexion point

- **Industry growth at 15% CAGR over FY16-20E.** We estimate the Indian room air conditioner market would grow from 4mn units in FY16 to 7mn in FY20, a 15% CAGR. The growth would be driven by rising penetration of ACs (3-4% currently vs. 30% global average), higher disposable income, growing urbanization and year round usage of ACs. For FY17 we build in 15% industry growth and this comes after a subdued CY15/FY16, where unseasonal rainfall adversely impacted sales of air conditioners (ACs); we expect industry volumes to increase 10% YoY in CY15/FY16. Our recent channel checks indicate a very strong pickup in volumes over the past 2-3 weeks post the sharp rise in temperatures across the country. If the recent trend in summer seasons sales continues, our FY17 industry growth at 15% YoY has an upside risk to it and industry growth could be upwards of 20%.
- **Competition remains high; brand, distribution, after sales service and dealer margins key differentiators:** Our discussion with channel partners indicates brand name, distribution reach (>50–55% of AC sales now in Tier 2 to Tier 4 cities), After sales support and Dealer support/margins are key success factors in the AC industry. Competition has increased with players such as Daikin, LG, Panasonic, Lloyd Electric and Blue Star eyeing a larger market share.
- **Shift toward higher energy-efficient models; Premiumisation trends to continue:** There is a clear shift toward five-star and inverter ACs that comprise 20% and 10%, respectively, of overall industry volumes. Consumers are increasingly considering the lifecycle cost of a product than just the initial capital cost. BEE has mandated compulsory rating of inverter ACs from 2018; thus, the rating for fixed and variable compressors will be merged—a four- or five-star rated AC would be primarily considered an inverter, while a current five-star rated AC would be graded as three-star. The split AC market is expected to move toward split inverter ACs over the next few years; inverters are projected to reach 30% of the market by FY18 and 50% by 2020.
- **Margins to improve with fall in commodity prices:** Star ratings, normally revised every two years have not been changed for CY16 and CY17. The ratings were last upgraded in January 2014. Therefore, manufacturers have not resorted to any price hikes. In fact, a sharp contraction in raw material prices would help improve margins for AC manufacturers.
- **Valuation and views:** Voltas (BUY, TP: INR350), market leader in the room AC segment with a ~21% share, is our top pick in the sector. The company is the best play due to its distribution reach (>12,000 touch points), strong after sales network, focused advertising, highest dealer margins and a reputed brand name. Blue Star (N/R) which entered the residential AC segment in FY11 has grown its share to 11% in FY16 and targets to grow 30% in FY17 to capture a 12-13% share. Other listed companies which are beneficiaries of a rise in AC demand are Hitachi Home & Life (N/R) and Lloyd Electric (N/R).

Capital Goods

Room air conditioners At an inflexion point



[Please click here for Video Link](#)

Room air conditioners

At an inflexion point – sales to reach 7mn by 2020E (15% CAGR)

- In our opinion, the Indian room AC industry is at an inflexion point and poised to register a CAGR of 15% to 7mn units in FY20. We expect FY17 to augur well for AC sales after a subdued FY16; we forecast volumes to increase ~10% in FY16.
- In India, AC penetration remains a dismal 3–4% vis-à-vis peers; nevertheless, this bolsters demand for ACs. More importantly, ACs has now transformed into a necessity from luxury a couple of years back. Interestingly, most people now install multiple ACs in their homes.
- India's AC sales which stood at 4mn units in FY16 are expected to rise to 7mn units by FY20, a 15% CAGR. Key drivers for room AC sales over the coming years are:
 - Increasing penetration levels where India significantly lags behind other countries
 - Improved macro-economic factors such as rising disposable income, higher standard of living and urbanization. This has changed the perception of air conditioners from a luxury to a necessity with most Indian households now opting for multiple air conditioners.
 - Seasonality concerns being addressed by offering heating and cooling options with the AC so that it can be used year round
 - Increasing range of energy efficient AC's which address the Indian consumer's concerns on high electricity bills.
 - Positive impact of the 7th Pay Commission wage hike recommendations which would lead to increased spending on consumer durables

Exhibit 1: India remains under penetrated vis-à-vis other countries

Country	Penetration (%)
Taiwan	90%
US	87%
Korea	70%
China	53%
Thailand	30%
Indonesia	8%
India	3–4%

Source: Industry, Blue Star, MOSL

Exhibit 2: Air conditioners remain under penetrated compared to other durables

Description	% penetration
TV	77%
Fridge	33%
Air Cooler	17%
Washing machine	10-11%
Air Conditioner	3-4%

Source: Industry, MOSL

- Unseasonal rainfall during March/ April 2015 dented peak summer season sales. Most players expecting an average growth of 15–20% in the industry were saddled with unsold inventory. Consequently, manufacturers resorted to price

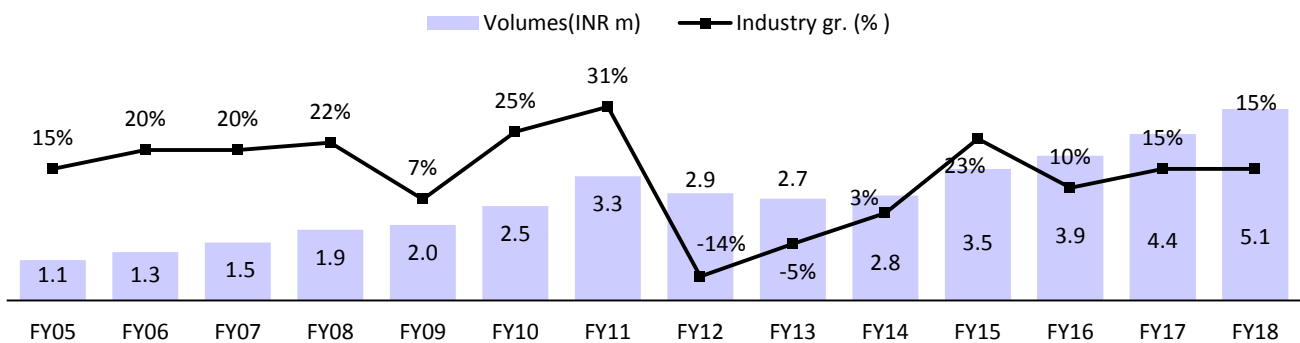
cuts and discounts that continued well into Q316. Though secondary sales during the quarter was strong (+35% YoY), driven by higher festive demand and an unusually warm winter, it has been more of clearing the inventory backlog as companies plan to launch new models in CY2016.

- For FY17, we forecast the industry growth to accelerate to 15%. As BEE’s star ratings remain unchanged, we do not expect any price hikes across most manufacturers. Nevertheless, this is subject to the rupee’s movement; nearly 50–60% of the parts of a split ACs are imported and a fall in the currency is generally offset by passing on price hikes to end consumers.

CY16 off to a good start; IMD forecasts “above normal” summer temperatures

- The summer season has begun earlier than normal in CY16 - typically, AC sales start by mid to end March. This year, the industry has witnessed an early onslaught of summers, right from the middle of February. While the entire country witnessed a relatively warm February, March saw a lot of traction in South India. Rising temperatures in Maharashtra, Tamil Nadu, Kerala and Telengana pushed up sales by up to 25 per cent for major manufacturers such as Daikin, Blue Star, Carrier-Midea and Voltas between January and mid-March. Dealers expect sales to rise 18–20% YoY in CY16.
- The Indian Meteorological Department (IMD) forecasts that during the 2016 summer season (April- June), temperatures’ are likely to be above normal by >1 degree across the country. There is a high probability (76%) of moderate to severe heat wave conditions during the summer season. This is primarily in the Central and North West India. We note that temperatures have been above normal during the past two weeks in April with heat waves seen across North, South and East India. Our recent channel checks indicate a very strong pickup in AC volumes over the past 2-3 weeks. If the recent trend in summer season sales continues, our FY17 industry growth at 15% YoY has an upside risk to it and industry growth could be upwards of 20%.
- Though industry players have majorly relied on the summer months (50-60% of total) for boosting sales, sustained high temperatures following the monsoon (Oct - December) have resulted in a new window for AC sales. As a result, ACs are now being sold for almost 7–8 months in a year compared to 4–5 months previously.

Exhibit 3: Room AC volumes (FY05–18E) and growth (% YoY)



Source: MOSL, Industry

Market share of key players in the room AC segment

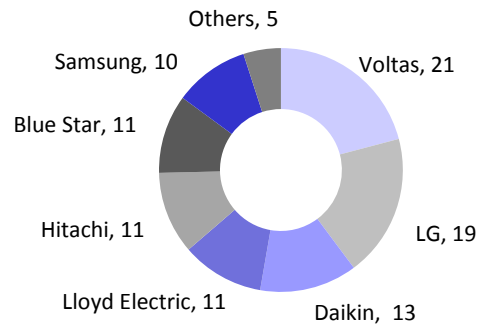
- Based on various media articles, company interactions and reports, we have derived the market share of players in the room AC segment. According to GfK Nielsen’s multi-brand outlet survey, Voltas ranked first with a share of ~21% as of Q316 followed by LG.

Exhibit 4: Market share in the room AC market

Name of company	Market share (%)
Voltas	21
LG	19
Daikin	12
Lloyd Electric	11
Hitachi	11
Blue Star	11
Samsung	10
Others	5

Source: Media reports, Industry, Channel checks, MOSL

Exhibit 5: Break-up of room AC market share (by player)



Source: Industry, MOSL, Channel checks

Exhibit 6: Brand hierarchy in the Indian room AC market

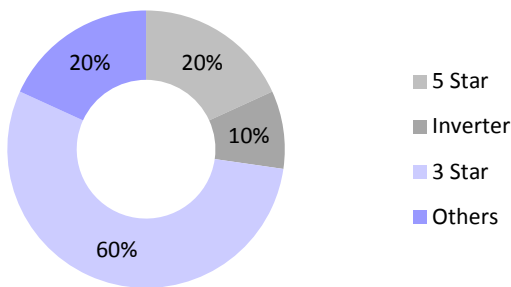


Source: Dealer feedback, Industry, MOSL

Industry sales shifting towards Inverters

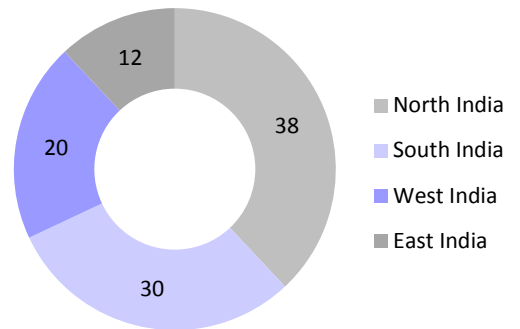
- By ratings, the three-star range accounts for 60% of the ACs sold in the country followed by five-star. BEE has mandated the rating of inverter ACs, with the same set of fixed-speed norms, from 2018. This implies the rating for fixed and variable compressors would converge into one—four or five-star rated ACs would be primarily inverters, while a current five-star rated AC would be a three-star. The split AC market would gradually transition to split inverter ACs over the next few years, accounting for a market share of 30% by FY18 and 50% by 2020 (Source: Blue Star).

Exhibit 7: Break-up of ACs by star ratings



Source: Industry, MOSL

Exhibit 8: Region-wise sales of ACs



Source: Industry, MOSL

Exhibit 9: Inverter sales for key AC manufacturers vs. the industry

Description	% of total sales
Industry	10%
Daikin	32–35%
Blue Star	13–14%
Hitachi	40%
Voltas	5–7%

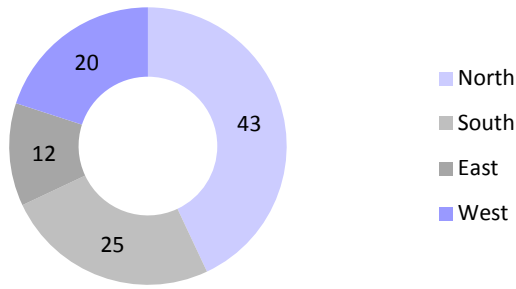
Source: MOSL, Media reports, Company

- Japanese (Daikin, Mitsubishi, Sharp and Hitachi) players currently dominate the Indian inverter AC market. Our channel checks indicate Voltas’s share would be <10% in the inverter category that has not been its focus area until date. On the other hand, Blue Star has one of the widest portfolios for inverter ACs in the country and aims to gain a stronger foothold in the sector. The company derives ~13–14% of revenues from this category.
- We highlight that Voltas’ 2016 AC advertising campaign of “All Star ACs” emphasizes the benefits of using Inverters and therefore shows Voltas’ focus on growing its share in the Inverter market where it has lagged behind peers.

North India remains the largest market for ACs; dominated by Window ACs

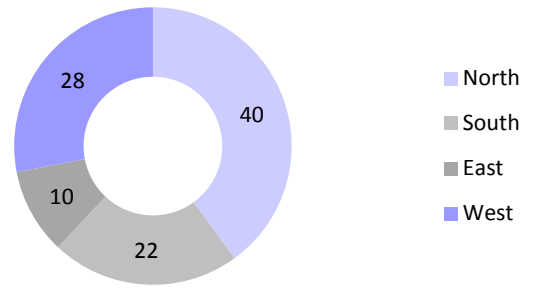
- By region, North India (38–40% of total) continues to remain the largest market, followed by South India (30%). A key trait of the North Indian market is the preference for window ACs, while split ACs are largely in demand elsewhere in the country. However, since the Northern region is the largest market, companies tend to continue manufacturing window ACs and cater to the demand.

Exhibit 10: Voltas – Region-wise sales break-up (% of total)



Source: Company, MOSL

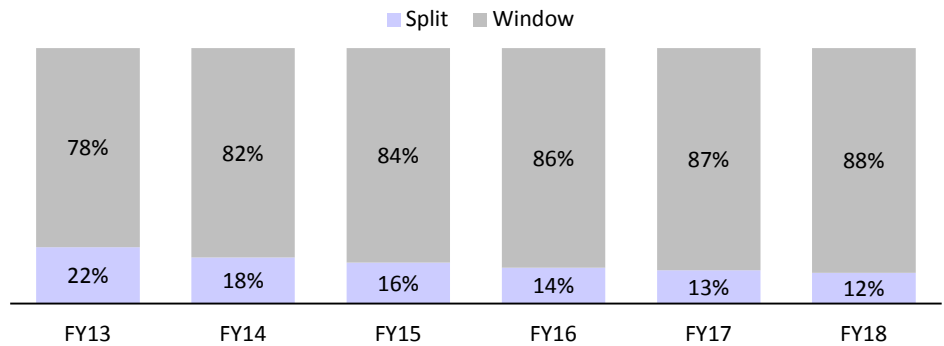
Exhibit 11: Daikin – Region-wise sales break-up (% of total)



Source: Company, MOSL

- We observed that Samsung and LG exited the window AC market in 2012 as the share of split ACs rose to ~75% of total sales and the price gap between split and window ACs reduced considerably; this indicates customers were opting for split ACs. However, LG has re-introduced select window AC models. For Voltas, window ACs comprise 24–25% of sales compared to the industry level of 15–16% as the former is a leader in the Northern market. Also, the window AC market size has been relatively stable, with many buyers shifting from air coolers to ACs for the first time (especially in Tier 2 and 3 cities).

Exhibit 12: India room ACs – split ACs continue to gain share



Source: Industry, MOSL

Key differentiators in the Room AC industry

- A key differentiator in the Indian AC market is the distribution reach of a manufacturer; this has become all the more important since ~50–55% of the overall industry’s volumes are now outside metros/Tier 1 cities. In our understanding, one of the main advantages for Voltas is more than 12,000 touch points all over India which stood at 6,500 as of FY14.

Exhibit 13: Dealer touch points across AC brands in India

Company Name	Touch points
Voltas	>12000
Blue Star	3,800
Daikin	4,000
Videocon	7,000
Hitachi	4,000
Lloyd Electric	7,000

Source: Industry, Media reports, MOSL

- Dealer margins.** Voltas, LG are very dealer oriented and give high margins while Samsung and Blue Star are not equally so. Voltas gives 35% margins to some of the bigger dealers and 28% to smaller dealers while LG gives 28-30% margins to dealers. Blue Star gives lesser margins (25-26% margin) and is a relative new comer to the industry as it entered the retail market only in CY11. At the other end of the spectrum are O General and Mitsubishi Electric which offer the lowest margins in the 18-20% range to its dealers.

Exhibit 14: Dealer margins offered by various air conditioner manufacturer

Name of company	Margin offered
Voltas	+++++++
LG	+++++
Blue Star/Samsung/Lloyd Electric	++++
Daikin/Hitachi	+++
Mitsubishi	+++
O General	+++

Source: Industry, MOSL, **higher denotes better margins

- Branding and advertising spends:** Brand name and trust are other key differentiators in the AC industry. For example, Voltas, through the highly successful 'Murthy campaign (launched in 2012)', has strengthened its connection with Indian customers over the past four years. The advertisement was also used to highlight the company's 'All weather air conditioners', which can be used for both heating and cooling throughout the year. Blue Star has also used the "Nobody cools better", "Get office like cooling at home" and "Daddy Cool" advertising campaigns to build a strong connect with the Indian customers. Typically, with the onset of the summer season, AC manufacturers step up their advertising spends to gain mindshare with the customer. For details of marketing campaigns being run by various manufacturers in the 2016 summer season, please refer to the section "Marketing campaign being run for the 2016 summer" at the end of the report. Companies typically spend 1-2% of their sales on advertising.

Exhibit 15: Advertising spends by player (FY16)

Name of company	INR mn	% of sales
LG	500	NA
Hitachi Home	1,092	7%
Blue Star	350	1.8%
Samsung	300	NA
Voltas	500	1.9%
Whirlpool	704	2.0%
Lloyd Electric	345	1.9%

Source: Company, Media articles, *Hitachi, Lloyd Electric and Whirlpool spend for FY15, **** Blue Star spend is INR400m in FY17

- After sales service.** Another key differentiator in the room AC industry is the after sales services provided by the manufacturer which in turn is dependent on the quantum of service centers and their presence across the country. ACs are typically used for a period of 10-12 years and therefore, it is critical that a customer is offered a good after sales experience. All companies offer an Annual Maintenance Contract (AMC) which is priced in the region of INR2000-2500 and ensures regular servicing and maintenance of the AC. Most companies follow the franchisee route for service centers – while the customer lodges the complaint with the manufacturers' call center, this is passed on to the service center where the customer resides and the issue is addressed by the same. We highlight that Voltas has the highest number of service centers followed closely by LG and Carrier. With an increasing proportion of inverter AC sales, there would be a higher need for service centers since these cannot be serviced by the local unauthorized service centers.

Exhibit 16: Service centers across manufacturers in India

Name of company	No. of Service centers
Voltas	200
Blue Star	25
Hitachi Home and Life	41
Daikin	75
LG	194
Lloyd electric	275
Carrier	175
Panasonic	100

Source: Industry, MOSL

'Outsource and Assembly' business model in vogue in room ACs

- R&D spending.** Most AC manufacturers in India follow the 'Outsource and Assembly' model with low spending on R&D. The compressors are mostly sourced from China or Thailand while the condensers are sourced from local vendors with the complete AC being assembled in the AC manufacturers' factory. Typical R&D spends are in the range of 0.2%-2% of sales. Daikin has been amongst the front runners in terms of R&D spending and is also building its first R&D facility at an investment of INR0.6b in Rajasthan. The center is expected to become fully operational in July, 2016 and would enable customization of the AC for Indian climatic conditions and other SAARC countries.

Exhibit 17: R&D spending as a % of sales (FY15)

Name of company	% of total
Blue Star	2.0%
Voltas	0.2%
Daikin	2.0%
Hitachi Home and Life	1.0%
Whirlpool	1.0%

Source: Company, MOSL

- Product Portfolio.** A comparison of the company wise models across star ratings indicates that the market leader, Voltas has the maximum number of models on offer with ~50% being 3 star rated ACs and only 15% inverter models. Similarly, LG has 39 models on offer with ~50% of the model of the 3 star category and 15% as inverter models. This is in sharp contrast to the Japanese players - Daikin India, Hitachi and Mitsubishi Electric who have 60%, 40% and 40% respectively, of their models from the inverter range. This clearly highlights the focus of these brands on the inverter range of ACs.

Exhibit 18: Star Rating wise product portfolio across key players

Name of company	2 Star	3 Star	4 Star	5 Star	Inverter	Total
Voltas	8	35	0	20	13	76
Hitachi Home and Life	1	15	6	16	26	64
LG India	3	18	0	12	6	39
Samsung India	4	11	0	9	6	30
Mitsubishi Electric	0	8	4	8	12	32
Daikin India	8	12	0	9	43	72

Source: Company, MOSL, **we have taken only the models listed on the company's website

'2016 Summer season' AC models and new features launched

- Typically, February-March of each year sees the launch of new model ranges by AC manufacturers for the upcoming summer season and this year has been no different. Key features being highlighted this year by AC manufacturers are:
 - 'Wifi' enabled ACs which enables the user to control the machine from anywhere using a smart phone. Additionally, smart phones can also be used to monitor power usage and consumption.
 - Air purifiers as a result of increasing concerns of polluted air within cities. As per our discussion with AC manufacturers, air purifiers would become an integral part of ACs in the next five years.
 - R410A refrigerant gas being used in ACs as an alternative to the ozone damaging R22 gas being currently used by most manufacturers. The R22 gas has to be phased out by 2030 but the industry intends to completely switch to R410 by FY20 itself.
 - Increased focus on power savings and therefore, increased range/models of inverter ACs with each brand trying to highlight the energy savings.
 - Dehumidifiers for controlling the humidity, especially during monsoons so as to offer better comfort.

Exhibit 19: Comparison of AC features across companies

Name of company	Key products on offer	Key features
Voltas	"All Star" ACs" "All Weather Smart A/C's"	Voltas has launched its "All Star" airconditioners with the theme of "Run 2 ACs at the cost of 1" which has a "2 stage inverter technology" for significant power savings, environment friendly, super silent operations, advanced air purifier and ambient cooling at high temperature. It has introduced its advanced "All Weather Smart ACs" which can be operated by a phone using Wifi /GPRS, senses outside temperature and adapts to the weather and keeps a tab on power usage and consumption
LG	"Smart Inverter" ACs with Mosquito Away, Himalaya Cool, Monsoon Comfort and Hot & Cold comfort	With the tagline " The AC that saves every day", LG ACs offer 30% faster cooling, 66% energy savings, super quiet operation(19db) and 99% sterilized air compared to conventional ACs. LG's ACs also offer "Mosquito Away" technology to drive away mosquitoes, "Himalaya Cool" technology for faster cooling, "Monsoon Comfort" for controlling the humidity and "Hot & Cold" AC for all weather usage
Hitachi	"iCare" ACs with "iClean", "iSense" and "iSee" technology	Hitachi's Inverter ACs offer "iClean Plus" technology which automatically cleans the dust in the air filter, "iSense" which regulates the temperature as per the person's active body movements and "iSee" which detects faces of people and directs air flow to everyone, Wifi technology to control the AC from anywhere and uses R410 green refrigerant which is eco friendly
Panasonic	"Life Conditioner" AC range	Life Conditioner' range offers a smarter life (65% energy saving), a healthier life (99% purer air) and a faster life (35% faster cooling through iAutoX). Panasonic Life Conditioners are equipped with Nanoe-G & PM 2.5 Air Purification that eliminates airborne particles. Econavi inverter technology monitors the product's operations, while iAUTO X delivers faster cooling.
Videocon	"Aryabot" range	The 'Aryabot' range of ACs can through a user's GPS location, switch off the AC when one leaves the house and switch it on before one enters the premises, it comes with a dedicated USB slot for a web cam connection and the web cam streams live video on the smartphone, keeps a tab of power consumption and through its budgeting feature, one can set limits on electricity consumption, Voice command to control the remote, the Sleep Graph mode allows to set desired temperature levels for each hour of the night, Aryabot can also sense the outside temperature and automatically adjust to set temperature inside. The AC also intelligently detects problem areas and suggests remedial actions basis its algorithms.It also has the ability to contact the service centre on its own and log in service requests
Daikin	"Fill the air with goodness" campaign	Daikin ACs offer 64% more power savings (Good for savings), 15.3% more comfort (Good for comfort), 75% less CO2 emission(Good for environment) and Swing Inverter Technology(Good for living). Its' ACs also have dehumidifiers, Streamer discharge air purifier, Intelligent Eye(adjusts cooling to human presence), Smart phone connectivity for ACs, Stabilizer free operation and all season AC for heating/cooling
Blue Star	"Nobody cools better" campaign	Blue Star has launched Wifi enabled ACs which can be used from any remote location within the Wifi network, can work at high temperatures upto 50 degrees and within a voltage range of 160-270V without stabilizer, 30% power saving vs. 5 star split ACs, Purifiers for eliminating odors, dust, bacteria and other pollutants
Godrej Appliances	"NXW" ACs	The NXW is the most energy-efficient inverter AC in the country with an Indian Seasonal Energy Efficiency ratio (ISEER) of 5.2. It is adaptable to Indian climatic conditions and delivers high efficiency
Samsung	"Digital inverter" ACs	Samsung's Digital Inverter compressor offer power savings, stabilizer free operation, Virus Doctor and Easy Filter to eliminate dust, Multi Jet Plus technology for better cooling efficiency, Tropicalized compressor for cooling till 52 degrees, Turbo Cooling, Good Sleep for regulating temperature throughout the night, Full HD filter and Dry Cool for comfort even in humidity

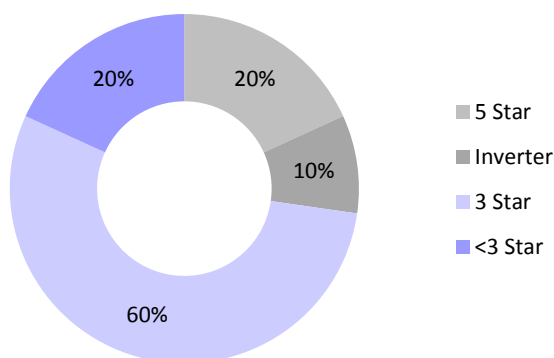
Source: Company websites, MOSL

Industry shifting to higher energy-efficient models

Premiumisation trends to continue; five-star and inverter ACs to be in demand

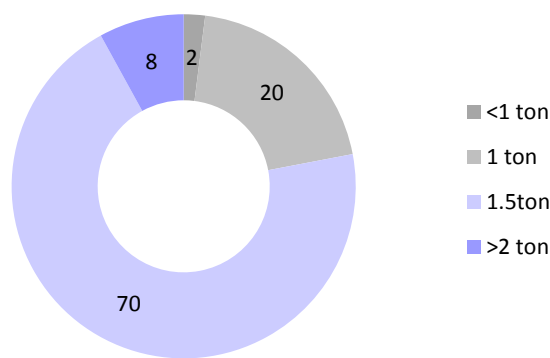
- The room AC industry is gradually shifting toward more energy-efficient models over the last few years as customers are increasingly aware of the lifetime costs of ACs vis-à-vis upfront costs.
- To promote energy efficiency, BEE initiated star labeling in 2007 for fixed-speed ACs, where the compressor cuts off or cuts in when the desired temperature has been achieved or the room temperature increases. This program was conducted in 2006, involving key stakeholders including consumer organizations, and manufacturers of ACs and components. January 2007 became a voluntary year for AC star ratings. It was made mandatory from January, 2010 for one star to five star. The ratings were upgraded in January 2012 and January 2014.
- Inverter ACs are to be voluntarily labeled from January 2016. These ACs are considered to be more efficient than fixed-speed. Apart from power savings, the key unique sales proposition of an inverter AC is that the set temperature is precise, delivering better comfort. Since inverter ACs have variable compressors, they have different standards compared to fixed-speed compressor ACs.
- BEE proposes to merge the standards for fixed-speed and inverter ACs from CY18 and mandate compulsory rating for the latter. This implies the rating for fixed and variable compressors will converge into one: a four- or five-star rated AC will be primarily inverters, while a current five-star rated AC would become a three-star. In our opinion, the split ACs market would gradually move toward inverter split AC over the next few years, and inverters might constitute 30% of the market by FY18 and 50% by 2020.
- Since June 2015, BEE has introduced the ISEER ratio for inverter ACs. ISEER is defined as the ratio of total amount of heat that an AC can eliminate to total energy consumed to remove this heat. The minimum ISEER for a five-star rated inverter AC is 4.5.
- Currently, inverter ACs comprise 10% of the overall market, while five-star rated ACs account for 20%. However, three-star rated ACs are the largest contributors in the market.

Exhibit 20: India AC volume break-up (by rating)



Source: MOSL, Industry

Exhibit 21: AC volume breakup (by tonnage)



Source: MOSL, Industry

Exhibit 22: AC tonnage and cooling area

Tonnage	Appropriate area
1 ton	120–140sq ft
1.5 ton	150–180sq ft
2 ton	180–240sq ft

Source: MOSL, Industry

- While inverters ACs are typically 25–35% more expensive than a similar non-inverter model, the extra capital cost is recouped within approximately one year as it uses 35-40% less power.
- A 1 ton AC uses 1100W of electricity every hour or 1.1kwh. With a normal household running the AC for 9 hour, the daily electricity consumption is 10 units and 300 units per month. With cost per unit at INR7, the monthly bill would come to INR2,100. With an inverter AC, the electricity usage goes down by 40%, so the monthly saving is INR800 which implies a payback time period of ~1 year (Typically, inverter ACs are INR8,000-10,000 more expensive than a regular split AC).
- According to Blue Star, inverters ACs are likely to account for 30% of the overall industry by FY18 and 50% by FY20. This is expected to be driven by increasing consumer preference for energy-efficient products and convergence of star ratings from CY18 onward.
- Within the inverter AC segment, Japanese players like Daikin, Mitsubishi Electric, and Hitachi have an edge over Indian peers as they have introduced these models earlier in the Indian market and have access to technology from the parent company.
- With effect from January 2016, BEE has stopped the sale of one-star rated ACs. This indicates two-star rated ACs would become the new entry level models that are ~INR20–30b more expensive than one-star.

Exhibit 23: Star rating for window ACs (valid from January 1, 2016- December, 2017)

Description	Energy Efficiency Ratios (Watt)	
	Minimum	Maximum
1 Star *	2.5	2.69
2 Star **	2.7	2.89
3 Star **	2.9	3.09
4 Star ****	3.1	3.29
5 Star *****	3.3	

Source: BEE; one-star rated ACs cannot be sold from January 1, 2016

Exhibit 24: Star rating for split ACs (from January 1, 2016- December, 2017)

Description	Energy Efficiency Ratios (Watt)	
	Minimum	Maximum
1 Star *	2.7	2.89
2 Star **	2.9	3.09
3 Star **	3.1	3.29
4 Star ****	3.3	3.49
5 Star *****	3.5	

Source: BEE; one-star rated ACs cannot be sold from January 1, 2016

Exhibit 25: Inverter ACs ISEER rating – mandatory from 1st January, 2018

Description	ISEER	
	Minimum	Maximum
1 Star *	3.1	3.29
2 Star **	3.3	3.49
3 Star **	3.5	3.99
4 Star ****	4.0	4.49
5 Star *****	4.5	

Source: BEE; one-star rated ACs cannot be sold from January 1, 2016

Competitive intensity to remain high

Brand, Distribution reach, After sales and dealer margins key factors

We interacted with the largest dealers and channel partners with a presence across India, to understand key summer trends in the AC industry. Our key takeaways are described below.

- **Summer season off to a good start; growth target of 18–20% YoY in FY17:** The summer season has begun earlier than normal in CY16; typically, AC sales start by mid to end March. This year, the industry has witnessed an early onslaught of summers, right from the middle of February. While the entire country witnessed a relatively warm February, March saw a lot of traction in South India. Rising temperatures in Maharashtra, Tamil Nadu, Kerala and Telengana pushed up sales by up to 25 per cent for major manufacturers such as Daikin, Blue Star, Carrier-Midea and Voltas between January and March. Dealers expect sales to rise 18–20% YoY in CY16.
- **Inventory channelized during Q4; secondary sales in Q117:** Typically, manufacturers start sourcing compressors/indoor units from China/Thailand during Q4 (for the upcoming summer season) based on their AC sales forecast. Thereafter, manufacturers channelize the summer inventory and follow it up with marketing campaigns to promote their models.
- **Dealer margins:** Voltas and LG are dealer oriented and offer high margins, while it differs for Samsung and Blue Star. Voltas offers a margin of 35–40% to some bigger dealers and 28% to smaller dealers, while LG maintains 28–30% margin. Blue Star has a lesser margin base of 25–26% and is relatively a newcomer in the industry (entered the retail market in CY11). At the other end of the spectrum is O General, which offers the lowest margin of 18–20%.

Exhibit 26: Dealer margins offered by various air conditioner manufacturer

Name of company	Margin offered
Voltas	+++++++
LG	++++++
Blue Star/Samsung/Lloyd Electric	+++++
Daikin/Hitachi	++++
Mitsubishi	+++
O General	+++

Source: Industry, MOSL, **higher denotes better margins

- **Energy efficiency – the way forward:** A clear shift toward five-star and inverter ACs indicates customers are increasingly aware of the benefits of these products. This is more so in the case of metros than in smaller cities and towns.
- **Inverter ACs:** Sales of inverter ACs are largely restricted to metros/Tier 1 cities given their premium pricing (INR8, 000–10,000 higher relative to a three- star with the same tonnage). Another factor that impedes growth is the high cost of an annual maintenance contract (2x of fixed compressor variants). Moreover, the converter chip (converts AC to DC power) is at a high risk of failure due to voltage fluctuations. Each chip costs ~INR8, 000 and can prove to be a sizeable cost for an end customer. To resolve this issue, inverter ACs would need to be

manufactured with in-built stabilizers. **Daikin, Mitsubishi, Sharp, Hitachi are the bestselling inverter brands**

Exhibit 27: Inverter AC sales for key manufacturers vs. the industry

Description	% of total
Industry	10%
Daikin	32–35%
Blue Star	13–14%
Voltas	5–7%

Source: MOSL, Company

- **AC prices retained at 2015 level:** With no change in the BEE star ratings in CY16, most manufacturers have maintained last year's prices for ACs. Conversely, some brands, such as O General, Hitachi, and Blue Star, have hiked prices for select models.
- **Sale promotions via exchange offers, discounts and free installations to continue:** In order to promote sales during the summer season, brands are offering exchange schemes for old aircons, free installation worth INR1500 and discounts. Typical discounts being offered are in the region of 10-15% of the MRP of the air conditioner. By company, the premium brands like Mitsubishi, Hitachi, O General, Daikin the discounts are in the range of 8-12% while in case of Voltas, LG the discounts are in the 12-15% range. This a regular feature during the summer season and largely on expected lines. Companies are also offering comprehensive warranty on the air conditioners for 5 years.
- **Increasing competition:** In terms of competition, our channel checks hinted Daikin, Lloyd Electric, Panasonic, and LG are striving to increase market share/ volumes; in fact, Panasonic offered large dealer margins and witnessed considerable growth in 2012, but could not sustain this trend. We believe Daikin and Hitachi are trying to enter the "Popular" segment, which accounts for ~60-70% of volumes from the erstwhile Premium category.
- **Voltas, Blue Star, LG, Daikin and Panasonic** are the most popular brands for dealers. O General, Carrier, and Hitachi are considered premium brands, meant for the discerning customer. Higher prices for these brands could be partly ascribed to the use of 100% copper condensers.

Exhibit 28: Brand hierarchy in the Indian room AC market

Source: Dealer feedback, Industry, MOSL

- Voltas is expected to retain its leadership position in the industry. This has been ascribed to the company's persistent efforts to enhance brand name, distribution reach and dealer support. Voltas's focused advertising and brand building exercise, along with the TATA brand, helped in gaining customers' trust. With more than 12,000 touch points in its distribution network, service network and dealer margins are well ahead of competitors.
- Daikin has started to focus on catering to the mid-range in the industry; earlier, it was considered primarily a premium brand. The price difference between a Daikin and a Voltas one ton (three-star) split AC has decreased to INR1,000–2,000 from INR3,000–5,000 earlier. Globally, Daikin ranks number one in AC and it aims to replicate this ranking in India by FY20. In our view, the company faces two challenges: a) Daikin as a brand is not very well known outside of key metros; therefore, the company needs to raise brand awareness. Nearly 50–55% of industry sales are in Tier 2 to Tier 4 cities, where Daikin might not be very popular; and b) Daikin's distribution network stands at ~3,500 vis-à-vis Voltas's ~12,000, which gives the latter a strong edge.
- Panasonic resorted to aggressive strategies in 2012 to gain a higher market share; the company achieved the target by reducing prices and offering significant discounts, but was unable to sustain at lower price points. Thereafter, prices had to be normalized that, in turn, resulted in loss of market share. Panasonic has resurfaced in 2016, with dealer margins raised to 27–28%. The company is providing exclusive models to dealers to ensure no price under cutting and launched a fresh marketing campaign to regain lost share in the industry.
- Voltas's all-weather smart ACs are primarily sold in North India, where the consumer also requires a heater during winter. As Mumbai is characterized by mild winters, most dealers do not stock this model.

Key air conditioner manufacturers' summer strategy

Based on media articles/channel checks and company feedback, we have highlighted key strategies adopted by various players for the upcoming summer season.

Blue Star – Impressive lineup of AC models; market share target at 12–13%

- The company has a strong position in the inverter split AC segment, which, along with five-star ACs, generates 30% of revenues. Inverter ACs contribute 10% to domestic industry sales compared to over 50% in China. Also, operating costs (primarily electricity) for an inverter AC are 30% lower. Management expects the market share of inverter ACs to triple over the next few years.
- Blue Star's line-up of new inverter split ACs are among the first to comply with BEE's voluntary labeling program (mandatory for inverter ACs from 2018). All models have been designed to operate non-stop at 50 degrees and can function smoothly without an external voltage stabilizer. In FY17, the company plans to allocate INR300mn for further product development.
- The company's distribution network comprises 3,800 outlets across 500 locations, with smaller towns generating 50% of total sales. Blue Star plans to introduce a same-day installation facility in NCR. IN our view, this is the largest market for ACs in the country, with Voltas enjoying nearly 30–35% share in several areas.
- Blue Star currently has 70 exclusive product stores and targets to reach 100 by the end of FY17. Also, it aims to open the first Blue Star Platinum Store in New Delhi in 2016. These stores encompassing an area of ~2,000sq ft will comprehensively display the entire product range; thereafter, Blue Star plans to replicate the initiative in other metros.
- The company's targeted spending for summer 2016 stands at INR400mn. Blue Star continues to use the brand message, 'Nobody Cools Better'. The company's current market share (in value terms) stands at 10.5% and is projected to reach 12% in FY17.

Voltas – targeting a double digit growth this summer season

- Voltas (~21.8% share) continued to lead the room AC industry in 9M16, aided by a robust dealer network, strong brand name (trust in the TATA brand), and focused advertising.
- The company recently launched the 'All Star ratings' AC range based on the core value proposition of 'Run 2 ACs at the cost of 1 AC' and the unique 'Steady Cool' compressor, which operates on a 'two stage inverter' technology. This cutting-edge technology leads to significant power savings vis-à-vis an ordinary compressor. In addition, the All Star ACs are environment-friendly and efficient with super silent operation (noise levels as low as 18 decibels), high ambient cooling (efficient in temperatures as high as 54 degree Celsius) and an advanced air purifier. The company is offering this unique range with a five-year warranty.
- Voltas introduced a range of advanced 'All Weather Smart ACs' by integrating three smart features: a) Smart Access: Wi-Fi enabled ACs can be operated from anywhere and anytime through a smart phone using local Wi-Fi or GPRS

connection; b) Smart Sense: The AC senses outside weather conditions and adapts to the changing environment without any manual intervention; and c) Smart Analytics: It keeps a tab on the energy usage and consumption trends. In addition, the company revamped the new Smart AC mobile app.

- Voltas expects a double digit growth in FY17 and is expecting a long and severe summer in CY16; this along with pent up demand from customers will lead to good growth in the industry.
- With the latest launches, Voltas now has a strong product portfolio of over 150 variants of split ACs through more than 12,000 touch points in the country.

Daikin India – target to expand reach and market share

- Under the leadership of the current MD, Mr. K. Jawa, Daikin plans to double sales to 1mn units in 4–5 years, with the commissioning of a second plant. Globally, the company ranks first in ACs and targets to achieve the same position in India by 2020.
- Over the last few years Daikin ACs were generally perceived as expensive; nevertheless, the company has reduced the prices with effect from CY15. Daikin aim is to sell at the right price, and use the right technology and right product range to capture the market, including semi-urban areas.
- The company's plant in Neemrana was set up at a cost of INR11b and produces 0.5mn ACs, 6,000 ductable and 18,000 chiller units. Daikin intends to set up a second plant at an investment of INR6b. The new facility, estimated to have a manufacturing capacity of 1mn units per year, is scheduled to commence operations in 2017–18.
- Daikin will build its first R&D facility at an investment of INR0.6b which is presumed to be the foremost in the country by an AC manufacturer. The center is expected to become fully operational in 2016.
- The company has tied up with the Delhi Daredevils IPL team to enhance brand image and reach.
- Daikin has launched its marketing campaign under the tag "Fill the air with goodness" which reiterates the company's commitment to provide state of the art technology that offers comfort, great saving and is environment friendly.

Videocon – Targets 15% share in room ACs

- Videocon is depending on sales network expansion and product launches to sell 0.6mn AC units this year and thereby garner 15% market share.
- The company introduced eight split AC models, priced between INR34, 000 and INR39,000, under the 'Aryabot' range.
- To gain an additional 5% share, Videocon targets to increase its dealer strength from 7,000 to 9,000 and sell 0.6mn units during summer.
- The '**Aryabot**' range of ACs are compliant with BEE ratings and can pair up with smartphones and smart watches by enabling GPS access—through a user's GPS location, the feature notifies the need to switch off the AC when one leaves the house and switch it on before one enters the premises.

Panasonic – ‘A better life, a better world’

- Panasonic’s new advertising campaign is titled ‘A Better Life, A Better World’; the campaign reiterates the company’s commitment to improve the quality and standard of living, and creating a better world for the entire community.
- ‘Life Conditioner’, a new range of ACs enhance consumer experience by providing pre-requisite cooling features and using latest Japanese technology. The range is reported to offer 65% energy saving, 99% purer air and 35% faster cooling. Panasonic Life Conditioners are equipped with Nanoe-G & PM 2.5 Air Purification that eliminates airborne particles. Econavi inverter technology monitors the product’s operations, while iAUTO X delivers faster cooling.
- The advertising campaign features Panasonic’s brand ambassador, Katrina Kaif, who, with a strong youth appeal, connects with techno-savvy consumers seeking products aligned to global standards.

Godrej Appliances – Eyeing 15% share in the inverter AC segment

- Godrej Appliances has rolled out an energy-efficient AC under its premium NXW brand, which was used for super premium refrigerators until date. The company targets to acquire 15% share in the inverter AC market.
- The company highlighted it is the most energy-efficient inverter AC in the country with an Indian Seasonal Energy Efficiency ratio (ISEER) of 5.2. Since June 2015, BEE has introduced ISEER for inverter ACs. ISEER refers to the ratio of the total amount of heat that an AC can eliminate to total energy consumed to remove the heat. The minimum ISEER for a five-star rated inverter AC is 4.5.
- Godrej’s inverter AC is expected to be among the top five-star rated inverter ACs, with 31% savings over a five-star AC. It is adaptable to Indian climatic conditions and delivers high efficiency. The NXW range would be available as 3440W and 5000W, and the company is offering a five-year condenser warranty and a 10-year compressor warranty.
- After gaining a 15% share in the premium and five-star rated AC segments, Godrej now looks to acquire a similar share in the inverter AC market.
- The company plans to double advertising spending and thereby increase market share in FY17.

Carrier Midea – Targets 40% growth in CY16

- The company has projected 40% growth in overall sales (INR10b in CY15), driven by a strong performance in the AC division. Carrier Midea, a 40:60 JV between US-based Carrier Corporation and China’s G D Midea, is also expanding the sales network to include 3,200 retail outlets by the end of March 2016 to sell its product range.
- Carrier Midea India has adopted a strategy of not increasing the price of existing AC models this season due to local manufacturing and localization. The company has a manufacturing unit at Bawal, Haryana, with a capacity of 0.7mn AC units per year.
- This season, the company’s product range would encompass 115 AC models, wherein 78 would be sold under the Carrier brand and the remaining 37 as Midea.

Lloyd Electric – 11% share and still rising

- The company accounted for ~11% in the Indian room AC industry during FY16 (8% in FY15). Lloyd continues to aggressively strengthen presence in the AC market.
- Lloyd's TV campaign would be telecast during T20 World Cup series to garner mindshare with customers.
- As per a recent company release, Lloyd has already sold 0.2mn ACs in Q416 which is a record set by it.

LG – Looks to close the gap with market leader

- With a new MD, Mr. Kim ki Wan at the helm, LG has already turned aggressive in terms of dealer margins and discounts to gain a sizeable market share. (http://articles.economictimes.indiatimes.com/2015-11-30/news/68661316_1_lg-india-lg-electronics-lg-products).
- Our channel checks indicate the company is targeting a growth rate of 15% in FY17, based on new product launches such as dual inverter ACs that are more efficient than normal inverter ACs.
- Sales growth would come primarily from the Northern region where LG expects a double digit growth in sales.

Exhibit 29: Comparison of AC features across companies

Name of company	Key products on offer	Key features offered
Voltas	"All Star" ACs" All Weather Smart A/C's"	Voltas has launched its "All Star" airconditioners with the theme of "Run 2 ACs at the cost of 1" which has significant power savings, environment friendly, super silent operations, advanced air purifier and ambient cooling at high temperature. It has introduced its advanced "All Weather Smart ACs" which can be operated by a phone using Wifi /GPRS, senses outside temperature and adapts to the weather and keeps a tab on power usage and consumption
LG	"Smart Inverter" ACs with Mosquito Away, Himalaya Cool, Monsoon Comfort and Hot & Cold comfort	With the tagline " The AC that saves every day", LG ACs offer 30% faster cooling, 66% energy savings, super quiet operation(19db) and 99% sterilized air. LG's ACs also offer "Mosquito Away" technology to drive away mosquitoes, "Himalaya Cool" technology for faster cooling, "Monsoon Comfort" for controlling the humidity and "Hot & Cold" AC for all weather usage
Hitachi	"iCare" ACs with "iClean", "iSense" and "iSee" technology	Hitachi's Inverter ACs offer "iClean Plus" technology which automatically cleans the dust in the air filter, "iSense" which regulates the temperature as per the person's active body movements and "iSee" which detects faces of people and directs air flow to everyone, Wifi technology to control the AC from anywhere and uses R410 green refrigerant which is eco friendly
Panasonic	"Life Conditioner" AC range	Life Conditioner' range offers a smarter life(65% energy saving), a healthier life(99% purer air) and a faster life(35% faster cooling through iAutoX). Panasonic Life Conditioners are equipped with Nanoe-G & PM 2.5 Air Purification that eliminates airborne particles. Econavi inverter technology monitors the product's operations, while iAUTO X delivers faster cooling.
Videocon	"Aryabot" range	The 'Aryabot' range of ACs can through a user's GPS location, switch off the AC when one leaves the house and switch it on before one enters the premises, it comes with a dedicated USB slot for a web cam connection and the web cam streams live video on the smartphone, keeps a tab of power consumption and through its budgeting feature, one can set limits on electricity consumption, Voice command to control the remote, the Sleep Graph mode allows to set desired temperature levels for each hour of the night, Aryabot can also sense the outside temperature and automatically adjust to set temperature inside. The AC also intelligently detects problem areas and suggests remedial actions basis its algorithms.It also has the ability to contact the service centre on its own and log in service requests
Daikin	"Fill the air with goodness"	Daikin ACs offer 64% more power savings(Good for savings), 15.3% more comfort(Good for comfort), 75% less CO2 emission(Good for environment) and Swing Inverter Technology(Good for living). Its' ACs also have dehumidifiers, Streamer discharge air purifier, Intelligent Eye(adjusts cooling to human presence), Smart phone connectivity for ACs, Stabilizer free operation and all season AC for heating/cooling
Blue Star	"Nobody cools better"	Blue Star has launched Wifi enabled ACs which can be used from any remote location within the Wifi network, can work at high temperatures upto 50 degrees and within a voltage range of 160-270V without stabilizer, 30% power saving vs. 5 star split ACs, Purifiers for eliminating odors, dust, bacteria and other pollutants
Godrej Appliances	NXW ACs	The NXW is the most energy-efficient inverter AC in the country with an Indian Seasonal Energy Efficiency ratio (ISEER) of 5.2. It is adaptable to Indian climatic conditions and delivers high efficiency
Samsung	Digital inverter ACs	Samsung's Digital Inverter compressor offer power savings, stabilizer free operation, Virus Doctor and Easy Filter to eliminate dust, Multi Jet Plus technology for better cooling efficiency, Tropicalized compressor for cooling till 52 degrees, Turbo Cooling, Good Sleep for regulating temperature throughout the night Full HD filter and Dry Cool for comfort even in humidity

Source: Company websites, MOSL

Takeaways from ACREX 2016: Asia's largest exhibition for ACs, HVAC, refrigeration and energy efficiency

Industry growth at 15% YoY in CY16; no respite in competition

We visited ACREX, Asia's largest exhibition for ACs, HVAC, refrigeration and energy efficiency where we met the leading air conditioner manufacturers in the country. Key takeaways are listed below.

- AC manufacturers expect the industry to grow 10–15% YoY in CY16, following a subdued CY15; sales from March–June (summer months) account for 50–55% of industry volumes and companies expect a normal summer season.
- Inventory has been cleared after strong industry growth in Q316 (35% YoY); currently, channel filling is underway for the upcoming summer season.
- As BEE star ratings remain unchanged, AC manufacturers do not expect any price increases in CY16. However, if the rupee posts a substantial decline, companies may have to pass it on to end consumers.
- Consumers have increasingly opted for energy-efficient products; five-star and inverter AC sales constitute 30% of the market and are growing in high double-digits.
- After strong festive season sales in Q316, secondary sales have been subdued in January, especially in the North and West, due to extended winters. However, secondary sales have picked up over the past week in Tamil Nadu and Kerala.
- Competitive intensity remains high with established players in the Premium category (Daikin and Hitachi) seeking to enhance presence in the Popular category (50–60% market share); smaller players like GREE, Midea, Lloyd Electric and Videocon are also struggling to increase their share in the Popular segment.
- Key differentiators in the AC market are brand name, distribution network, after sales and dealer margins. Reduction in pricing alone would not lead to sustainable market share gains.

Company-wise key takeaways from ACREX, 2016

Blue Star

- The company expects industry growth of 15%. Blue Star's sales are projected to accelerate by 25% YoY, driven by new model launches, increased distribution network and focused advertising.
- Blue Star has 30 inverter split AC models voluntarily rated as three and five-star.
- The company aims to increase market share to 12% from the current 10%. Blue Star has introduced a total of 130 AC models, of which 40–50 operate on green gases (R410A/R22).

Hitachi

- The company accounted for a market share of 11–12% in FY16 (FY15: 8–9%) with sales rising 40% YoY. Hitachi expects the share to reach 13% by selling 0.5mn units in this year; the company currently ranks third in the industry after Voltas and LG. Daikin and Lloyd Electric rank lower in terms of volumes.
- Hitachi has voluntarily rated all of the inverter AC models for BEE star labeling; it is now focusing on energy efficiency for boosting sales.
- Though industry growth decelerated in CY15, the company expects CY16 to be a strong year.
- Hitachi has been targeting the Popular segment and has AC models across the Premium, Popular and Economy level categories.
- Competition is intense with Daikin, Midea, GREE and Lloyd Electric aggressively targeting the market.

Voltas

- Extended winters during the year—normally winter ends by mid-January, but this year it continued well into late Jan – early February; strong heat since then has been positive for Voltas's secondary sales over the last few days.
- Generally, markets are weak after Diwali (festival of lights in October/November) and sales are yet to pick up.
- The company's new AC model can be monitored from any Wi-Fi enabled environment. Voltas raised the prices of this product and the SMART All weather model by INR1, 500.
- Since star ratings have remained unchanged, the company has largely not resorted to price increases; however a sharp fall in the rupee could have an adverse impact.
- Voltas lags behind peers in inverter ACs and needs to launch models in this segment – 2016 "All Star ACs" are being launched to aggressively enter this market; moreover, the government needs to provide tax incentives to improve usage. Indian consumers are price conscious and hence, the market may not witness exponential growth.

LG

- LG's sales grew 15% in CY15 and it projects 30% growth in CY16 given the early onset of summer and predictions of an above normal summer in CY16.
- In terms of market share, the company undertakes significant amount of B2B sales to residential developers. This has not been captured in the Gsk Neilson data that is only for multi-brand outlets. They are ahead and the market leader in the room air conditioner segment.

Marketing campaigns by key players

Aggressive campaigns planned to gain market share

Exhibit 30: LG - “The AC that saves every day” with its smart inverter AC



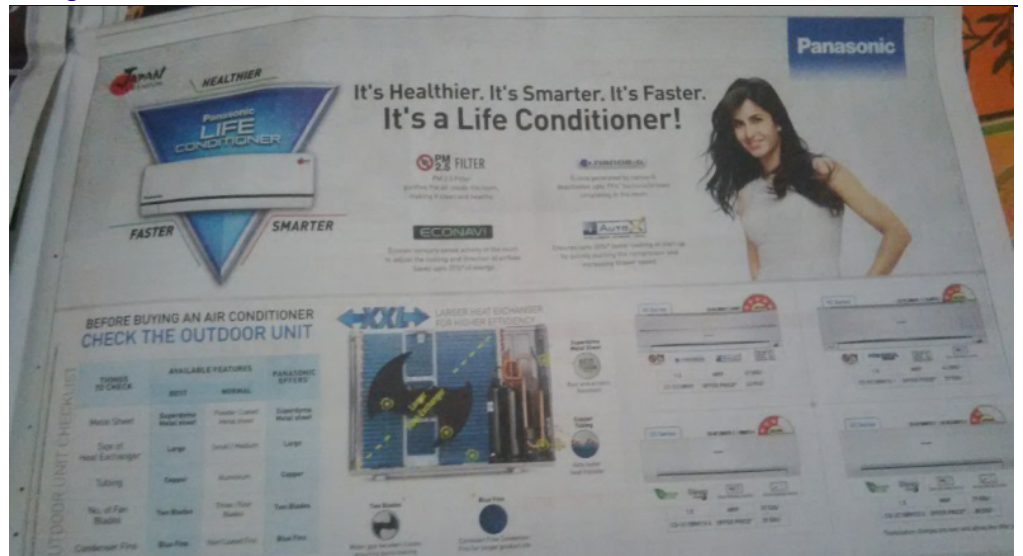
Source: Media reports, MOSL

Exhibit 31: LG - Smart Inverter technology with Mosquito away, Himalaya Cool and Monsoon Comfort are additional features on offer



Source: Media reports, MOSL

Exhibit 32: Panasonic – “The Life Conditioner” - Faster cooling, Air purifier and Energy savings as well



Source: Media reports, MOSL

Exhibit 33: Voltas – “All Star air conditioner” – Highlighting its inverter compressor which enables “Run 2 aircons at the cost of one; bring home All Star savings”



Source: Media reports, MOSL

Exhibit 34: Lloyd Electric – “Khushiyon ki gurantee”. Offering 60 months warranty on air conditioners to celebrate its 60 years in India

LLOYD DIAMOND
60 YEARS

**On Our 60 Years Celebration
Get 60 Months Warranty
on Lloyd ACs & LED TVs**

QHD 4K LED TV MODELS				FULL HD LED TV MODELS				AIR CONDITIONERS				
Model No.	Resolution	MSRP	MRP after	Model No.	Resolution	MSRP	MRP after	Model No.	Capacity	Star Rating	MSRP	MRP after
QHD 55Inch (2016) 4K	4K	₹1,30,000	₹80,000	QHD 55Inch (2016) 4K	4K	₹1,20,000	₹70,000	QHD 1.5Ton	1.5Ton	5 Star	₹24,000	₹17,000
QHD 50Inch (2016) 4K	4K	₹1,10,000	₹70,000	QHD 50Inch (2016) 4K	4K	₹1,00,000	₹60,000	QHD 1.2Ton	1.2Ton	5 Star	₹20,000	₹14,000
QHD 45Inch (2016) 4K	4K	₹90,000	₹55,000	QHD 45Inch (2016) 4K	4K	₹80,000	₹50,000	QHD 1.0Ton	1.0Ton	5 Star	₹17,000	₹12,000
QHD 40Inch (2016) 4K	4K	₹70,000	₹45,000	QHD 40Inch (2016) 4K	4K	₹60,000	₹40,000	QHD 0.8Ton	0.8Ton	5 Star	₹14,000	₹10,000
QHD 35Inch (2016) 4K	4K	₹50,000	₹35,000	QHD 35Inch (2016) 4K	4K	₹45,000	₹30,000	QHD 0.7Ton	0.7Ton	5 Star	₹12,000	₹9,000

Source: Media reports, MOSL

Exhibit 35: Kohinoor – exchange offer plus free standard installation with 5 year condenser and 10 year compressor warranty on select brands

**Measure the Temperature
Get your Discount**

**WEATHER PERMITTING
YOUR MAXIMUM
DISCOUNT
CAN GO UPTO 40%**

**35°C = 35% DISCOUNT
OUTSIDE TEMPERATURE = YOUR NEW AC DISCOUNT %**

Inclusion of exchange value & free standard installation on a select range

TEMPERATURE FOR THE PAST 7 DAYS

Sun 28°	Mon 29°	Tue 30°	Wed 31°	Thu 32°	Fri 33°	Sat 34°
37°C	36°C	37°C	34°C	36°C	33°C	33°C

DAIKIN ATPOGV16 1.5 Ton ₹47,000/-
₹3,917/-

SAMSUNG ARYZV10H1RW 1 Ton ₹41,300/-
₹3,442/-

LG LSASTM10 1 Ton ₹35,490/-
₹2,958/-

TIMES RETAIL ICONS 2016

Kohinoor has been recognised as the Preferred chain for consumer electronics & durables 2016

Source: Media reports, MOSL

Exhibit 36: Vijay Sales – Promotional offer



Source: Media reports, MOSL

Exhibit 37: Daikin – “Fill the air with goodness”



Source: Media reports, MOSL

Exhibit 38: Onida – “Regalio”



Source: Media reports, MOSL

Exhibit 39: Hitachi – iClean technology for automatic cleaning of filters while ISee to sense people in the room and direct the air flow to them



Source: Media reports, MOSL

Exhibit 40: Godrej Appliances – NXW range which is the highest rated inverter AC in India

Godrej

INTRODUCING GODREJ NXW, INDIA'S BEST 5-STAR INVERTER AC WITH 5.2 ISEER.*

Choose from India's most energy-efficient AC range*

- 7-STAR | ISEER 18 F3 8 MOD
- 5-STAR | ISEER 12.7 10 F3 6 MOD
- 5-STAR | ISEER 12 F3 6 MOD
- 5-STAR | ISEER 15 F3 6 MOD
- 5-STAR INVERTER | ISEER 12.1 18 GA 3 MOD
- 5-STAR | ISEER 15 F3 6 MOD

10 YEAR Compressor Warranty*

5 YEAR Condenser Warranty*

FREE Standard Installation*

Same Day Standard Installation*

Easy Finance Option*

099808 99808 or call us on 1800 209 5511 (Toll Free)

Source: Media reports, MOSL

Exhibit 41: Whirlpool – 3D cool Xtreme AC

New 3D COOL Xtreme

Whirlpool
DESIGNED TO DELIGHT™

PRESENTING THE NEW 3D COOL XTREME AC

3X MORE POWERFUL COOLING* WITH PM 2.5 FILTRATION*

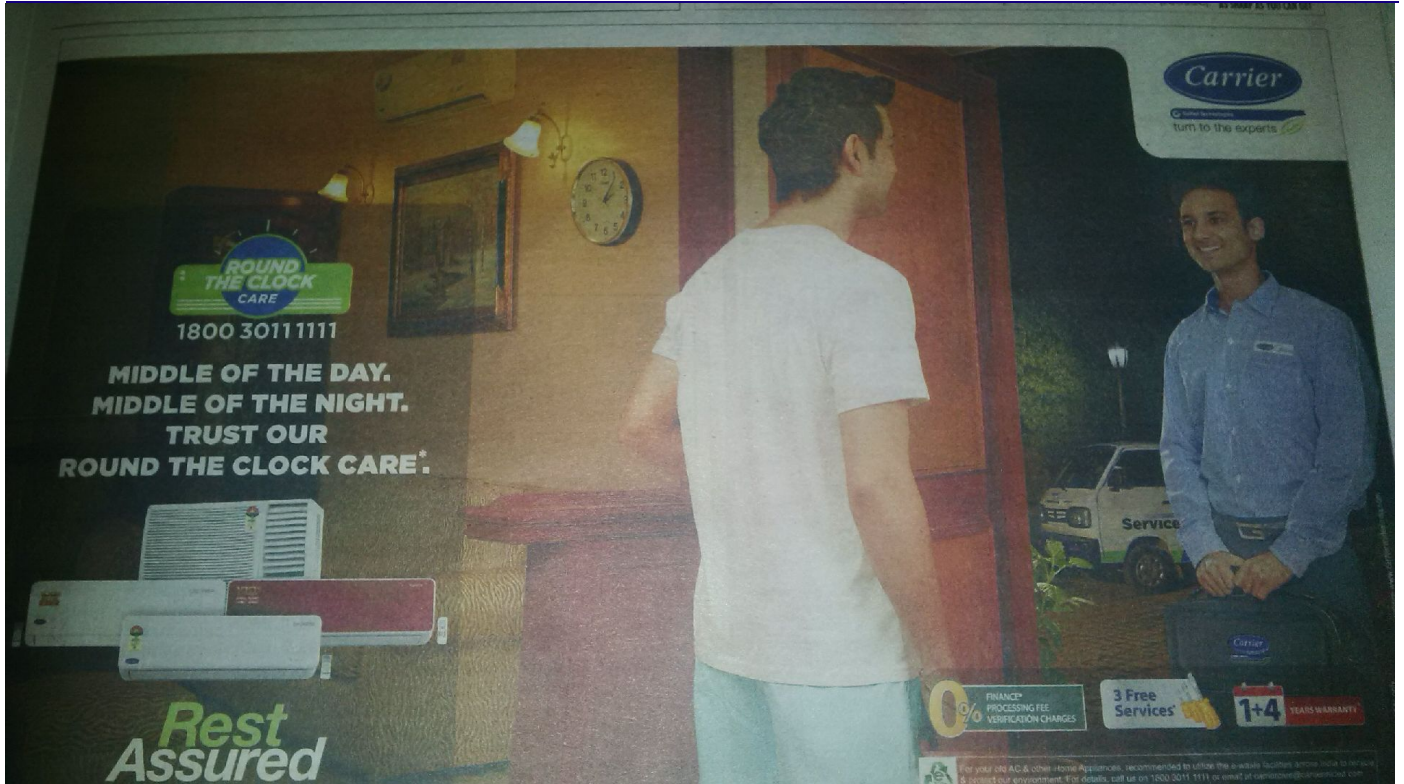
- 3X POWERFUL COOLING TECHNOLOGY
- 39 FEET AIR THROW
- PM 2.5 FILTRATION*
- DFC TECHNOLOGY*

6 YEAR WARRANTY

www.whirlpoolindia.com

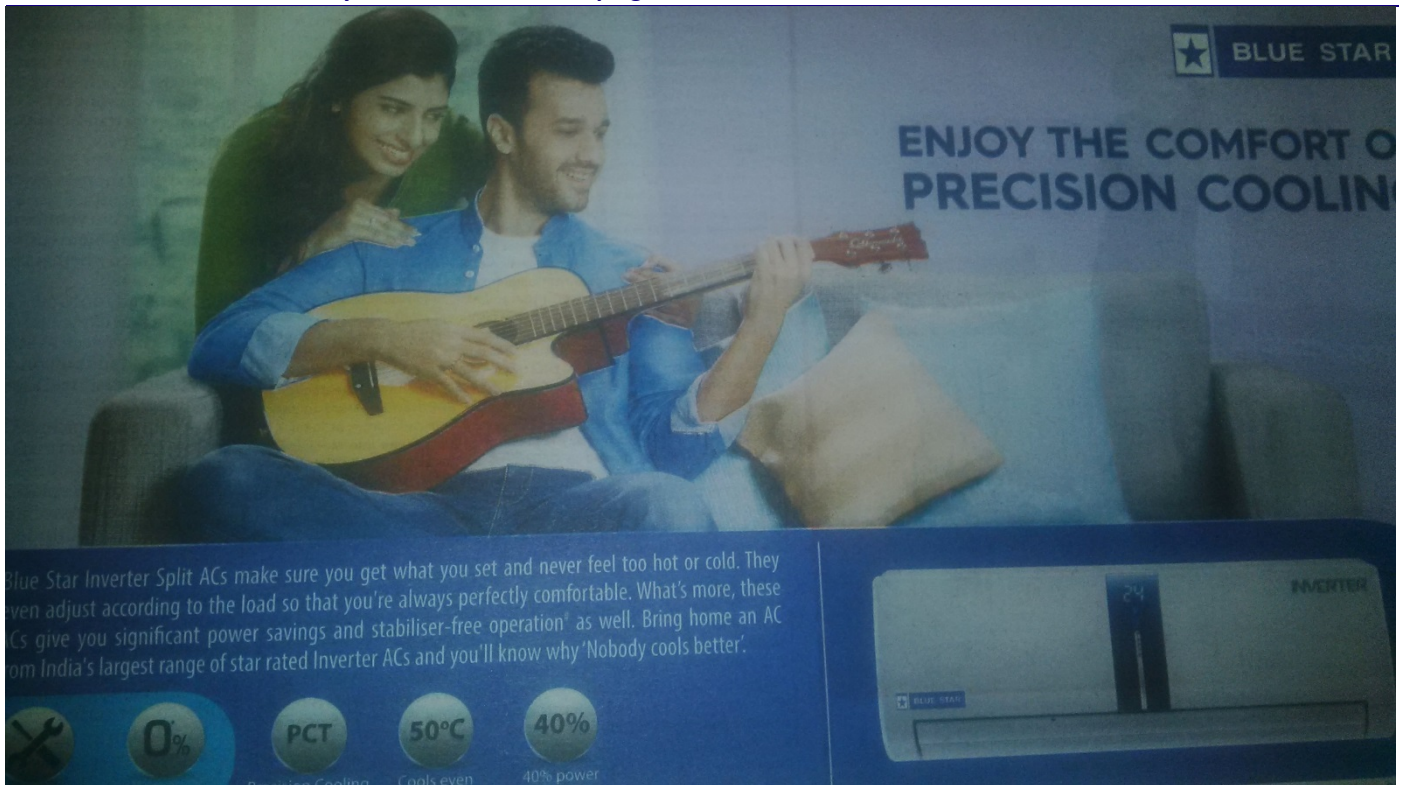
Source: Media reports, MOSL

Exhibit 42: Carrier – “Round the clock” care



Source: Media reports, MOSL

Exhibit 43: Blue Star – “Nobody cools better” ad campaign



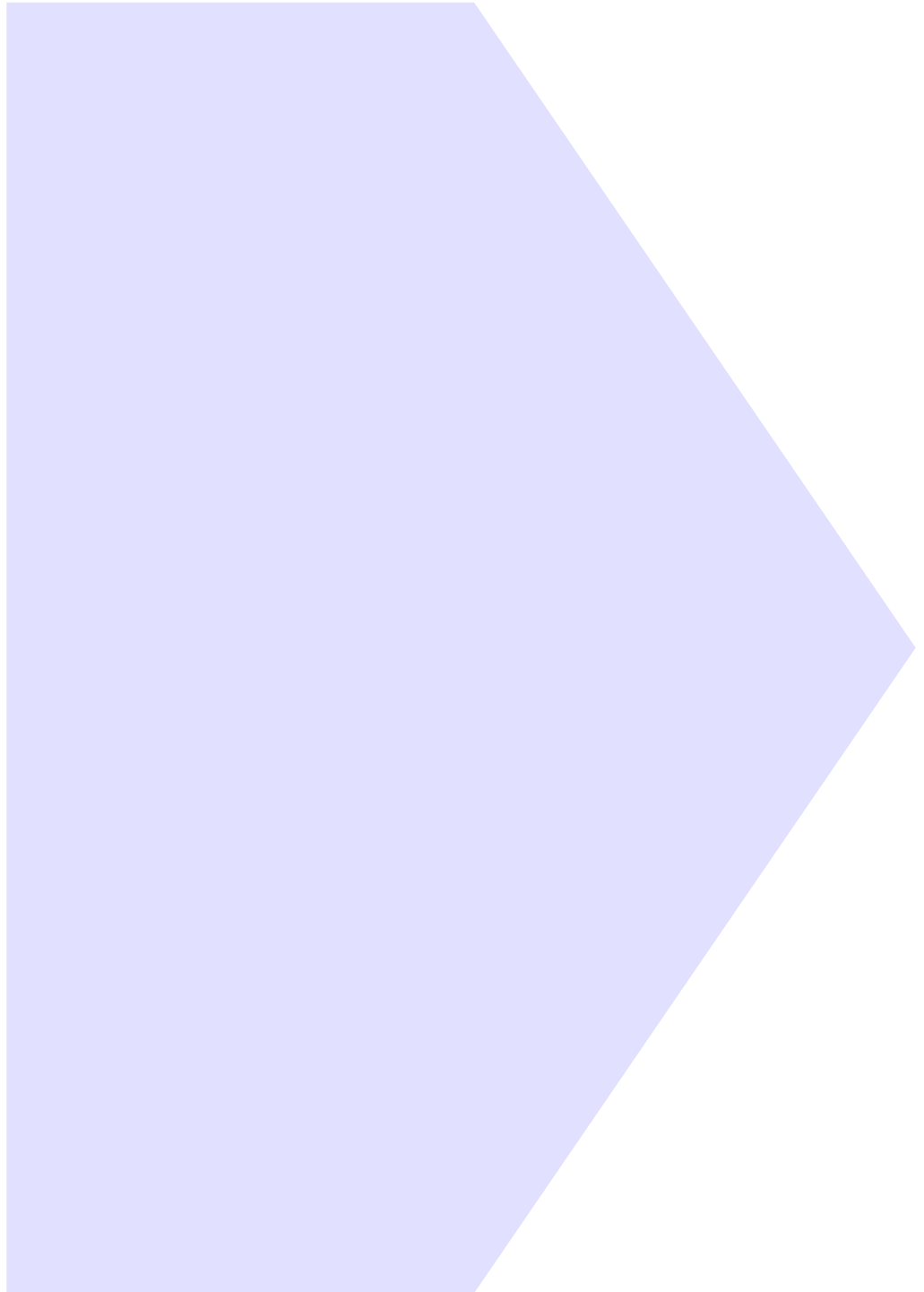
Source: Media reports, MOSL

Companies

BSE Sensex: 25,844**S&P CNX: 7,915****April 2016****Companies Covered**

Voltas	34
Blue Star	37
Hitachi	40

*Prices as on 20 April 2016



BSE SENSEX
25,844S&P CNX
7,915**CMP: INR302****TP: INR350(+16%)****Buy****VOLTAS****Stock Info**

Bloomberg	VOLT IN
Equity Shares (m)	330.9
52-Week Range (INR)	360/211
1, 6, 12 Rel. Per (%)	9/10/12
M.Cap. (INR b)	90.6
M.Cap. (USD b)	1.4
12M Avg Val (INR M)	592
Free float (%)	69.7

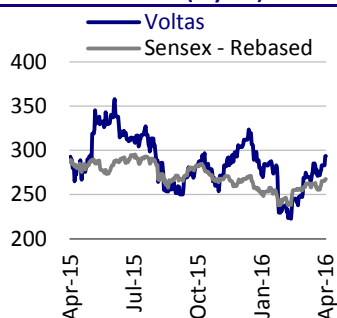
Financials Snapshot (INR b)

Y/E MAR	2016E	2017E	2018E
Net Sales	56.7	62.0	72.2
EBITDA	4.0	4.8	6.1
Adj PAT	3.3	4.0	5.0
EPS(INR)	9.9	12.0	15.1
EPS Gr. (%)	-3.4	21.9	25.7
BV/Sh. (INR)	70.9	79.9	91.1
RoE (%)	14.7	16.0	17.7
RoCE (%)	14.3	15.3	16.8
P/E (x)	30.7	25.2	20.0
P/BV (x)	4.3	3.8	3.3

Shareholding pattern (%)

As On	Dec-15	Sep-15	Dec-14
Promoter	30.3	30.3	30.3
DII	27.0	26.8	26.1
FII	21.6	21.1	21.8
Others	21.1	21.8	21.8

FII Includes depository receipts

Stock Performance (1-year)**Leader in India's room AC market****Key focus areas – brand, distribution, after sales service and dealer support**

- **Channel checks indicate strong demand for air conditioners in upcoming season:** We did a dip-stick study across large dealers and retail chains to understand the demand scenario for the upcoming summer season, competitive intensity, and new product launches in the market. Dealers highlighted (1) robust demand for air conditioners (ACs) across brands, (2) likely growth of 15-20% for the industry, and (3) intense competition, preventing major price hikes across brands. There is a clear shift by consumers towards energy efficiency, with more 4/5-star ACs being sold.
- **MEP business facing near-term headwinds:** VOLT's MEP business posted a loss in 3QFY16 and EBIT margins turned negative after six quarters (-1.2%). This was because while the company booked costs for the UAE project, it is yet to book the acceleration claim. Business environment in the Middle East remains challenging, with slow project execution, reluctance to officially extend project timelines, 'engineered' delays in settlement of commercial entitlements, increasing tendency to legally dispute and go to arbitration. This has impacted margins in the MEP segment – blended margins remain below the guided 4-5%.
- **Air cooler sales to kick in meaningfully from FY17:** To diversify its product range in the Unitary Cooling Products (UCP) segment and as a natural extension of its existing brand, VOLT has diversified into air coolers. It has launched 11 models (7 desert coolers, 3 personal coolers, and 1 window cooler) across India. It intends to be among the top-3 players in the country in the next three years and is currently focused primarily on the residential cooler market. The air cooler season begins from December and lasts up to May; VOLT is focusing on the upcoming season to increase volumes. The residential cooler market is estimated at 5m-6m units, with a market size of ~INR40b (INR6,660 per unit), 80% of which is unorganized. Even if VOLT is able to gain 2-3% of the overall market (8-12% of the organized market), it could add sales of INR0.7b-1.2b in the UCP segment.

Valuation and view

- VOLT trades at 25x FY17E and 20x FY18E EPS. We maintain Buy; our target price is INR350 (earlier INR290) which values the UCP segment at INR300 (25x FY18E EPS) and the Engineered Product Segment at INR50 (15x FY18E EPS). In our view, there are multiple triggers for the stock, which include (1) positive impact of 7th Pay Commission hikes, (2) structural uptrend in the air conditioner market, and (3) potential improvement in the MEP business, with pick-up in domestic construction activity.

Financials and Valuations

Income Statement								(INR Million)
Y/E March	2012	2013	2014	2015	2016E	2017E	2018E	
Total Revenues	51,857	55,310	52,660	51,831	56,663	61,955	72,220	
Change (%)	(0.1)	6.7	(4.8)	-2	9	9	17	
Raw Materials	37,800	41,670	38,543	35,974	40,468	44,385	52,743	
Staff Cost	5,995	6,325	5,947	5,899	6,165	6,442	6,732	
Other Expenses	4,698	4,934	5,515	5,857	6,029	6,316	6,617	
EBITDA	3,365	2,380	2,656	4,100	4,001	4,812	6,129	
% of Total Revenues	6.5	4.3	5.0	7.9	7.1	7.8	8.5	
Other Income	985	901	1,002	1,087	1,083	1,199	1,332	
Depreciation	340	278	248	280	282	288	294	
Interest	314	326	225	233	162	198	223	
Exceptional Items	(1,505)	121	215	462	0	0	0	
PBT	2,191	2,798	3,399	5,136	4,640	5,525	6,943	
Tax	571	728	941	1,276	1,392	1,547	1,944	
Rate (%)	26.1	26.0	27.7	25	30	28	28	
Reported PAT	1,620	2,070	2,458	3,860	3,264	3,978	4,999	
Change (%)	(44.7)	27.8	18.7	57	-15	22	26	
Adj. Consolidated PAT	3,126	1,955	2,238	3,381	3,264	3,978	4,999	
Change (%)	(0.7)	(37.5)	14.5	51	-3	22	26	

Balance Sheet								(INR Million)
Y/E March	2012	2013	2014	2015	2016E	2017E	2018E	
Share Capital	331	331	331	331	331	331	331	
Reserves	14,469	15,926	17,862	20,690	23,119	26,080	29,800	
Net Worth	14,800	16,256	18,193	21,021	23,450	26,411	30,131	
Minority Intetest	170	118	138	161	161	161	161	
Loans	2,214	2,612	2,629	1,217	1,717	2,217	2,717	
Deferred Tax Liability	(242)	(222)	(239)	(349)	(349)	(349)	(349)	
Capital Employed	16,941	18,765	20,721	22,049	24,979	28,440	32,660	
Gross Fixed Assets	4,451	4,678	4,198	4,114	4,649	4,749	4,849	
Less: Depreciation	2,448	2,568	2,113	2,223	2,941	3,229	3,524	
Net Fixed Assets	2,003	2,110	2,086	1,891	1,708	1,520	1,326	
Capital WIP	46	0	18	44	44	44	44	
Investments	3,116	4,074	7,320	10,939	10,939	10,939	10,939	
Goodwill	890	888	798	798	814	814	814	
Curr. Assets	35,271	38,352	36,974	34,844	39,631	45,060	53,446	
Inventory	8,334	9,784	9,010	8,671	9,479	10,364	12,081	
Debtors	20,977	21,927	22,039	21,051	14,634	16,001	18,652	
Cash & Bank Balance	2,710	3,498	2,818	2,516	4,289	6,418	8,401	
Loans & Advances	3,249	3,142	3,108	2,606	2,849	3,115	3,631	
Current Liab. & Prov.	24,384	26,658	26,476	26,466	28,157	29,938	33,909	
Creditors	14,730	17,191	16,267	15,414	16,076	16,728	18,510	
Other Liabilities	9,654	9,186	10,208	11,051	12,082	13,210	15,399	
Net Current Assets	10,887	11,694	10,499	8,378	11,473	15,122	19,537	
Application of Funds	16,941	18,766	20,721	22,050	24,979	28,439	32,659	

E: MOSL Estimates

Financials and Valuations

Ratios

Y/E March	2012	2013	2014	2015	2016E	2017E	2018E
Basic (INR)	9.5	5.9	6.8	10.2	9.9	12.0	15.1
Adj EPS	4.9	6.3	7.4	10.2	9.9	12.0	15.1
Cash EPS	10.5	6.8	7.5	11.1	10.7	12.9	16.0
Book Value	44.7	49.2	55.0	63.6	70.9	79.9	91.1
DPS	1.6	1.6	1.9	2.3	2.2	2.6	3.3
Payout (incl. Div. Tax.)	38.0	29.8	29.2	23.3	25.6	25.6	25.6

Valuation (x)

P/E			23.8	22.6	30.7	25.2	20.0
Cash P/E			34.2	20.9	28.3	23.5	18.9
EV/EBITDA			20.0	18.3	24.4	20.0	15.4
EV/Sales			1.0	1.5	1.7	1.5	1.3
Price/Book Value			2.9	3.6	4.3	3.8	3.3
Dividend Yield (%)			1.1	1.0	0.7	0.9	1.1

Profitability Ratios (%)

RoE	21.1	12.0	12.3	16.1	14.7	16.0	17.7
RoCE	23.3	15.8	16.3	21.9	14.3	15.3	16.8

Turnover Ratios

Debtors (Days)	148	145	153	148.2	94.3	94.3	94.3
Inventory (Days)	59	65	62	61.1	61.1	61.1	61.1
Creditors. (Days)	152	158	164	161.4	103.6	98.6	93.6
Asset Turnover (x)	3.1	2.9	2.5	2.4	2.3	2.2	2.2

Leverage Ratio

Debt/Equity (x)	0.1	0.2	0.1	0.1	0.1	0.1	0.1
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Cash Flow Statement

Y/E March	2012	2013	2014	2015	2016E	2017E	2018E
PBT before EO Items	2,191	2,798	3,399	5,136	4,640	5,525	6,943
Add : Depreciation	340	278	248	280	282	288	294
Interest	314	326	225	233	-	-	-
Less : Direct Taxes Paid	(571)	(728)	(941)	(1,276)	(1,392)	(1,547)	(1,944)
(Inc)/Dec in WC	(3,651)	(202)	98	1,425	(1,323)	(1,520)	(2,432)
CF from Operations	(1,378)	2,472	3,030	5,798	2,208	2,747	2,862
(Inc)/Dec in FA	(289)	(181)	462	58	(100)	(100)	(100)
Free Cash Flow	(1,666)	2,291	3,492	5,856	2,108	2,647	2,762
Investment in liquid assets	(430)	(957)	(3,247)	(3,619)	-	-	-
CF from Investments	(719)	(1,139)	(2,785)	(3,561)	(100)	(100)	(100)
(Inc)/Dec in Debt	847	399	17	(1,412)	500	500	500
Less : Interest Paid	(314)	(326)	(225)	(233)	-	-	-
Dividend Paid	(615)	(619)	(716)	(894)	(835)	(1,017)	(1,278)
CF from Fin. Activity	(83)	(546)	(925)	(2,539)	(335)	(517)	(778)
Inc/Dec of Cash	(2,179)	787	(679)	(302)	1,773	2,129	1,983
Add: Beginning Balance	4,890	2,710	3,497	2,818	2,516	4,289	6,418
Closing Balance	2,710	3,497	2,818	2,516	4,289	6,418	8,401

E: MOSL Estimates

Blue Star

BSE SENSEX

25,844

S&P CNX

7,915

CMP: INR414

Not Rated



Stock Info

	BLSTR IN
Bloomberg	BLSTR IN
Equity Shares (m)	89.9
52-Week Range (INR)	411/290
1, 6, 12 Rel. Per (%)	15/24/40
M.Cap. (INR b)	35.7
M.Cap. (USD b)	0.5
Avg Val (INRm)/Vol m	24 / 0.68
Free float (%)	60.5

Financials Snapshot (INR b)

Y/E MAR	2013	2014	2015
Net Sales	27.7	27.9	30.8
EBITDA	1.0	1.5	1.7
PAT	0.4	0.9	1.1
EPS (INR)	4.5	10.3	12.2
Gr. (%)	-145.1	130.6	18.0
BV/Sh (INR)	55	59	70
RoE (%)	8	18	19
RoCE (%)	9.3	15.5	16.3
P/E (x)	35.4	32.4	27.4
P/BV (x)	2.9	5.7	4.8

Strong contender in India's AC market

Gaining market share across segments

- Plans to increase share in room AC market by focusing on North India:** Blue Star intends to increase its share in the room air conditioner market from the current 10% to 12% in FY17 by expanding its distribution network and focusing on North India. Its market share is weak in the North as compared to the South and the West. North India currently constitutes ~45% of the air conditioner market. To improve its focus and market share, Blue Star plans to set up two new manufacturing facilities (Jammu and Sri City), with a capex of INR2.5b. We believe that dealer network expansion, introduction of new product line (135 new models with star rating for inverter ACs) and new facilities to cater to demand from the North and South would help the company to beat industry growth.
- Capex revival to aid growth in the projects business:** Electromechanical projects and packaged air conditioning systems business, which contributes about 52% of Blue Star's total revenue, has witnessed muted growth over the last five years due to weak macroeconomic scenario, delay in execution of orders and the company's focus on profitable growth. However, revival in commercial construction and urban infrastructure activity will help grow the electromechanical contracting business. Blue Star is the leader in the domestic HVAC segment, with every third commercial building in the country having a Blue Star-installed AC. Despite muted ordering activity in the industry, for 9MFY16, order inflow in the MEP segment has remained strong for Blue Star at INR14.3b (up 40% YoY).
- Focus on exports to support growth:** Blue Star intends to increase its revenue share from exports from the current 5%. To increase exports, it plans to tap new opportunities in AC&R products, MEP projects, after-sales services as well as systems integration and agency business. It plans to export to the Middle East, Africa, SAARC and ASEAN regions. Middle East Expo 2020, FIFA World Cup 2022, changes in rules and regulations in the GCC market for energy-efficient air conditioners, and higher FDI limits in the SAARC and ASEAN regions would be the key drivers for the air conditioning market.

Valuation and view

- Focus on expanding dealer network, introduction of new models, and brand strengthening through higher ad spends should help Blue Star to increase its market share in the air conditioning business from the current 9.5% to 12% in FY17.** Bloomberg standalone earnings estimates are INR17.6 for FY17 and INR19.9 for FY18. The stock trades at 28x FY17E and 21x FY18E EPS. We do not have any rating on the stock.

Financials and Valuations

Income Statement						(INR Million)
Y/E March	2010	2011	2012	2013	2014	2015
Total Revenues	25,250	28,589	27,008	27,671	27,895	30,808
Change (%)	0.9	13.2	-5.5	2.5	0.8	10.4
Raw Materials	18,821	20,432	20,858	20,379	19,577	21,335
Staff Cost	1,849	2,061	2,069	2,155	2,340	2,568
Other Expenses	1,833	3,610	4,186	4,149	4,470	5,168
EBITDA	2,747	2,486	-105	988	1,507	1,736
% of Total Revenues	10.9	8.7	-0.4	3.6	5.4	5.6
Other Income	311	340	238	365	264	101
Depreciation	347	317	314	329	347	393
Interest	85	244	703	499	496	435
Exceptional Items	140	4	0	0	-169	419
PBT	2,766	2,269	-884	526	759	1,428
Tax	651	719	7	124	0	-86
Rate (%)	23.5	31.7	-0.8	23.5	0.0	-6.0
Reported PAT	2,115	1,550	-891	402	759	1,514
Change (%)	17.3	-26.7	-157.5	-145.1	88.7	99.4
Adj. Consolidated PAT	1,975	1,546	-891	402	928	1,095
Change (%)	9.6	-21.7	-157.7	-145.1	130.6	18.0

Balance Sheet						(INR Million)
Y/E March	2010	2011	2012	2013	2014	2015
Share Capital	180	180	180	180	180	180
Reserves	4,737	5,555	4,559	4,764	5,116	6,071
Net Worth	4,917	5,735	4,739	4,944	5,296	6,251
Minority Intetest	0	0	0	0	0	0
Loans	89	4,214	3,462	3,760	4,337	3,319
Deferred Tax Liability	-15	-7	0	0	0	-165
Capital Employed	4,991	9,942	8,201	8,704	9,633	9,405
Gross Fixed Assets	3,519	3,741	4,146	4,620	4,994	5,438
Less: Depreciation	1,542	1,809	2,087	2,390	2,681	3,063
Net Fixed Assets	1,977	1,931	2,059	2,230	2,314	2,374
Capital WIP	16	253	315	77	0	25
Investments	42	1,018	1,214	1,214	1,208	2,319
Goodwill	0	0	0	0	0	0
Curr. Assets	13,928	19,382	16,919	17,479	18,830	17,043
Inventory	2,580	4,945	4,372	5,088	5,814	4,628
Debtors	6,282	7,786	6,935	7,296	7,329	7,081
Cash & Bank Balance	132	465	508	110	473	363
Loans & Advances	1,324	1,427	1,692	2,034	2,450	2,385
Current Liab. & Prov.	10,971	12,642	12,306	12,294	12,718	12,356
Creditors	5,531	6,890	7,030	7,527	7,893	8,408
Other Liabilities	5,440	5,752	5,276	4,767	4,825	3,947
Net Current Assets	2,957	6,740	4,613	5,184	6,111	4,688
Application of Funds	4,992	9,943	8,201	8,704	9,633	9,405

E: MOSL Estimates

Financials and Valuations

Ratios

Y/E March	2010	2011	2012	2013	2014	2015
Basic (INR)						
Adj EPS	22.0	17.2	(9.9)	4.5	10.3	12.2
Cash EPS	25.8	20.7	(6.4)	8.1	14.2	16.5
Book Value	54.7	63.8	52.7	55.0	58.9	69.5
DPS	8.0	7.0	1.0	3.0	4.0	5.0
Payout (incl. Div. Tax.)	34.0	40.6	-10.1	67.1	47.4	29.7

Valuation (x)

P/E						27.4
Cash P/E						20.2
EV/EBITDA						19.0
EV/Sales						1.1
Price/Book Value						4.8
Dividend Yield (%)						1.5

Profitability Ratios (%)

RoE	46.0	29.0	-17.0	8.3	18.1	19.0
RoCE	45.6	22.9	-2.0	9.3	15.5	16.3

Turnover Ratios

Debtors (Days)	91	99	94	96	96	84
Inventory (Days)	37	63	59	67	76	55
Creditors. (Days)	80	88	95	99	103	100
Asset Turnover (x)	5.1	2.9	3.3	3.2	2.9	3.3

Leverage Ratio

Debt/Equity (x)	0.0	0.7	0.7	0.8	0.8	0.5
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Cash Flow Statement

(INR Million)

Y/E March	2010	2011	2012	2013	2014	2015
PBT before EO Items	2,627	2,265	-884	526	928	1,009
Add : Depreciation	347	317	314	329	347	393
Interest	0	0	0	0	0	0
Less : Direct Taxes Paid	-666	-712	0	-124	0	86
(Inc)/Dec in WC	-1,667	-3,450	2,170	-969	-564	1,314
CF from Operations	641	-1,580	1,600	-238	711	2,803
(Inc)/Dec in FA	-216	-509	-504	-262	-103	-103
Free Cash Flow	425	-2,088	1,096	-500	607	2,700
Investment in liquid assets	2	-976	-195	0	6	-1,111
CF from Investments	-214	-1,485	-699	-262	-97	-1,214
(Inc)/Dec in Debt	-184	4,125	-753	299	577	-1,018
Less : Interest Paid	0	0	0	0	0	0
Dividend Paid	-839	-732	-105	-270	-421	-526
CF from Fin. Activity	-1,023	3,393	-857	29	156	-1,544
Inc/Dec of Cash	-596	329	43	-471	769	45
Add: Beginning Balance	92	132	465	508	110	473
Closing Balance	-504	461	508	110	473	363

E: MOSL Estimates

BSE SENSEX
25,844S&P CNX
7,915**CMP: INR1,495****Not Rated****HITACHI**
Inspire the Next**Stock Info**

Bloomberg	HTHL IN
Equity Shares (m)	27.2
52-Week Range (INR)	-
1, 6, 12 Rel. Per (%)	-
M.Cap. (INR b)	31.7
M.Cap. (USD b)	0.5
Avg Val (INRm)/Vol m	-
Free float (%)	-

Financials Snapshot (INR b)

Y/E MAR	FY13A	FY14A	FY15A
Net Sales	9.3	11.0	15.7
EBITDA	0.5	0.5	1.4
PAT	0.2	0.1	0.8
EPS (INR)	5.6	3.0	28.6
Gr. (%)	369.6	-47.6	868.7
BV/Sh (INR)	87.0	88.3	115.1
RoE (%)	7.5	3.4	28.1
RoCE (%)	8.3	6.1	26.7
P/E (x)	0.0	506.6	52.3
P/BV (x)	0.0	16.9	13.0

Greater focus on room ACs**India a key market for growth**

- Gaining market share through penetration in 'Popular' segment of room ACs:** Historically, Hitachi has focused on the 'premium' segment of room ACs, where it has been a leader. However, over the last few years, Hitachi has also begun targeting the 'popular' segment, which accounts for 60-65% of total volumes. Hitachi's room AC sales have grown 53% in FY15, significantly higher than the 23% industry growth. Growth in Hitachi's sales has been driven by (a) increasing dealer presence, especially in North India, (b) introduction of a wider range of models, and (c) increased advertising spends (INR1.1b; 7% of sales in FY15, higher than industry average of 2% of sales). Hitachi's dealer touch points now exceed 4,000 across India and it has 41 service centers to take care of after sales services.
- Betting on inverter and 5-star ACs for growth:** Hitachi has been an early identifier of the market trend of customers shifting to energy efficient ACs and has focused on 5-star/inverter ACs. 65% of its models are of this variety. In FY15, sales of Hitachi's 5-star/inverter ACs grew by 63%. As per our channel checks, inverter ACs are likely to touch 30% of the market by FY18 and 50% by FY20.
- JV with Johnson Controls strengthens presence in HVAC segment:** On January 21, 2015, US-based Johnson Controls and Hitachi had entered into an agreement to form a 60:40 JV for the global air conditioning business of Hitachi Appliances. The JV would build on the strengths of Johnson Controls in the HVAC market and incorporate Hitachi's strengths in the room AC, VRF and chiller segments. In India, the JV is seen as a strong contender in the air conditioner market.

Valuation and view

- Focus on expanding dealer network, introduction of new range of models and higher ad spends should help Hitachi to increase its market share in the room air conditioning business from the current 11%. Bloomberg standalone earnings estimates are INR35.8/share for FY17 and INR50.2/share for FY18. The stock trades at 38x FY17E and 30x FY18E EPS. We do not have any rating on the stock.**

Financials and Valuations

Standalone - Income Statement

(INR Million)

Y/E March	FY10	FY11	FY12	FY13	FY14	FY15
Total Income from Operations	6,409	7,640	7,981	9,300	10,997	15,729
Change (%)	36.3	19.2	4.5	16.5	18.3	43.0
Total Expenditure	5,824	7,053	7,689	8,835	10,522	14,348
% of Sales	90.9	92.3	96.3	95.0	95.7	91.2
EBITDA	585	587	291	465	476	1,381
Margin (%)	9.1	7.7	3.7	5.0	4.3	8.8
Depreciation	118	161	183	202	300	359
EBIT	467	427	108	263	175	1,022
Int. and Finance Charges	15	74	89	72	120	83
Other Income	118	47	9	16	57	71
PBT bef. EO Exp.	570	399	28	207	113	1,010
EO Items	0	0	0	0	0	0
PBT after EO Exp.	570	399	28	207	113	1,010
Current Tax	115	108	25	27	39	212
Deferred Tax	-6	-2	-30	26	-6	21
Tax Rate (%)	19.1	26.6	-16.8	25.9	29.0	23.0
Less: Mionrity Interest	0	0	0	0	0	0
Reported PAT	461	293	33	153	80	778
Adjusted PAT	461	293	33	153	80	778
Change (%)	119.0	-36.4	-88.9	369.6	-47.6	868.7
Margin (%)	7.2	3.8	0.4	1.6	0.7	4.9

Standalone - Balance Sheet

(INR Million)

Y/E March	FY10	FY11	FY12	FY13	FY14	FY15
Equity Share Capital	230	230	230	230	272	272
Total Reserves	1,237	1,490	1,483	1,588	2,128	2,857
Net Worth	1,466	1,720	1,712	2,364	2,400	3,129
Deferred Tax Liabilities	35	39	22	52	69	108
Total Loans	601	900	992	1,659	1,249	1,396
Capital Employed	2,101	2,658	2,726	4,075	3,719	4,632
Gross Block	1,589	1,986	2,136	2,599	3,052	3,811
Less: Accum. Deprn.	543	677	840	823	1,097	1,381
Net Fixed Assets	1,046	1,309	1,296	1,776	1,955	2,430
Capital WIP	152	57	128	109	22	26
Total Investments	0	0	0	0	0	0
Curr. Assets, Loans&Adv.	3,302	4,857	4,502	6,428	5,622	8,327
Inventory	1,804	3,267	2,681	3,057	2,905	4,903
Account Receivables	960	1,252	1,481	1,645	1,884	2,838
Cash and Bank Balance	284	21	26	716	220	57
Loans and Advances	255	317	314	1,010	613	528
Curr. Liability & Prov.	2,427	3,600	3,247	4,288	3,954	6,244
Account Payables	1,610	3,117	2,665	3,603	3,085	5,044
Other Current Liabilities	686	332	406	461	492	761
Provisions	131	151	176	224	377	439
Net Current Assets	875	1,258	1,255	2,140	1,668	2,083
Deferred Tax assets	29	34	48	52	75	93
Appl. of Funds	2,101	2,658	2,726	4,076	3,719	4,632

E: MOSL Estimates

Financials and Valuations

Ratios						
Y/E March	FY10	FY11	FY12	FY13	FY14	FY15
Basic (INR)						
EPS	17.0	10.8	1.2	5.6	3.0	28.6
Cash EPS	21.3	16.7	7.9	13.1	14.0	41.8
BV/Share	53.9	63.2	63.0	87.0	88.3	115.1
DPS	1.3	1.3	1.3	1.5	1.5	1.5
Payout (%)	8.7	13.6	122.7	31.2	59.4	6.3
Valuation (x)						
P/E					506.6	52.3
Cash P/E					106.8	35.8
P/BV					16.9	13.0
EV/Sales					3.8	2.7
EV/EBITDA					87.7	30.4
Dividend Yield (%)	0.1	0.1	0.1	0.1	0.1	0.1
FCF per share	-0.6	-17.4	1.9	-15.9	0.9	-7.9
Return Ratios (%)						
RoE	36.7	18.4	1.9	7.5	3.4	28.1
RoCE	32.4	20.2	4.4	8.3	6.1	26.7
Working Capital Ratios						
Asset Turnover (x)	3.1	2.9	2.9	2.3	3.0	3.4
Inventory (Days)	103	156	123	120	96	114
Debtor (Days)	51	55	62	59	57	61
Creditor (Days)	92	149	122	141	102	117
Working Cap. Turnover (Days)	34	59	56	56	48	47
Leverage Ratio (x)						
Current Ratio	1.4	1.3	1.4	1.5	1.4	1.3
Interest Cover Ratio	30.9	5.8	1.2	3.6	1.5	12.4
Debt/Equity	0.4	0.5	0.6	0.7	0.5	0.4

Standalone - Cash Flow Statement

Y/E March	FY10	FY11	FY12	FY13	FY14	FY15
OP/(Loss) before Tax	570	399	28	207	113	1,010
Depreciation	118	161	183	202	300	359
Interest & Finance Charges	-4	-3	86	43	42	37
Direct Taxes Paid	-85	-84	-41	-43	-66	-216
(Inc)/Dec in WC	-186	-606	-8	-395	-313	-677
CF from Operations	413	-133	248	14	76	514
Others	-42	44	14	664	504	33
CF from Operating incl EO	371	-89	262	677	580	547
(Inc)/Dec in FA	-388	-385	-210	-1,109	-556	-762
Free Cash Flow	-17	-474	52	-432	24	-215
Others	-37	24	3	-22	38	49
CF from Investments	-425	-361	-207	-1,131	-518	-712
Inc/(Dec) in Debt	124	246	53	1,234	-428	146
Interest Paid	-15	-20	-63	-52	-83	-96
Dividend Paid	0	-40	-40	-40	-47	-47
CF from Fin. Activity	109	187	-49	1,143	-559	3
Inc/Dec of Cash	55	-263	6	689	-496	-163
Opening Balance	229	284	21	26	716	220
Closing Balance	284	21	26	716	220	57

THEMATIC GALLERY

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Financials

Digital banking | Where's your money?

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Still... The paradox?
More of the same

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India Defense

A Pivotal Trip

Capacity augmentation and modernization

A dividend opportunity for private players

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Fast and furious

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Utilities / Metals

A new beginning

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Sector Update | March 2015

Logistics

Transformational times!

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Financials

Breaking free
Part 2 of 3

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Oil & Gas

Breaking free
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Thematic | March 2015

Healthcare

Fortified capabilities, sustained growth

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