

Johnson Controls-Hitachi AC (I) Ltd (JCHAC IN)

Brand re-positioning-led gains ahead

INDIA | CONSUMER ELECTRICALS | Initiating Coverage

We initiate coverage on JCH (Johnson Controls-Hitachi AC (I) Ltd) with a Buy recommendation and a target of Rs 2,700. Read this report to see how tremendous changes in the company will effect re-rating.

- → Two global giants joining hands for a common goal.
- → In RACs (room air conditioners), strengthening product offering in all segments and a better distribution network will lead to market-share gains.
- → VRF (variable refrigerant flow) is a game changer in commercial ACs. Its current market share is c.4%, but we expect c.10% by FY22.
- → Re-positioning its brand *Hitachi*, and the distribution network.
- → Global R&D will help it to move up in premium products (a high-margin segment), both in B2C and B2B, and also help it for increasing its service revenue.

RAC current market share is 12%; it expects to touch c.17% over 2-3 years. JCH, one of the market leaders in the RAC segment with 12% share and has been in India for more than 30 years. It wants a leading position in the industry over the next 2-3 years for which it plans to – (1) ramp up its presence in the mass segment, (2) move up the value chain in 2+ tonne ACs where not many players are present, (3) make aggressive and innovative product launches, (4) increase its distribution strength in south and west India, and (5) reinvent its brand *Hitachi*. We expect these efforts to result in 18%/16% volume/revenue CAGR over FY19-22.

Strengthening commercial air conditioners with VRF and PAC. In commercial ACs, JCH has seen only 6% CAGR over FY12-19, mainly due to telecom-sector doldrums. However, in products such as VRF, growth was 21% over FY13-19, mainly driven by new product launches such as Set-free Sigma Series and a stronger distribution network. We expect the high-margin VRF segment to grow by 19% over 2-3 years and gain market share. Additionally, with improvement in the telecom sector, when private investment cycle kick starts, and increasing customers in other segments, PAC (Packaged Air Conditioning) will see a recovery in volumes over 2-3 years. Overall, we expect revenue CAGR of 15% over FY19-

Strong manufacturing and R&D will help new launches, moving up the value chain, and increasing service revenue. JCH has one of the largest air conditioning manufacturing facilities in India with a strong R&D team, after it recently set up a Global Development Centre (GDC) in Kadi, Gujarat, at a capex of Rs 1.5bn; this global R&D centre for PAC and RAC will provide design and development services to JCH companies in South-East Asia, Middle East and Europe. Additionally, with an improvement in service and product, we expect AMC and service revenue to increase. Overall, we expect this segment to see a revenue CAGR of 15% over FY19-22.

Outlook and valuation

JCH's current stock price is trading at a FY21/22 PE of 37x/30x and EV/sales of 1.9x/1.7x. With its operational strengths, financial soundness, and strong global brand and distribution, we believe that JCH to trade at a premium valuation than its peers in the consumer appliances industry (Whirlpool, Voltas-CD, Blue star-CD — Average PE of 38x FY22). Historically, JCH has traded at 2 year average forward PE of 40x. We assign a 40x FY22 target PE to JCH's earnings to arrive at a per share value of Rs 2,700, implying a 33% upside. Measures taken will lead to robust cash-flow generation while improvement in the returns profile along with its strong global management team should support a rerating. Initiate coverage with a **BUY** rating.

20 January 2020

BUY

CMP Rs 2,037 TARGET RS 2,700 (+33%)

COMPANY DATA O/S SHARES (MN): 27 MARKET CAP (RSBN): 55 MARKET CAP (USDBN): 0.8 52 - WK HI/LO (RS): 2175 / 1475 LIQUIDITY 3M (USDMN): 0.5

SHARE HOLDING PATTERN, %

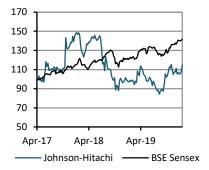
PAR VALUE (RS):

	Dec 19	Sep 19	Jun 19
PROMOTERS :	74.3	74.3	74.3
FII / NRI :	1.7	2.1	2.1
FI / MF :	15.0	14.7	14.4
NON PRO:	1.9	1.8	1.8
PUBLIC & OTHERS:	7.2	7.2	7.5

PRICE PERFORMANCE, %

	1MTH	3MTH	1YR
ABS	4.3	0.0	12.8
REL TO BSE	4.7	-5.6	-1.3

PRICE VS. SENSEX



Source: Phillip Capital India Research

KEY FINANCIALS

Rs mn	FY19	FY20E	FY21E
Net Sales	22,413	25,717	29,478
EBIDTA	1,792	2,106	2,526
Net Profit	859	1,187	1,482
EPS, Rs	32.0	44.3	55.3
PER, x	63.6	46.0	36.9
EV/EBIDTA, x	31.4	26.7	22.1
P/BV, x	8.9	7.5	6.3
ROE, %	14%	16%	17%

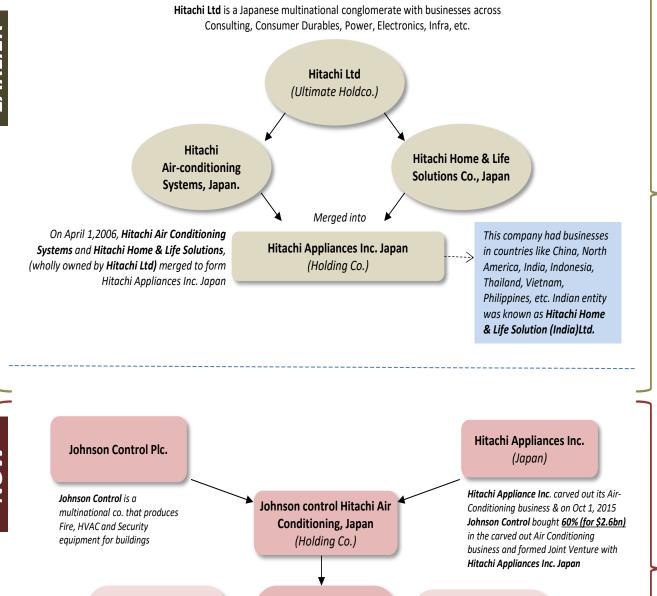
Source: PhillipCapital India Research Est.

Deepak Agarwal, Research Analyst (+ 9122 6246 4112) dagarwal@phillipcapital.in



Global brands joining hands

JCH was established on $\mathbf{1}^{\text{st}}$ October 2015 as a joint venture between Hitachi Appliances, Inc. (now Hitachi Global Life Solutions, Inc.) and Johnson Controls. Hitachi Appliances carved out and contributed its air-conditioning business to the JV, in which Johnson Controls acquired a 60% stake while Hitachi Global Life Solutions, Inc. continued to hold 40%.



With this JV, two 100-year-old corporate cultures and histories combined to create an exciting new company, serving customers with a diverse product portfolio in air conditioning

Johnson Control Hitachi Air

Conditioning, India

Johnson Control Hitachi Air

Conditioning, Vietnam

Johnson Control Hitachi Air

Conditioning, France

& in other countries like

Indonesia, Thailand,

Philippines, etc.

JCH global has presence in 25 countries.

Johnson Control Hitachi Air

Conditioning, North America.

Johnson Control Hitachi Air

Conditioning, China



What has the new management done?

Change in the team with a higher focus on the business

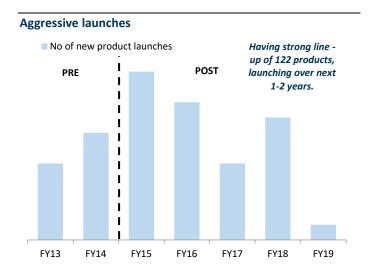
After the new MD has been in place, the team has changed and become more aggressive.. (Added c.120 engineers in GDC)

						00	,
Name of the Employee	Designation	Qualification	Age	Ехр.	Remuneration	Date of	Last employment held
			(Yrs)	(yrs)	(Rs mn)	joining	
Mr. Gurmeet Singh	Chairman & MD	PGDM	53	31	18.4	08-Feb-14	Orient Paper And Industries Ltd. (OEL)
Mr. Sanjay Kumar	Vice President	M.B.A, B.A	49	27	7.7	27-Jan-15	Tafe Motor And Tractors Ltd.
Mr. Masahiko Watanabe	Asst. Vice	B.E. (Mechanical)	50	27	7.6	18-Apr-17	Hitachi Johnson Controls Air Conditioning
	President						Inc. Japan
Mr. Naoji Anjiki	Sr. Vice President	B.E.	61	39	9.5	05-Jun-17	Hitachi-Johnson Controls Air Conditioning
							Inc.
Mr. Rishi Mehta	CFO	M.Com, CA	40	17	8.2	08-Jan-18	Adient India Pvt. Ltd
Mr. Vikas Verma	Sr. Vice President	B.E.	49	20	7.6	27-Jan-18	Daikin Air conditioning India Private
							Limited
Mr. Jitendhar G S	Sr. Vice President	B.Tech	55	28	9.9	13-Mar-18	EAFT Technologies
Mr. Sanjeev Agarwal	Director-Sales	M.A.	56	33	7.5	20-Sep-18	L G Electronics

Source: Company, PhillipCapital India Research

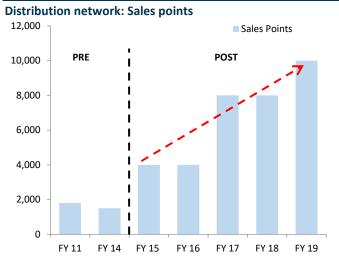
...has revived product lines in both RACs and commercial ACs

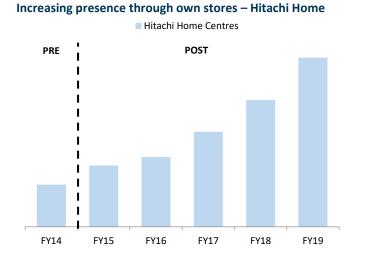
"Hitachi" has become from a Brand of few to brand of many



Increa	Increased focus on inverter RACs and VRFs					
Year	Segment	Product				
FY15	Residential AC	Residential AC 'Kashikoi ACE inverter' & Reidan Hot & Cold				
	Home Appliances MIJ refrigerator & side by side refrigerator					
FY16	Residential AC Heat pump inverter AC & wifi series 'Iconnect'					
	Commercial AC	Takumi condenser& screw chillers				
FY17	Residential	Launched new inverter AC series 'Neo' and 'Waza'				
	Commercial AC	Set free VRF modular type & centrifugal chiller				
	Home Appliance	s 4-door french bottom freezer refrigerator				
FY18	Residential	Expandable inverter AC				
	Commercial AC Wave cooled screw & direct drive centrifugal chil					
	Home Appliance	s Air purifiers				

Strengthened its distribution network, added touch points, increased its presence in the south & west India market and also added JCH exclusive stores

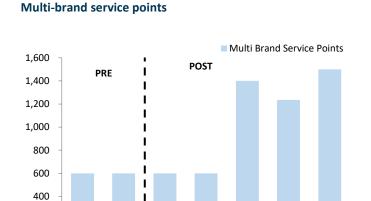




Source: Company, PhillipCapital India Research



Improved service quality with increasing no. of service outlets.



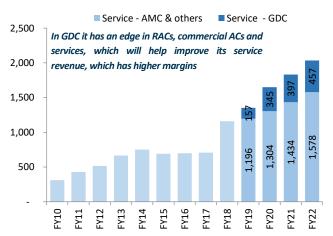
Source: Company, PhillipCapital India Research

FY14

FY13

200

FY19 has 6-month service revenue from GDC – as it started in H2FY19 (16% margin in FY19)



Profitability and market share are improving

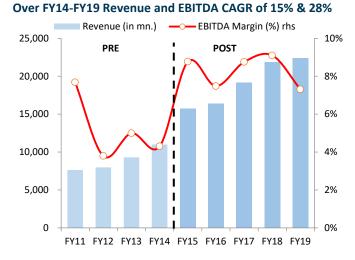
FY15

FY16

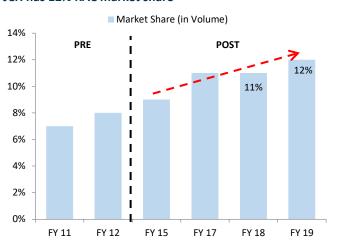
FY17

FY18

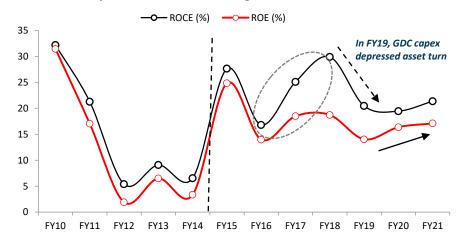
FY19



JCH has 12% RAC market share



JCH: Profitability boosted after new management took over



Improvement in return ratios was majorly because of improvement in profitability, increasing penetration, product mix and higher asset sweating

Source: Company, PhillipCapital India Research Estimates

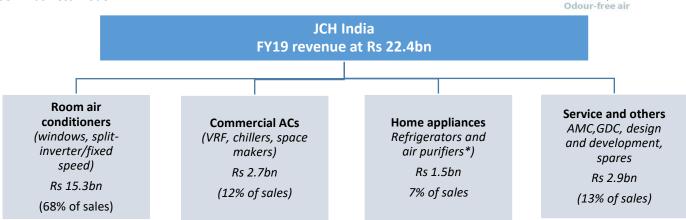


Business segments: All about AIR

A joint-venture between two global organizations, the US-based Johnson Controls and Japan-based Hitachi Appliances, Johnson Controls-Hitachi Air Conditioning India Limited (JCH) has emerged as one of the main players in the Indian air-conditioning market with a market share of 12% in RACs and significant presence in commercial ACs.



JCH: Business model



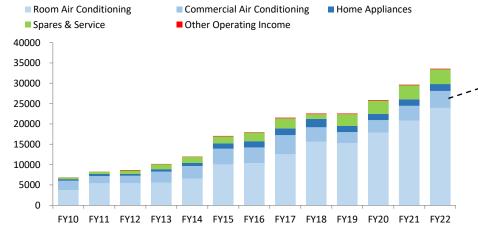
Source: Company, PhillipCapital India Research. Note: *Started from FY18# From FY19 - Global Development Centre (GDC) started

Leading in RACs; increasing its market share in commercial ACs

- JCH's products cater to the residential and commercial segments. It is a leading player in RACs with 12% share. Currently, 68% of its revenues come from RACs, it has stronghold in the premium segment and is increasing its presence in the mass segment.
- In commercial HVACs, it is gaining share backed by products such as VRF.
- It has a robust dealer network of over 10,000.
- The recall for brand Hitachi is strong.
- We expect its RAC segment to report a revenue CAGR of 16% over the next three
- It wants to become the leading HVAC player in India by 2021 and is looking at increasing both B2B and B2C market share.
- Its business is backed by its strong Global Development (R&D) Centre GDC. GDC support to global companies of JCH in product development and design will lead to higher service revenue, which is high-margin.

Its products have huge market potential, resulting in accelerated growth and rising market share





In home appliances, it has a premium range of refrigerators and air purifiers, which it sells through its RAC distribution network. It is currently importing these products

Source: Company, PhillipCapital India Research



Sees RAC market share at c.17% over 2-3 years from 12% now

JCH wants a leading position in RAC over the next 2-3 years for which it plans to – (1) ramp up its presence in the mass segment, (2) move up the value chain in 2+ tonne ACs where not many players are present, (3) make aggressive and innovative product launches, (4) increase its distribution strength in south and west India, and (5) reinvent its brand *Hitachi*. We expect these efforts to 18%/16% volume/revenue CAGR over FY19-22.

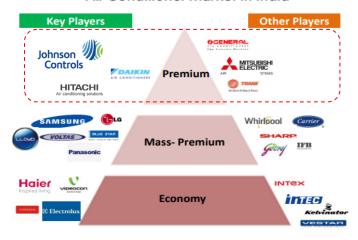
1. Increasing its presence in mass segment: JCH had positioned itself as a premium player in the RAC market, but is now entering the popular segment (mass premium), which is already crowded with established players. For this, it has introduced a new series of inverter RAC products and repositioned its brand for the mid-market, while maintaining its strength in the premium segment. We believe, Hitachi's strong premium brand recognition will help to gain market share in the mass segment. In its new avatar, it has launched several new products that are designed to cater to the needs of first-time buyers and mid-segment RAC buyers. It has c.40 new models lined up for the mass segment. We expect that with strong launches and because it is offering a premium product to the mass segment at lower prices, JCH will gain significant market share.

Now JCH has product for every segment of consumer.

Earlier, Hitachi products were available at premium of c.20% (from Industry leaders), with cost optimisation and product redesigning premium has reduced to c.4 %.

Hitachi is a premium brand...

Air Conditioner Market in India



...but is now entering the mass premium segment (3-star, 1.5-tonne inverter RACs)

			Cooling Capacity	
Companies	Rating	Condenser	Btu/Hr*	Price
Mitsubishi	4	Copper	18414	56690
Hitachi	3	Copper	18083	32990
O General	3	Blue Fin	18073	54875
Carrier	3	Copper	17988	29990
Blue Star	3	Copper	17732	36240
Daikin	3	Copper	17732	31611
LG	3	Alloy	17688	36990
Voltas	3	PFC	17221	31489

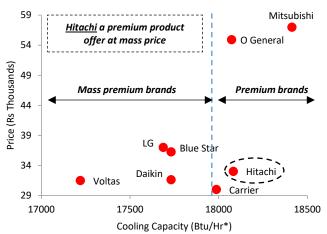
Source: Industry, PhillipCapital India Research

Note: Taken lowest prices available in respective brands in 3-star 1.5 tonne ACs.

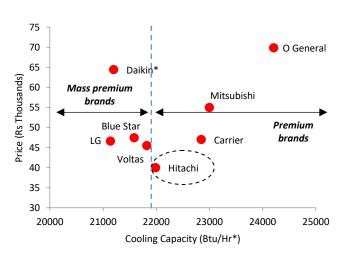
*Btu: British Thermal Unit *At 100% load

Hitachi's inverter AC is priced c.5% higher than industry leader and has higher cooling capacity and efficiency.

Brands in 1.5-tonne 3-star inverter ACs (prices and capacity)



Brands in 2-tonne 3-star inverter ACs



Source: Industry, PhillipCapital India Research

Over the last two years, JCH has reduced its prices in RACs based on improvement in manufacturing capability and internal cost controls. This move has helped it to move into the mass segment and attract more customers.



2. <u>Aggressive innovative product launches:</u> It is continuously focusing on aggressive new launches in inverter ACs and has launched many new products in this range, designed for the first-time buyer and mid segment. This has helped it to increase its presence in the mass-premium segment. JCH has c.122 models (35% in 5 star & 72% in inverter) for this calendar year.

New product launches in RACs; increased focus on inverter ACs

PRE POST Having strong line of 122 products, launching in next 1 years. FY13 FY14 FY15 FY16 FY17 FY18 FY19

Key new product launches over the last four years

Year	Product	Features
FY16	Kaze Hot & Cold Inverter ACs	Functions of heating and cooling
FY17	Neo Series Inverter ACs	New range of Inverter ACs
FY18	Merai Expandable Inverter	Expandable inverter ACs
FY19	Kashikoi Expandable ACs	Expandable AC in Kashikoi ACs
FY20	5 Star Expandable ACs	5 Star expandable inverter ACs

Key innovative technology gives it an edge over other brands

Technologies in JCH ACs	Functions
iSee and iSense	Cools according to the number of people, shape of the room, etc.
iClean Technology	Automated cleaning function
Auto humid control	Adjusts cooling when it detects high humidity
Hot and cold AC	Built-in heater
Wifi connect	Connectivity with smart phones
4-way swing	It blows air in four directions
Anti-corrosive fin	Long-lasting fin.

3. Moving up in the value chain (higher capacity and inverter ACs): JCH is aggressively improving its product offering by adding products in the upper segments of RACs and in inverter ACs. It is strong in the 2-tonne category and plans to enter higher-than-2-tonne categories too, where it will compete with Mitsubishi, Daikin, and O-General. According to our channel checks, JCH will launch these higher tonnage capacities (c.3.5 tonnes) at competitive prices.

Improving its presence in premium RACs

Tonnage	Mitsubishi	O-General	Hitachi	Daikin
2-2.1	3	2	10	3
2.2-2.5	1	1	- ;	2
3-3.5	-	1		-

[#] Currently company is not having presence in 2-tonne RACs.

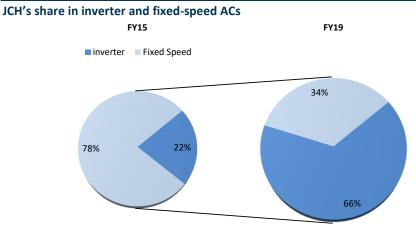
In 2-tonne RACs, JCH's pricing is aggressive

					Cooling Cap.	
Companies	Model No.	Rating	Tonnage	Condenser	Btu/Hr*	Price
<u>Hitachi</u>	RM0322HCD0	<u>3</u>	<u>2</u>	<u>Copper</u>	21988	<u>39990</u>
O General	ASGG24CLCA	3	2	Copper	24211	69859
Voltas	243CZ0	3	2	Copper	21824	45493
LG	KS-Q24ENXA	3	2	Copper	21142	46622
Blue Star	FS3224YATU	3	2	Copper	21585	47440
Daikin*	FTX71TV16	3	1.8	Cooper	21200	64442
Carrier	CAI24DN3R39F0	3	2	Copper	22847	47015
Mitsubishi	SRK25CSS-S6	3	2.2	Copper	26000	57899

^{*} Daikin Tonnage is 1.8T

Source: Industry, PhillipCapital India Research

JCH has also seen a significant shift to inverter ACs from fixed-speed ones. The share of inverter ACs increased to 66% in FY19 from 22% in FY15, which resulted in Hitachi moving into the league of top players in inverter split ACs. It now offers the best products at a mass prices, which has helped it to establish its position.



Further company is increasing its presence in inverter RAC, expect it to become 90% over next 2-3 years.

Source: Industry, PhillipCapital (India) Research

4. Extending its branch and distribution network

Hitachi is one of India's oldest and most reputed brands with a strong recall among consumers. It enjoys strong brand equity with a pan-India distribution network of 10,000 touch points and a significant presence in the B2B market. To strengthen its presence in RACs, JCH added c.4,000 selling points in Tier-2 and 3 cities over the last two years, introduced a new series of inverter-driven RACs and repositioned the brand into the mid-market while maintaining its strength in the premium segment.

JCH is also selling its products through its own e-commerce portal **buy.hitachiaircon.in** > **e-shop** as well as through other leading online marketplaces (Amazon, Flipkart, Snapdeal). It is aggressively focussing on advertising through TV, print, hoardings, and other media. It is more focused on in-shop branding (offline branding) as it is more cost efficient.

Promoted its inverter RAC with the campaign "Every Home Deserves a Hitachi Inverter AC" – which it pushed through multiple mediums such as TV, print, outdoor and digital media. It has also used distribution channels to reach various corners of the country

Some of its key advertisements

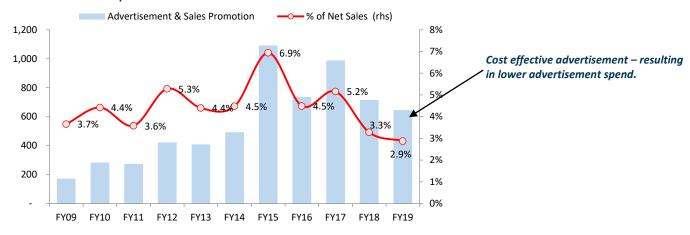


Source: Company, PhillipCapital (India) Research

JCH has taken significant measures to ensure consistency in product quality, distribution, accounts receivables, and customer service, which has led to business ramping up in its focus markets. Currently, it is spending about 3% of sales in brand building; we believe advertisement spend will remain at 3.0-3.5% over the next 3-4 years. Awareness for its products in tier-3 and 4 cities will increase with greater advertisements in that geography.





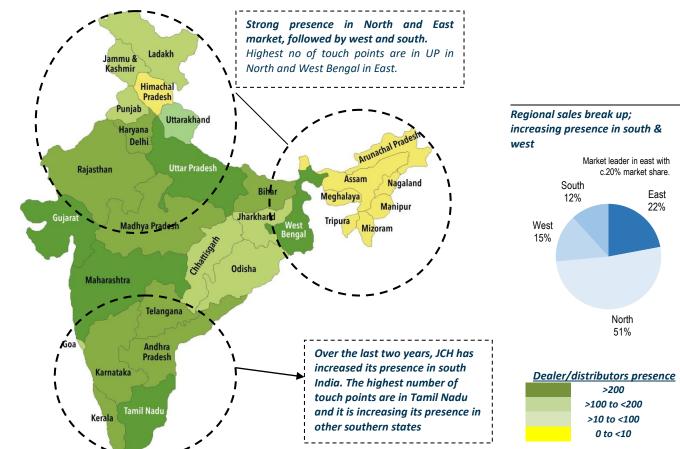


Source: Company, PhillipCapital India Research

Its robust B2C sales network is supported by a strong team of more than 100 members. Currently, it has c.10,000 selling points across 1,350 cities and a strong presence in north and east India markets. In fact, we believe that these two markets contribute c.70% of its RAC sales. Over the last two years, it has focussed on increasing its presence in the south market by adding touch points and increasing its presence in modern trade. It has also increased its own stores – *Hitachi Homes*. We believe that with continued investments into brand promotions in local languages, improving brand recall, and fostering channel advocacy, JCH will make significant progress in improving its presence in south India.

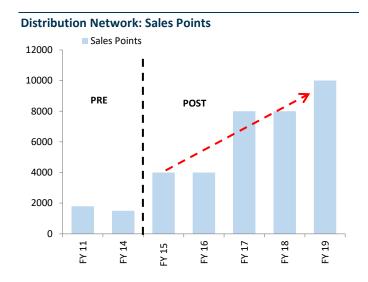
Jchi increasing its presence in export markets, currently c.3 %, expects it to increase c.5% over next 1-2 years as adding geographies.

India MAP: JCH distribution



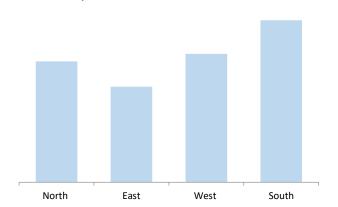
Source: Industry, PhillipCapital (India) Research





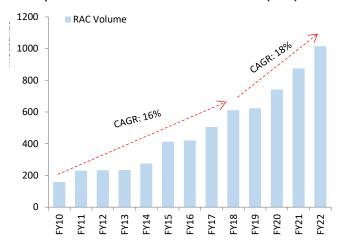
Stronger in north and east; increasing its presence in south by adding more touch points

Zone wise dealers/distributors

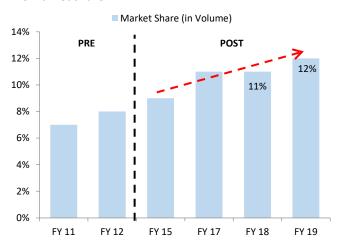


With productive initiatives and regular investments in new technology, JCH will emerge as a leading RAC player in industry. We expect that with product launches, channel strengthening, repositioning its brand, it will achieve a volume CAGR of 18% over the next three years, which will help to improve its market share to c.17% in FY24 from 12% currently.

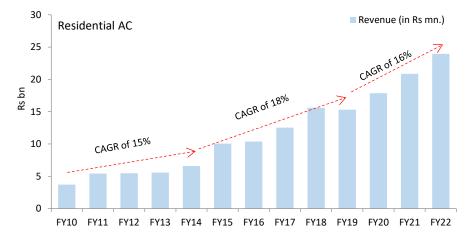
We expect volume CAGR of 18% over FY19-22 ('000)



RAC market share



JCH: RAC - Revenue CAGR of 16% over FY19-FY22



Company expects to grow 6% to 7% higher than RAC industry.

Source: Company, PhillipCapital India Research



Increasing presence in Commercial air conditioners

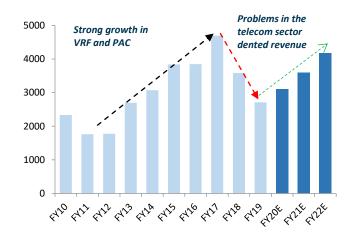
In commercial ACs, JCH's growth was only 6% over FY12-19, mainly dented by the telecom sector. However, in products like Variable Refrigerant Flow System (VRF), growth was 21% in FY13-19, mainly driven by new product launches and a stronger distribution network. It was able to nurture and add loyal channel partners through exclusive programs such as 'Xpert Lounge' and by establishing training centres, called Engineering Excellence Centres (EECs) in the four corners of India. It used various exhibitions, seminars, and meetings to promote its newly launch products such as Set-free sigma Series - which is energy efficient, easy to install and requires low maintenance.

Hitachi aspires to become the #1 HVAC company in India by 2021; this is complemented by its desire to enhance its market share in B2C and B2B segments

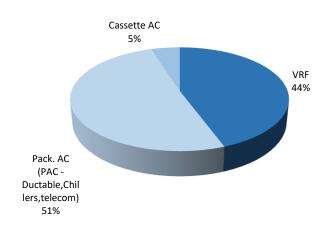
Adoption of eco-friendly, energy efficient, design-flexible and space saving technology is the key USP of the set-free sigma series.

Strong growth in VRF and cassette AC and recovery in the telecom sector will lead to growth in commercial ACs

Revenue from commercial ACs

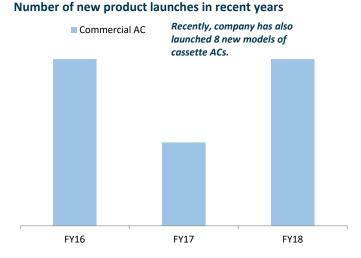


Revenue break-up by product (FY19)



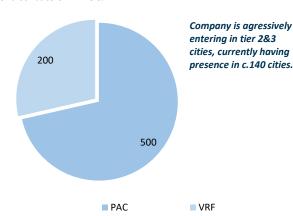
Source: Company, PhillipCapital India Research Estimates

Strengthening product and distribution of commercial ACs



Distribution network of commercial ACs

No of distributors in PAC & VRF



Source: Company, PhillipCapital India Research Estimates

JCH has partnered with more than 500 distributors in the PAC (Packaged air conditioning) segment and more than 200 distributors in the VRF segments to enhance its B2B presence in more than 140 cities across India.







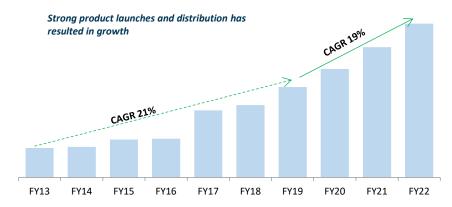


Source: Industry, PhillipCapital (India) Research

VRF is a game-changer in commercial ACs

Variable Refrigerant Flow Systems (VRF) in India has been seeing healthy growth; expected CAGR of 15% over the next few years. The presence of VRF in the commercial and premium-residential market is rising. JHC's new Set free-sigma series boosted its VRF business, which resulted the segment to grow c.25% in FY19.

VRF has seen a strong growth of 21% over FY13-19; expected to grow at 19% over the next three years



Source: Company, PhillipCapital India Research Estimates

JHC has also taken various initiatives to promote the VRF category. It has launched new products and is committed to providing enhanced technology with energy efficiency. We expect VRF to see a strong growth of 19% over the next 2-3 years, which would help JHC to gain market share. Currently, Hitachi has a market share of c.4% in this segment, which we expect will grow to 10% over the next 4-5 years.

JCH: Set Free-Sigma VRF



SET FREE Kyosho (Top Flow



SET FREE Sigma (Top Flow)



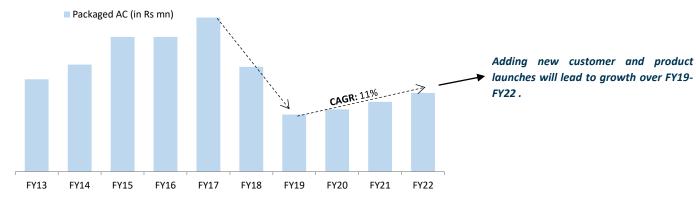
SET FREE Front Flow



PAC: Fall in telecom air conditioners dented revenue over the last 2-3 years

JCH continues to dominate this segment; it is the single-largest AC solutions provider for cooling requirement in telecom towers. However, stiff competition and stressed margins in the telecom industry have severely impacted this segment over the last 2-3 years. With a revival in this industry, when private investment-cycle kick starts, we expect this segment to start reporting growth.

PAC: Revenue mainly hurt by the telecom industry slowdown over FY17-19



Source: Company, PhillipCapital India Research Estimates

Key growth drivers of commercial ACs

The Indian HVAC market has been seeing considerable growth due to the rise in commercial offices and buildings, industries, hospitals, data centres, server rooms, and universities. Rising infrastructure spending also drove this growth with several infrastructure projects such as airports and metro railway expansions going on. All this will lead to strong growth in the HVAC industry.

New product launches leading to market share gains in VRF for JCH

Hitachi is one of the leading players in Ductable AC



Commercial AC compression: VRF will see higher growth mainly because of eco-friendly, energy efficient, design-flexible and space saving.

Туре	Variable Refrigerant Flow (VRF)	Ductable AC	Chillers
Features	One outdoor unit used for cooling capacity of 20 TR.		
	Can save energy by switching off on location where cooling not required.	Cooling is provided to all the location even where not required.	Cooling is provided to all the location even where not required.
Price Range (Rs per ton)	45,000-60,000	25,000-40,000	55,000-75,000
Installation & Maintenance Cost	Low	High	High
Power Consumption*	Low	High	High
Refrigerant	R410	R410	Water cooled (No Gas)
Durability (in Years)	10 years	10-12 years	10-12 years
Used in	Hotels, offices, restaurants and luxury apartments	Malls, showrooms, offices.	Malls, metro station.

^{*}Power saving from VRF can payback the up-gradation cost in 1.5 years when switching from ductables.

Source: Industry, PhillipCapital (India) Research



Strong manufacturing and R&D to lead innovative product launches

JCH has cutting-edge manufacturing facilities at Kadi - Gujarat. At 182,000 sqm, they are one of the largest manufacturing facilities in India. Its manufacturing unit holds the capacity to assemble under a single roof, a wide range of cooling products that cover both residential and commercial cooling. Over last 2-3 years, company has increased its utilization level by increasing its in-house manufacturing share (Currently, c.85% in-house). This has resulted in improving utilization levels to 80% +.

Higher focus on improving service quality, which has been weak

Along with offering good-quality products to customers, JHC has also given the utmost priority to good customer care and service, which was weak earlier according to our channel checks. JCH now continues investing in the training and up-gradation of technical skills to ensure growth stability.

It has undertaken multiple service-oriented initiatives such as discounted service presummer, a 'customer delight' program, and a free product check-up in the off season. These factors have helped JCH retain its client base and provide service to over 1.5mn customers. In FY19, the company undertook a major initiative called 'Special Task Force' to provide timely resolution to complicated and technical issues, and to handle escalated matters.

JCH is setting up a Global Development Centre (GDC) in India (in Kadi, Gujarat) at a total capex of Rs 1.5bn. This state-of-the-art facility will focus on RAC and PAC products for India, Southeast Asia, Middle East, and EU markets. This development centre will increase JCH's product development capabilities, particularly in commercial ACs and RAC systems.

In addition, a range of capabilities related to user experience, industrial design, simulation, controls, design quality, project management and engineering information systems will be established at this centre. From 1 October 2018, GDC has started providing design and development services related to air conditioning to group companies outside India. JCH will charge fees to group global companies for providing these services; in 6 months, it has earned a revenue of Rs 157mn and margin of 16%.

JCH (Plant and GDC)



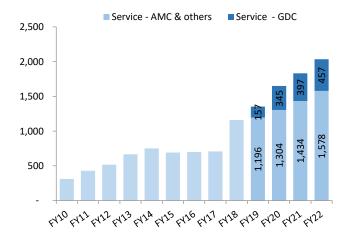
Labs will include state of-the-art research and testing facilities for measuring performance, reliability and electro-magnetic compliance

The facilities will allow for testing of ACs for global requirements in ambient temperatures ranging from -40 degrees C to + 60 degrees C

GDC: Design and development - A high EBITDA margin segment

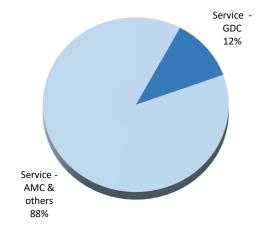


We expect service revenue CAGR of 15% over FY20-22



Source: Company, PhillipCapital India Research Estimates

Service and GDC revenue





JCH: Channel check

We spoke with JCH channel partners in Maharashtra, Rajasthan, Gujarat and Delhi. Here are the key takeaways:

North

- Over the last two years, its distribution network has grown significantly.
- In this region, Hitachi has c.15% market share.
- In the premium category, it is a market leader in volume terms.
- In Q3FY20, JHC has given discounts along the lines of its competitors.
- The price gap between Hitachi ACs and Voltas, which is the market leader in the mass category, has narrowed to Rs 2,500 from Rs 4,000 in the last two years

Key initiatives taken by JCHIL in FY19 are: Special Task Force, Free Service Camps and Customer Delight Program.

West

- Holds #3 position in the west markets; in the last few years, it has significantly gained market share here.
- It is launching newer SKUs with tonnages of 1.70/2.25/3.25.
- Newer models are being launched on similar lines as Mitsubishi.
- Hitachi is the only company in premium ACs that includes copper piping in its price. Mitsubishi and O-General AC prices do not include this.
- After the merger of Johnson Controls and Hitachi, JCH's after-sales service has significantly improved in the region.
- It has also worked on rationalising its SKUs from a total 65 earlier, these have come down to 25.
- Aggressive addition of dealers and touch points has taken place in the last few years; now, it is following a 'numeric' distribution strategy – which means it wants a presence in every multi-brands outlet in India. This, it believes, will ensure that its SKUs have a deeper reach.

South

- In the last three years, JCH's market share touched 8% from 6.5% earlier.
- Major growth in the region has come from 2015; it added newer touch points and improved its distribution network.
- In the region, chain stores and modern trade contributed c.70-80%, dealers/ distributors contributed 10-11%, and the remaining came from CSD and ecommerce.

Hitachi Increasing its Shelf space

Samsung products

Hitachi Products



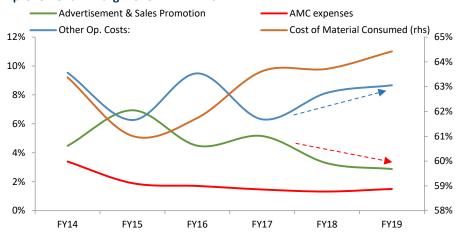
 $Source: Industry, Phillip Capital \ (India) \ Research$



Financials: Almost at a turnaround stage

Over FY14-19. JCH's revenue CAGR was 15% and EBITDA was 28%. Cost optimisation has resulted in 1% reduction of other operating exp. JCH-IN has focused on more cost effective advertisement, resulting in 1.6% reductions in advertisement cost but continuously gaining mindshare. Also, over the same period – AMC expenses has also witnessed 1.9% reduction. All the above factors have resulted in improvement in margins.

JCH-IN: Cost optimization and better utilization (higher asset sweating) resulted in improvement in margin over FY14-FY19

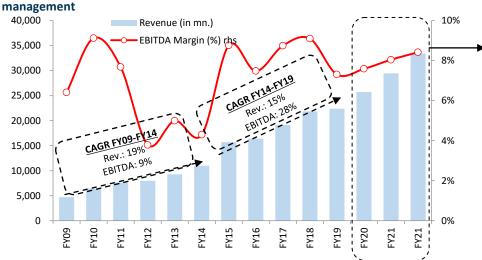


Source: Company, PhillipCapital India Research Estimates

We expect revenue CAGR at about 14% over FY19-22, with increasing product availability (channel sweating), improving product mix (new launches and moving up in premium products), and superior management focus on the businesses with a new management team in place. We also expect c.110bps improvement in margins, majorly driven by product mix between RAC and VRF and improvement in service revenue.

- In RAC & VRF, the launch of new products, improving product mix, and increasing penetration will lead to improvement in margins over the next 2-3 years.
- In services, better service quality, increasing service (AMC) and GDC revenue (revenue from JCH – global companies) will lead to margin improvement.

JCH revenue and EBITDA: Strong improvement in profitability after the new



Over FY19-22, all the hard work of the last 3-4 years will result in Revenue CAGR: 14% EBITDA CAGR: 20%

Source: Company, PhillipCapital India Research Estimates



Overall, for JCH, we expect revenue CAGR of 14% over the next 2-3 years majorly driven by: (1) increasing penetration, (2) channel sweating, and (3) new product launches (moving up in the entire product segment). With improvement in revenue mix and channel sweating, overall margins will improve by 110bps over the next 2-3 years.

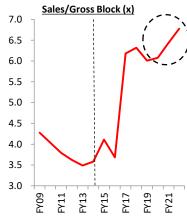
Improvement on all parameters will lead to higher FCF and higher return ratios

Improving return ratios with strong FCF generation: JCH currently has a total debt of Rs 1.9bn – increased from just Rs 127mn in FY18, mainly because of GDC capex; total investment in GDC is Rs 1.5bn. With improving product mix – moving up in premium products, both in RAC and PAC, and increasing service revenue, JCH should report a 110bps improvement in margins over FY19-22. Lower working capital requirement in the business – currently at about 52 days – should also help. This business should generate an FCF of Rs 1bn over FY21-22. JCHI IN will pay off its debt (term loans) in the next 2-3 years. With not much capex underway post GDC, asset-sweating (sales/gross block) should rise to 6.8x in FY22 from 6.0x in FY19.

After new management – higher asset sweating (Plant utilisation level has improved).

Sales/Gross Block (x)
7.0

ROCE should improve based on: (1) better asset/channel sweating, (2) improvement in margins, (3) higher free-cash generation leading to reduction in debt, and (4) better working capital days. We expect RoCE at 19.5%/21.4%/22.8% in FY20/21/22.



Source: Company, PhillipCapital (India) Research

DuPont analysis reveal re-rating triggers for JCHI-IN

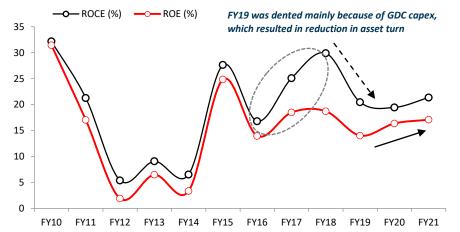
Over FY14-18, JCH's ROEs has improved mainly due to improvement in margin and asset-turnover, resulting in ROE improvement from single digits to 19% in FY18. In FY19, ROE was dented mainly due to capex for GDC, resulting in lower asset turnover – 4.09x in FY18, 4.85x in FY19. However, we expect JCH to move towards higher asset-turnover due to better business and product mix and improvement in margin profile.

- Improving margins (also because of GDC capex of c.Rs 1.5bn, which will generate better margins), utilisation, and improving distribution could lead to much better RoE – which would enable JCH to command richer valuations.
- Opportunities exist in the form of expansion of the dealer network in retail, new product launches, gaining market share, and higher service revenue.

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DuPont analysis	Mar-09	Mar-10	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22
Tax Burden (x)	0.8	0.8	0.7	1.2	0.7	0.7	0.8	0.7	0.7	0.7	0.6	0.8	0.8	0.8
Interest Burden (x)	0.91	0.97	0.84	0.22	0.74	0.49	0.92	0.87	0.96	0.99	0.98	0.97	0.98	0.99
EBIT Margin (%)	6.25	9.13	6.19	1.61	3.00	2.11	6.95	4.81	6.40	7.02	6.03	6.33	6.84	7.32
Asset Turnover (x)	3.01	3.09	3.22	3.34	2.48	3.27	3.47	3.37	3.90	4.09	2.85	2.89	2.95	2.92
Leverage Multiplier (x)	1	1	1	1	2	1	1	1	1	1	1	1	1	1
RoE (%)	20	31	17	2	6	3	25	14	18	19	14	16	17	17

ROCE and ROE will improve with better asset sweating and margins



Improvement in return ratios majorly because of better profitability + increasing penetration + better product mix + higher asset sweating

Source: Company, PhillipCapital India Research Estimates



Outlook and valuation: Unlocking...

Historically, JCH has traded at average 2 year forward PE of 40x. However, after its new avatar and change in the management, it has sharpened its focus on the business, resulting in market-share gains. Currently, JCH is trading at 30x PE and 1.6x market cap/sales vs. its peers' average of 38x PE and 2.5x market cap/sales.

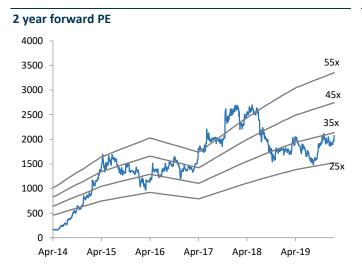
We believe that over the next two years, JCH will show a healthy improvement in margins and return ratios, majorly driven by: (1) RACs - increasing presence in all segments, moving up in premium products, (2) HVACs - VRFs gaining market share with new product launches, and (3) increasing penetration and better product mix. Consequently, this with help JCH to report a 110bps improvement in operating margins. With lower working-capital requirements, we expect FCF of Rs 1bn over FY21-22.

JCH's current stock price is trading at a FY21/22 PE of 37x/31x and EV/sales of 1.9x/1.7x. With its operational strengths, financial soundness, and strong global brand and distribution, we believe that JCH to trade at a premium valuation than its peers in the consumer appliances industry (Whirlpool, Voltas-CD, Blue star-CD -Average PE of 38x FY22). Historically, JCH has traded at average 2 year forward PE of 40x. We assign a 40x FY22 target PE to JCH's earnings to arrive at a per share value of Rs 2,700, implying a 33% upside. Measures taken will lead to robust cash-flow generation while improvement in the returns profile along with its strong global management team should support a rerating. Initiate coverage with a BUY rating.

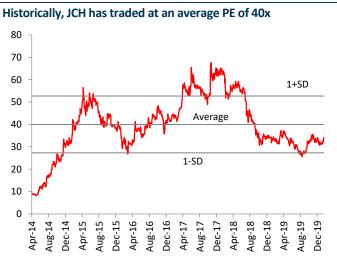
Valuation – JCH	
	FY22
1.) JCH	
PAT (Rs mn) – FY22	1,809
PE (x)	40
TP - Comp. (Rs)	2700
Upside (%)	33%

Source: PhillipCapital India Research Estimates

Our target price for JCH comes to Rs 2700, implying 33% upside. We initiate coverage with a BUY recommendation.









Consumer Appliances – Peer Comparison

Financials	;													
	Reco	Mcap	_	Revenue			EBITDA				OPM %			
Companies		(Rs bn.)	FY19	FY20	FY21	FY22	FY19	FY20	FY21	FY22	FY19	FY20	FY21	FY22
Blue Star	NR	82618	52348	59097	66987	75481	3712	4036	4942	5673	7.1%	6.8%	7.4%	7.5%
Havells	SELL	399606	100576	108558	123586	141083	13197	12698	15783	18944	13.1%	11.7%	12.8%	13.4%
JCH-IN	BUY	56531	22413	25717	29478	33424	1792	2106	2526	2969	8.0%	8.2%	8.6%	8.9%
Voltas	NEU	233290	71241	81969	92369	103886	6117	7848	8939	10031	8.6%	9.6%	9.7%	9.7%
Whirlpool	NR	316456	53977	63441	72446	82458	7468.7	7948	9385	10651	13.8%	12.5%	13.0%	12.9%

Kev	/R	at	ios

P/E				EV/EBITDA				ROE				
Companies	FY19	FY20	FY21	FY22	FY19	FY20	FY21	FY22	FY19	FY20	FY21	FY22
Blue Star	43.8	35.1	28.6	24.0	24.7	20.8	17.0	14.8	22.8	24.7	26.0	27.03
Havells	50.9	51.6	40.2	32.9	33.3	33.3	33.3	33.3	19.8	17.6	20.3	21.8
JCH-IN	65.5	47.5	38.0	31.1	32.3	32.3	32.3	32.3	14.0	16.4	17.1	17.4
Voltas	43.4	35.3	30.0	26.9	34.1	26.1	22.9	20.2	13.0	14.4	15.1	15.0
Whirlpool	75.7	53.7	45.4	38.4	40.8	36.5	30.9	27.2	22.8	24.7	26.0	27.0

Source: Company, PhillipCapital India Research Estimates

Key risk

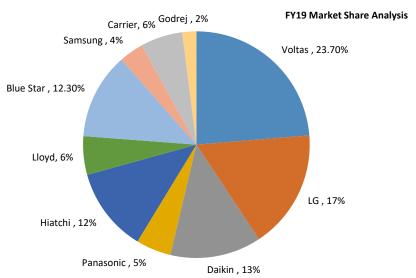
Raw material prices: Any sharp increase or decrease in raw material prices - copper and aluminium – would directly impact Hitachi's margins.

Competition: Increasing global and domestic brands in the AC market will result in increasing competition; may impact margins.

Competitive landscape:

Over last 10 years, RAC Industry has witnessed aggressive competitive form global and domestic brands. Market leader in the industry with significant market share of c.23% (Voltas), followed by LG Electronics. No 3 position has tough competition between Hitachi, Daikin and Blue Star.

RAC Industry market Share, JCH has 12% market Share.



Source: Company, PhillipCapital India Research Estimates

(Rs mn) Revenue FY15 FY16 FY17 FY18 FY19 EBITDA FY15 FY16 FY17 FY18	1,29,898 1,30,997 1,45,510 1,58,855 1,56,590	3,88,681 4,59,506 5,28,245	12,377	Mistubishi 9,261	O General	Daikin	Hitachi	Whirlpool	Voltas	Blue Star
FY15 FY16 FY17 FY18 FY19 EBITDA FY15 FY16 FY17 FY18	1,30,997 1,45,510 1,58,855	4,59,506	-	9,261						
FY16 FY17 FY18 FY19 EBITDA FY15 FY16 FY17 FY18	1,30,997 1,45,510 1,58,855	4,59,506	-	9,261						
FY17 FY18 FY19 EBITDA FY15 FY16 FY17 FY18	1,45,510 1,58,855		15 017		9,765	19,846	15,728	32,938	51,831	32,089
FY18 FY19 EBITDA FY15 FY16 FY17 FY18	1,58,855	5,28,245	15,017	12,521	9,791	22,610	16,405	34,399	57,198	38,298
FY19 EBITDA FY15 FY16 FY17 FY18			21,568	13,868	10,736	28,404	19,173	39,408	60,328	41,096
EBITDA FY15 FY16 FY17 FY18	1,56,590	5,88,636	30,262	15,903	NA	30,817	21,854	48,319	64,044	43,030
FY15 FY16 FY17 FY18		7,06,277	NA	NA	NA	NA	22,413	53,977	71,241	47,837
FY16 FY17 FY18	40.070	22.044	(505)	6.1	2.527	004	4.070	2.242	4.400	4 007
FY17 FY18	13,272	22,044	(505)	61	2,607	801	1,379	3,313	4,100	1,837
FY18	14,486	43,937	(213)	373	1,515	1,081	1,227	3,835	4,330	2,142
	20,323 22,546	63,429 53,360	141 424	406 584	1,493 NA	1,834 2,822	1,678	4,888 5,600	5,791 6,736	2,339 2,465
FY19	22,742	21,324	NA	NA	NA NA	2,622 NA	1,989 1,638	6,422	6,117	3,204
	22,742	21,324	IVA	IVA	IVA	INA	1,038	0,422	0,117	3,204
OPM(%) FY15	10.2%	5.7%	-4.1%	0.7%	26.7%	4.0%	8.8%	10.1%	7.9%	5.7%
FY16	11.1%	9.6%	-4.1%	3.0%	15.5%	4.0%	7.5%	11.1%	7.5% 7.6%	5.6%
FY17	14.0%	12.0%	0.7%	2.9%	13.9%	6.5%	8.7%	12.4%	9.6%	5.7%
FY18	14.2%	9.1%	1.4%	3.7%	13.5% NA	9.2%	9.1%	11.6%	10.5%	5.7%
FY19	14.5%	3.0%	NA	NA	NA	NA	7.3%	11.9%	8.6%	6.7%
PAT (Rs mn)	2,0	3.0,3		\				11.5,0	2.070	2/0
FY15	8,422	13,985	(82)	25	2,598	522	778	2,105	3,843	1,525
FY16	8,783	30,104	282	176	1,577	546	500	2,400	3,871	1,269
FY17	12,698	41,562	117	233	1,615	978	813	3,105	5,175	1,120
FY18	14,542	37,127	236	364	NA	1,503	1,002	3,507	5,724	1,322
FY19	15,345	15,401	NA	NA	NA	NA	859	4,071	5,079	1,218
Gross Debt	,	·								
FY15	290	1,213	564	51	1,100	92	1,396	NA	1,221	3,319
FY16	1,442	1,069	476	9	2,047	87	1,328	NA	2,707	2,857
FY17	613	52,043	108	NA	958	68	595	NA	1,709	1,492
FY18	544	31,552	395	NA	NA	78	127	NA	1,423	3,193
FY19	641	29,506	NA	NA	NA	NA	1,896	NA	3,147	3,644
Cash (Rs mn)										
FY15	3,752	48,638	1,060	1,192	942	2,686	57	5,357	2,516	2,319
FY16	12,478	70,004	1,324	1,289	1,401	3,930	42	8,563	1,855	4,352
FY17	6,080	1,25,041	1,762	1,625	692	4,507	236	10,590	3,314	2,746
FY18	14,901	1,25,635	2,991	1,233	NA	4,575	358	9,819	2,837	2,763
FY19	29,442	87,865	NA	NA	NA	NA	299	10,610	3,211	2,737
OCF (Rs mn)										
FY15	8,502	12,172	187	623	(154)	3,466	547	2,999	3,105	1,922
FY16	11,459	(3,976)	(1)	NA	(786)	1,669	615	3,438	2,191	2,708
FY17	12,174	55,191	1,067	NA	340	1,339	1,716	3,836	4,281	1,290
FY18	18,162	10,113	285	NA	NA	2,399	972	3,842	3,253	(290)
FY19	14,210	(24,667)	NA	NA	NA	NA	(810)	4,025	1,677	1,522
Key Ratio:										
ROCE (%)			4 >							
FY15	63.1	34.5	(4.3)	1.7	141.6	6.7	27.6	37.0	15.9	19.3
FY16	46.6	46.4	16.4	8.4	56.2	10.3	16.8	34.9	12.9	18.5
FY17	80.8	36.3	3.7	11.8	87.9	18.1	25.1	35.8	16.2	16.6
FY18 FY19	74.8 51.9	31.8 17.9	3.4 NA	15.4 NA	NA NA	24.4	29.9 20.5	33.3 32.3	14.9	17.5 17.2
	51.9	17.9	NA	NA	NA	NA	20.5	32.3	14.3	17.3
ROE (%)	40.3	22.2	(0.0)	0.0	204.1	6.0	240	35.0	16.4	36.4
FY15 FY16	48.2 37.1	22.2	(8.0)	0.9 5.0	304.1	6.6 6.5	24.9	25.8 23.2	16.4 13.4	26.4
FY17	37.1 49.1	35.4 34.4	13.2 2.5	5.9 7.0	159.2 145.5	10.6	14.0 18.5	23.2	16.3	20.3 14.5
FY17 FY18	49.1 54.1	23.2	2.5 2.7	10.0	145.5 NA	14.4	18.5	23.7	15.4	14.5
FY19	40.6	8.3	Z.7 NA	NA	NA NA	NA	14.0	21.8	13.4	12.8
Valuation:	40.0	0.5	11/7	IVA	INA	11/1	14.0	21.1	13.0	12.0
PE (X)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FY20	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	47.5	52.3	35.3	34.9
FY21	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	38.0	43.6	30.0	28.5
FY22	NA NA	NA NA	NA	NA NA	NA NA	NA	31.1	37.5	26.9	23.9
EV/ EBITDA (X)	13/3	14/-(14/-1	IVA	13/3	14/3	51.1	37.3	20.5	25.5
FY20	NA	NA	NA	NA	NA	NA	19.5	36.5	26.1	20.8
20	NA NA	NA NA	NA	NA NA	NA	NA	21.4	30.9	22.9	17.0
FY21	14/7	NA NA	NA	NA NA	NA NA	NA	22.8	30.3	5	17.0

 $Source: Phillip Capital\ India\ Research\ Estimates$

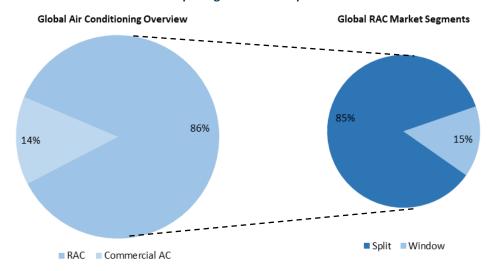


Annexure

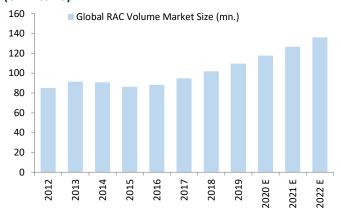
RAC – Industry

Global: RAC Industry Overview

Global Air Conditioner Market Break-up – Higher share of Split RAC



Global RAC industry has witnessed CAGR of 4% in Volume (CY12 to 19)



Over next 3 year industry is expect to grow at CAGR of 8%



India: RAC Industry Overview

The Indian RAC industry has witnessed robust CAGR of 11% in Volume (FY12 to 19)

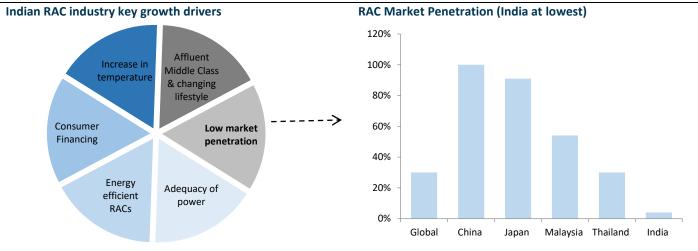


Over next 5 year industry is expect to grow at CAGR of 12%



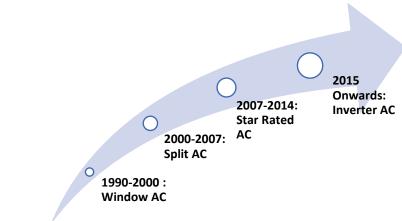
Source: Industry, PhillipCapital India Research



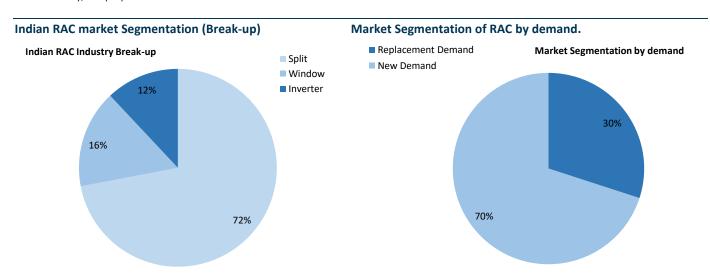


Source: Industry, PhillipCapital India Research.

Evolution of Room Air Conditioners in India.



Source: Industry, PhillipCapital India Research

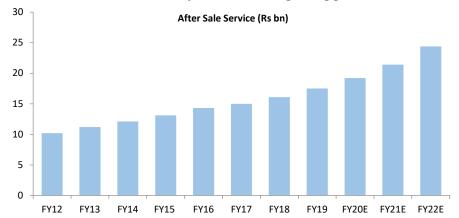


Source: Industry, PhillipCapital India Research.

Improving micro-economic conditions, increase in population, cheaper financing options, development of smarter cities, high potential for economic growth and greater product availability with increased electricity reach is likely to boost the demand for air conditioners. Currently, India is experiencing a continuous shift towards inverter ACs, which now contribute over 50% of the overall industry (wall-mounted split air conditioner sales).





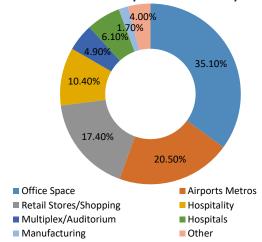


Source: Industry, PhillipCapital India Research

Indian HVAC

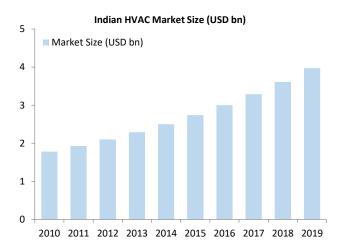
Indian HVAC market has been witnessing a considerable growth due to rise in commercial offices and buildings, industries, hospitals, data centres, server rooms, and universities. Further, rising infrastructure spending in the country is also driving the growth of the Indian HVAC market. Several infrastructure projects such airports and metro railway expansion projects are coming up across the country, leading to strong growth in the segment.

Indian HVAC market share by end-user industry



Source: Industry, PhillipCapital India Research

Indian HVAC market has witnessed CAGR of 9% over CY10 to 19.





Financial

Income Statement

E)/4.0	F)/20-	EV24 -	EV/22
			FY22e
22,413	25,717	29,478	33,424
2.6%	14.7%	14.6%	13.4%
0	0	0	0
14,439	16,439	18,695	21,031
2,742	3,172	3,666	4,190
1,652	1,899	2,146	2,425
1,942	2,254	2,599	2,963
1,638	1,952	2,372	2,815
-64.8%	19.2%	21.5%	18.7%
7.3%	7.6%	8.0%	8.4%
442	478	509	523
1,196	1,475	1,863	2,292
-71.0%	23.3%	26.3%	23.0%
5.3%	5.7%	6.3%	6.9%
27	46	41	34
154	154	154	154
1,324	1,583	1,976	2,412
464	396	494	603
859	1,187	1,482	1,809
0	0	0	0
859	1,187	1,482	1,809
-76.6%	38.1%	24.9%	22.1%
3.8%	4.6%	5.0%	5.4%
859	1,187	1,482	1,809
27	27	27	27
	0 14,439 2,742 1,652 1,942 1,638 -64.8% 7.3% 442 1,196 -71.0% 5.3% 27 154 1,324 464 859 0 859 -76.6% 3.8% 859	22,413 25,717 2.6% 14.7% 0 0 14,439 16,439 2,742 3,172 1,652 1,899 1,942 2,254 1,638 1,952 -64.8% 19.2% 7.3% 7.6% 442 478 1,196 1,475 -71.0% 23.3% 5.3% 5.7% 27 46 154 1,583 464 396 859 1,187 0 0 859 1,187 -76.6% 38.1% 3.8% 4.6% 859 1,187	22,413 25,717 29,478 2.6% 14.7% 14.6% 0 0 0 14,439 16,439 18,695 2,742 3,172 3,666 1,652 1,899 2,146 1,942 2,254 2,599 1,638 1,952 2,372 -64.8% 19.2% 21.5% 7.3% 7.6% 8.0% 442 478 509 1,196 1,475 1,863 -71.0% 23.3% 26.3% 5.3% 5.7% 6.3% 27 46 41 154 154 154 1,324 1,583 1,976 464 396 494 859 1,187 1,482 -76.6% 38.1% 24.9% 3.8% 4.6% 5.0% 859 1,187 1,482

Balance Sheet

Y/E Mar, Rs mn	FY19	FY20e	FY21e	FY22e
Cash & bank	299	243	326	673
Debtors	4,771	5,572	6,469	7,427
Inventory	5,555	5,941	6,776	7,652
Loans & advances	3,161	3,627	4,157	4,714
Other current assets	393	393	393	393
Total current assets	14,178	15,776	18,121	20,860
Investments	12	12	12	12
Gross fixed assets	3,731	4,231	4,581	4,931
Less: Depreciation	1,421	1,898	2,407	2,930
Add: Capital WIP	941	941	941	941
Net fixed assets	3,251	3,274	3,115	2,942
Total assets	17,442	19,062	21,248	23,814
Current liabilities	6,996	7,591	8,659	9,778
Provisions	2,586	2,586	2,586	2,586
Total current liabilities	9,582	10,177	11,245	12,364
Debt	1,896	1,796	1,496	1,196
Deferred Tax Liability	-166	-166	-166	-166
Total liabilities	11,312	11,807	12,575	13,394
Paid-up capital	272	272	272	272
Reserves & surplus	5,858	6,982	8,401	10,148
Shareholders' equity	6,130	7,254	8,673	10,420
Total equity & liabilities	17,442	19,062	21,248	23,814

Source: Company, PhillipCapital India Research Estimates

Cash Flow

Y/E Mar, Rs mn	FY19	FY20e	FY21e	FY22e
Pre-tax profit	1,324	1,583	1,976	2,412
Depreciation	442	478	509	523
Chg in working capital	-2,007	-1,058	-1,195	-1,272
Total tax paid	-514	-396	-494	-603
Other operating activities	-55	-108	-113	-121
Cash flow from operating activities	-810	499	683	940
Capital expenditure	-1,022	-500	-350	-350
Other investing activities	72	154	154	154
Cash flow from investing activities	-950	-346	-196	-196
Free cash flow	-1,760	153	487	744
Debt raised/(repaid)	0	-100	-300	-300
Dividend (incl. tax)	-49	-63	-63	-63
Interest Paid	-19	-46	-41	-34
Other financing activities	1,770	0	0	0
Cash flow from financing activities	1,701	-209	-404	-396
Net chg in cash	-59	-56	83	347

Valuation Ratios

	FY19	FY20e	FY21e	FY22e
Per Share data				
Dil. EPS (INR)	32.0	44.3	55.3	67.5
Book NAV/ FD share (INR)	228.6	270.5	323.4	388.5
CEPS (INR)	48.5	62.1	74.2	87.0
CFPS (INR)	(30.2)	18.6	25.5	35.0
DPS (INR)	1.5	2.0	2.0	2.0
Return ratios				
Return on assets (%)	10.9	13.4	14.8	15.8
Return on equity (%)	14.0	16.4	17.1	17.4
Return on capital employed (%)	20.5	19.5	21.4	22.8
Turnover ratios				
Sales/Total assets (x)	2.9	2.9	2.9	2.9
Sales/Net FA (x)	6.9	7.9	9.5	11.4
Working capital/Sales (x)	0.2	0.2	0.2	0.3
Receivable days	76.6	78.0	79.0	80.0
Inventory days	96.3	90.0	90.0	90.0
Loans, Adv (days)	50.8	50.8	50.8	50.8
Payable days	121.2	115.0	115.0	115.0
Working capital days	102.4	103.8	104.8	105.8
Liquidity ratios				
Current ratio (x)	1.5	1.6	1.6	1.7
Quick ratio (x)	0.9	1.0	1.0	1.1
Interest cover (x)	49.4	37.1	49.4	70.3
Total debt/Equity (%)	0.3	0.2	0.2	0.1
Net debt/Equity (%)	0.3	0.2	0.1	0.1
Valuation				
PER (x)	63.6	46.0	36.9	30.2
PEG (x) - y-o-y growth	0.1	0.0	0.0	0.0
Price/Book (x)	8.9	7.5	6.3	5.2
EV/Net sales (x)	2.5	2.2	1.9	1.7
EV/EBITDA (x)	31.4	26.7	22.1	18.6
EV/EBIT (x)	41.6	34.5	27.7	22.6

Rating Methodology

We rate stock on absolute return basis. Our target price for the stocks has an investment horizon of one year. We have different threshold for large market capitalisation stock and Mid/small market capitalisation stock. The categorisation of stock based on market capitalisation is as per the SEBI requirement.

Large cap stocks

Rating	Criteria	Definition
BUY	>= +10%	Target price is equal to or more than 10% of current market price
NEUTRAL	-10% > to < +10%	Target price is less than +10% but more than -10%
SELL	<= -10%	Target price is less than or equal to -10%.

Mid cap and Small cap stocks

Rating	Criteria	Definition
BUY	>= +15%	Target price is equal to or more than 15% of current market price
NEUTRAL	-15% > to < +15%	Target price is less than +15% but more than -15%
SELL	<= -15%	Target price is less than or equal to -15%.

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