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Lloyd Electric & Engineering Ltd

*Investor Presentation*

March 2012

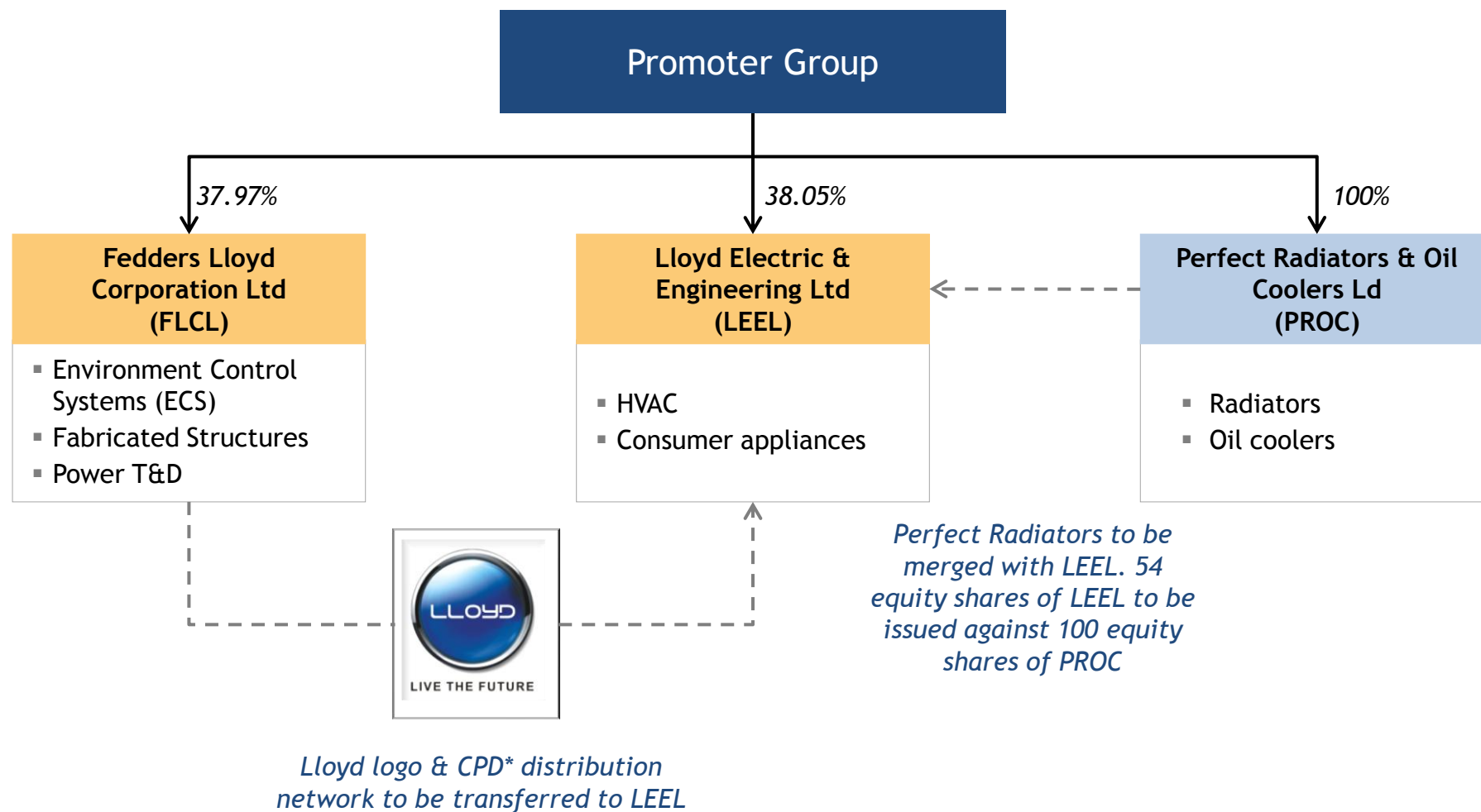


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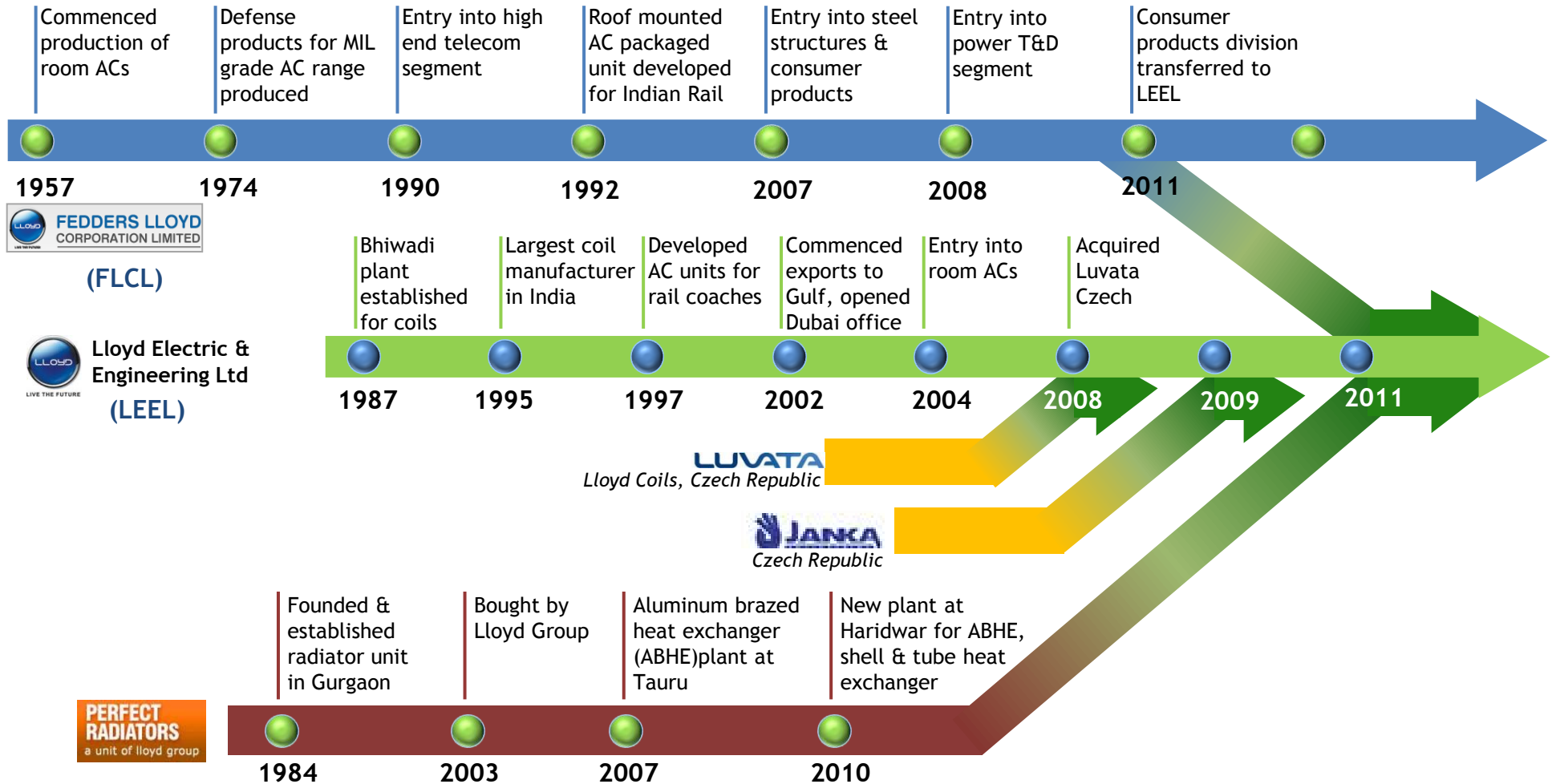


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## Group Overview



# Corporate History



*Focus on core strengths and consolidating for long term competitive advantage*



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## **Lloyd Electric & Engineering Ltd (LEEL)**

*Company Overview*

## Brief Introduction

- Promoted by promoters of Fedders Lloyd Corporation Ltd, leading HVAC group in India
- Listed on BSE in 1996
- Production capacity of over 1.2 mn coils & over 0.6 mn ACs annually
- ISO 9001 certified for HVAC products
- IRIS<sup>(1)</sup> certified for railway HVAC products
- International presence with wholly owned subsidiaries in Europe

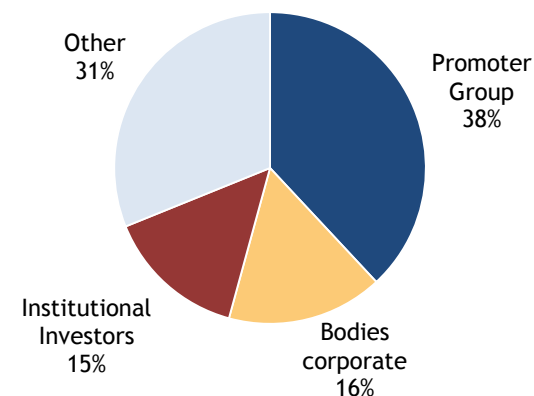
## Key Financials (standalone) (Rs mn)

	FY07	FY08	FY09	FY10	FY11
Revenue	4,966	6,699	5,879	6,795	7,836
EBITDA	661	818	501	731	823
PAT	430	527	204	343	361
Net worth	2,994	3,510	3,714	4,022	4,321
Net debt	61	826	1,411	1,735	2,703

## Key Products

- Heat exchangers
  - ⇒ Condensing & evaporating coils
  - ⇒ Sheet metal parts & components
  - ⇒ Industrial heat exchangers
- Air conditioning - contract manufacturing for other OEMs
  - ⇒ Window & split ACs
- Air conditioning - railway , metro, buses
- Consumer products (Lloyd branded)
  - ⇒ ACs, LCD/LED televisions

## Shareholding Pattern



## Key Products

### Heat Exchangers



### Air Conditioners (window, split, rail)



### Consumer Products



## Key Markets

### Air conditioning, Industrial, Auto, Refrigeration, Data centre



### OEMs, Railways, Metro Rail



### Retail Customers



*From Coils to Consumer - Present across value chain*



## Vertical integration

- Presence across value chain (from coils to brand) - better control on cost, low volatility of margins
- Hedge against cost/demand volatility in individual value chain elements

## Manufacturing experience for leading players

- Over 50 years of experience in HVAC business
- Adherence to highest standards of quality followed by global players due to long term contracting relationships
- Technologically at par with the best in the business

## Financial Benefits

- Dehradun, Kala Amb, Pantnagar & Haridwar plants enjoy tax holiday for 10 to 15 years
- Short term contracts protecting the company from commodity price fluctuations

## Technological edge

- Pioneer in PFC coils in India - high efficiency, low weight & low cost
- Capability to develop heat exchanging applications for nuclear power plants with acquisition of Janka Engineering

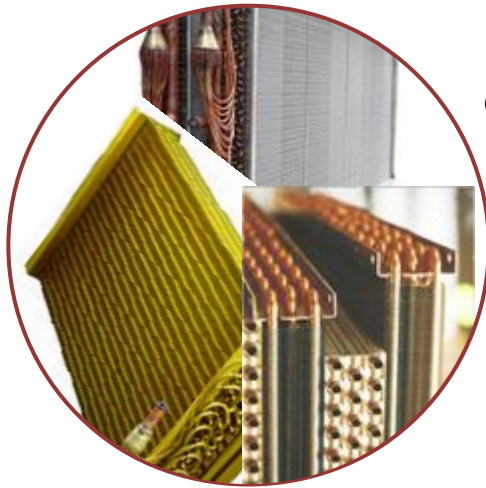
## Strong entry barriers

- Qualified Category I supplier for Indian Railways - 80% of the tenders awarded to Category I players
- IRIS qualified - will be able to bid for railway & metro projects internationally, first HVAC player in India with IRIS
- Strong consumer brand built by effective marketing campaign and history of selling consumer products

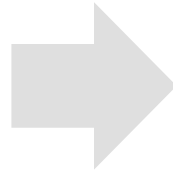
# Fully Integrated Across HVAC Value Chain



## Coils & Heat Exchangers



*Consumed in AC manufacturing*



## AC manufacturing



*Branded as Lloyd products*



## Branded AC/consumer products sales & marketing



Sale

Air-conditioning & refrigeration product manufacturers

Sale

Other OEMs

Sale

Retail customers



Better control on cost



Reduced volatility in margins

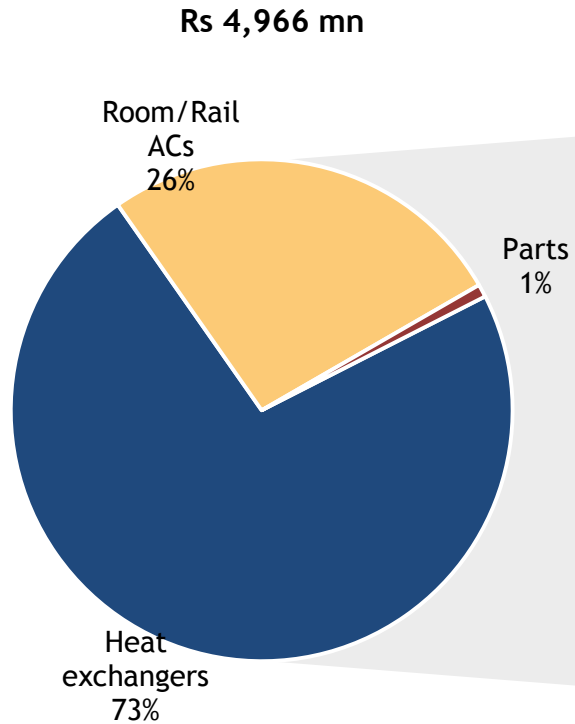


Hedge against demand volatility

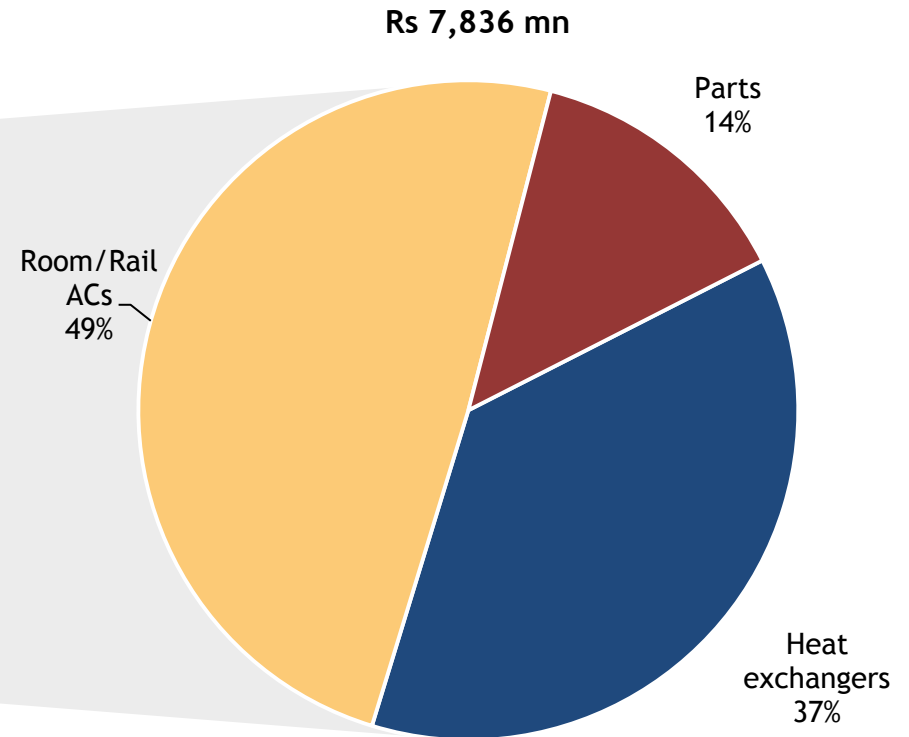
# LEEL - Share of ACs Has Grown to 50% in FY11 vis-à-vis 26% in FY07



Product Mix (FY07)



Product Mix(FY11)



*Rising focus on end products by leveraging product capabilities*

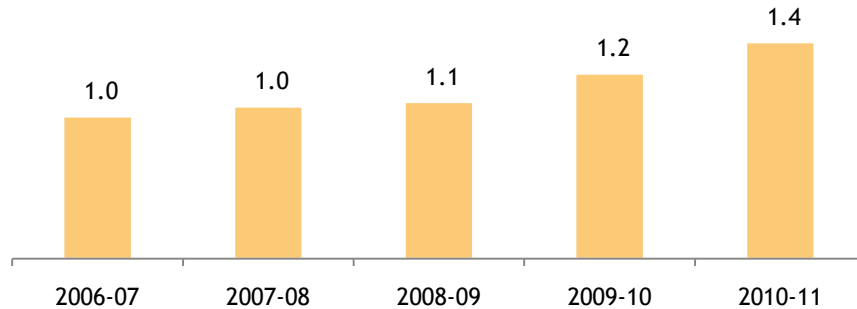
# Room AC Market Continues to Grow Rapidly



## Window AC Sales Have Been Growing Steadily...

(volume in mn units)

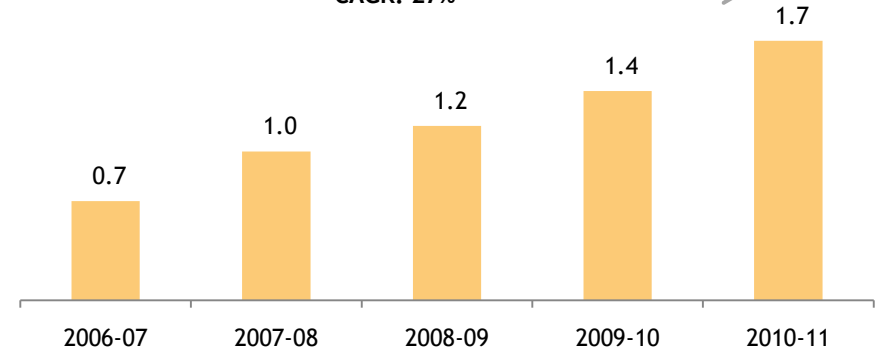
CAGR: 11%



## ...But Surpassed by Split AC Sales Growth

(volume in mn units)

CAGR: 27%

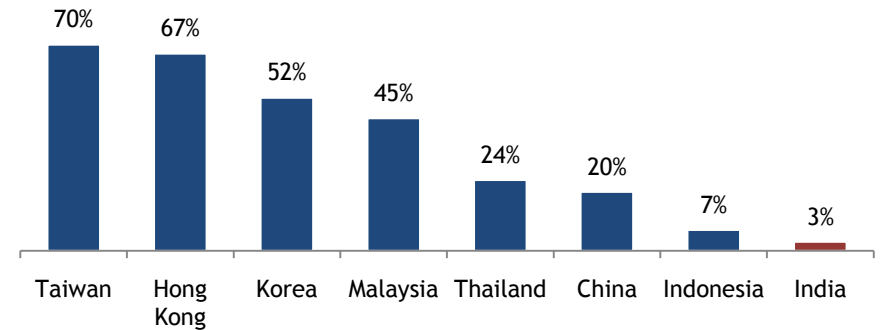


## Sustainable Growth Drivers

- Highly underpenetrated Indian household market
- Increasing affordability and financing options
- Increasing urbanization in tier II cities, improving power availability
- Robust growth in commercial segment
- Shift from being luxury product to being a necessary product
  - ⇒ Reduction of duty from 50% in 2002-03 to 10% currently

## Underpenetrated Indian Market vis-à-vis Other Asian Markets

(household penetration in %)



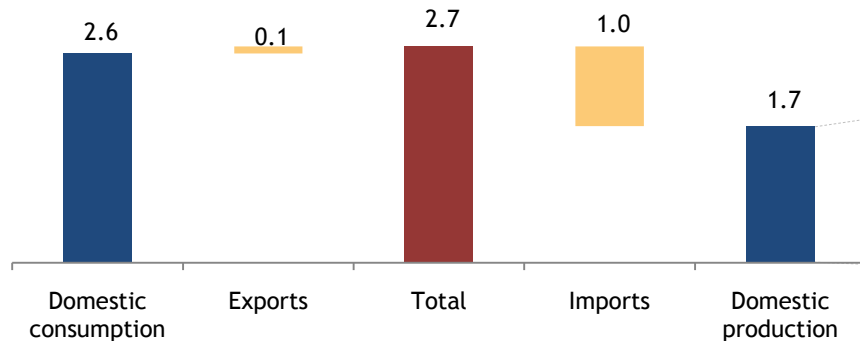
*Low penetration and rising affordability have been the key to rapid growth in the segment*

# Domestic Production Will Be Key to Servicing the Growing Indian Market



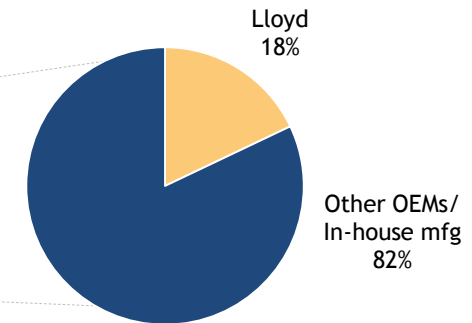
## Room AC Market in 2009-10

(volume in mn units)



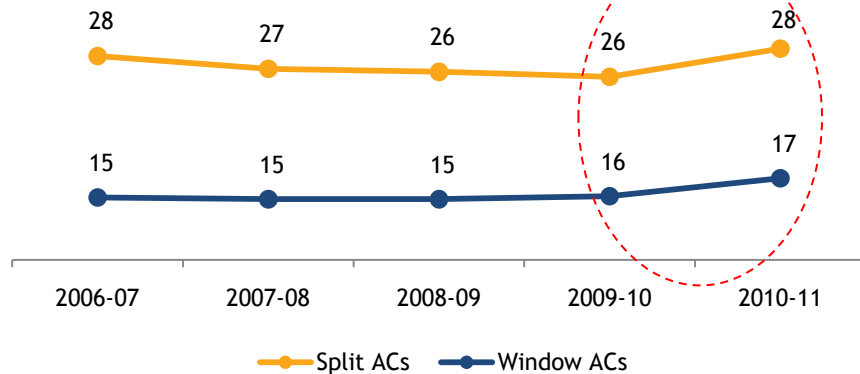
## LEEL Produced 18% of the ACs Produced in India in 2009-10

(share in %)



## With Limited Domestic Production, Prices Have Stiffened in 2011

(average prices in Rs '000 per unit)



## Business Models for AC Players in India

Captive manufacturing



Imports

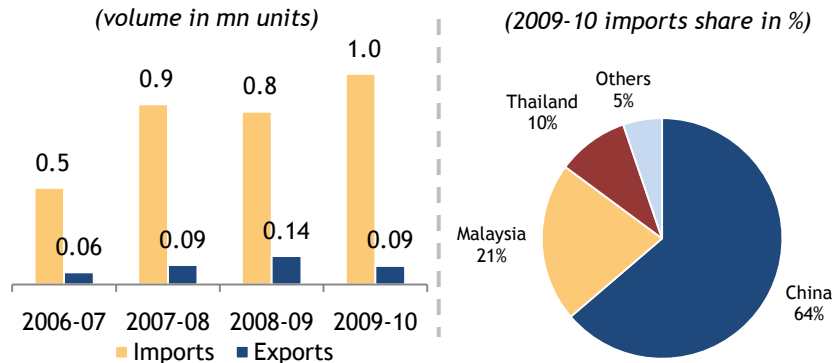


Outsourced manufacturing



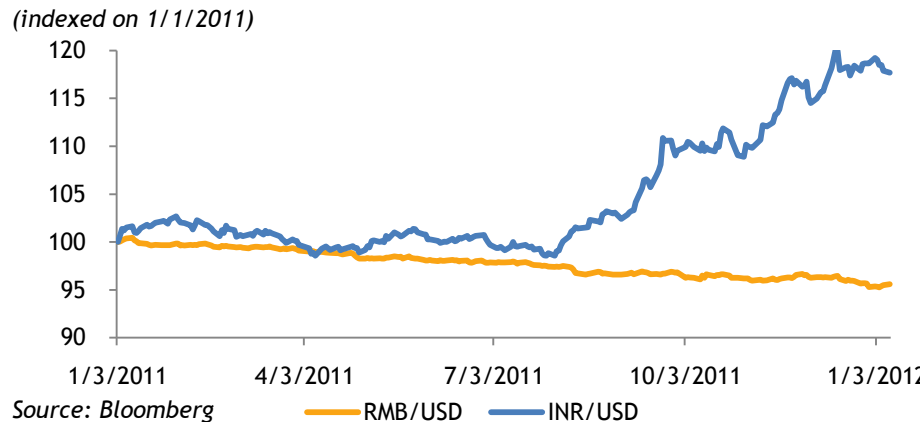
*LEEL's domestic production base acts as a key strength when other players relook at their manufacturing strategies*

## AC Imports Have Been Rising, Mostly from China



Source: Directorate General of Foreign Trade

## INR Has Depreciated Over 22% Relative to RMB in 2011

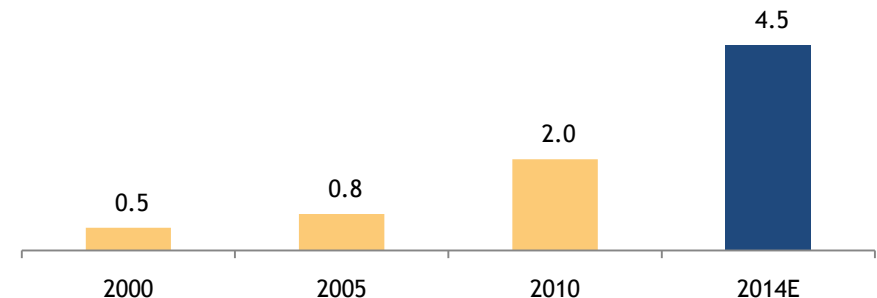


## India Increasingly Becoming More Competitive for Manufacturing

- Manufacturing labor cost has been rising in China
- Strengthening Yuan and weakening Rupee have made India relatively more competitive than China for AC manufacturing
- With FTAs, India is more competitive in exporting to South & South East Asian nations
- Players totally dependant on Chinese imports likely to commence sourcing from Indian manufacturers
- With increasing scale in India, economics expected to improve further

## Labor Cost in Chinese Manufacturing Has been Rising Consistently

(fully loaded factory worker wages in USD/hr)



Source: BCG

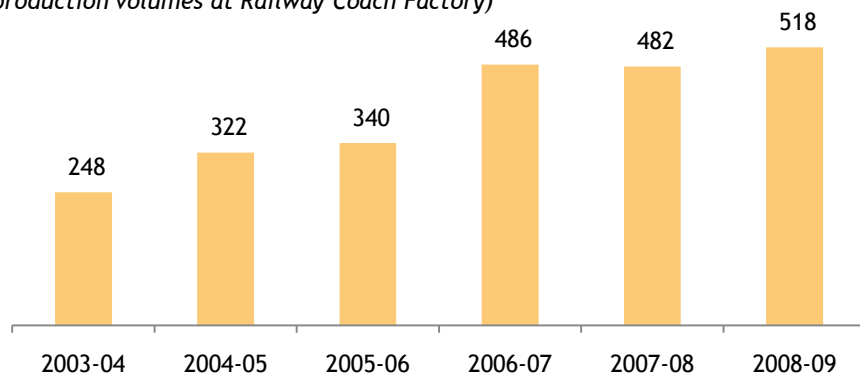
**LEEL has consistently grown in the midst of rising imports, positioned strongly as imports peak out**

## Key Growth Drivers

- Capacity augmentation by **India Railways**
  - ⇒ Targeted addition of 2,800 km , capex of Rs 200 Bn p.a.
  - ⇒ Line enhancement of 6,500km, capex of Rs 170 Bn p.a.
  - ⇒ New rail coach factory commissioned in Raebareili
- **Metro rail projects**
  - ⇒ Under construction metro projects in 8 cities
  - ⇒ 8 metro projects in pipeline
- **International markets** - with IRIS<sup>(1)</sup> certification, eligible to bid internationally

## RCF<sup>(2)</sup>, Kapoorthala Has Been Ramping Up AC Coach Production

(production volumes at Railway Coach Factory)



## Key Products

### Roof Mounted Packaged Unit (RMPU) for AC rail coaches



### Roof Mounted Packaged Unit (RMPU) for LHB coaches



### Roof Mounted Packaged Unit (RMPU) for metro rail



*With increasing coach production in India, RMPUs is a rapidly growing market*

(1) International Railway Industry Standards

(2) Rail Coach Factory

## Key Application Areas



Room Air Conditioners



Commercial Refrigeration



Automobile Air Conditioners



Precision Air Conditioners



Rail Air Conditioners



Industrial heat exchanger

## Key Products

- Condenser coils
- Evaporator coils
- Fin & tube heat exchangers
- Sheet metals parts & components

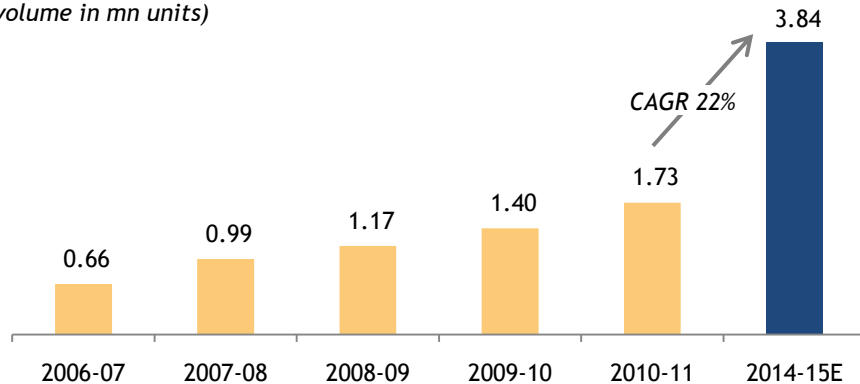
## Market Leadership

- Room ACs and refrigeration are fastest growing segments for coils
  - ⇒ Retail market is the primary driver for these segments
- LEEL is the leading player with largest market share in non-industrial heat exchangers
- Other key players include
  - ⇒ Advantec
  - ⇒ Spirotec



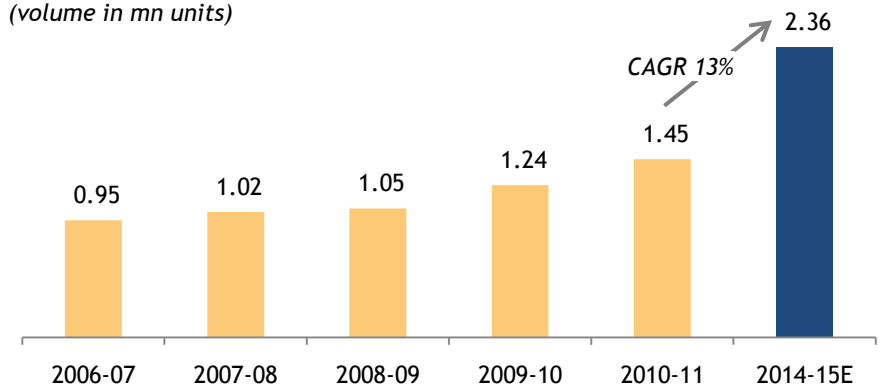
## Split AC Market Expected to Grow 22% Annually

(volume in mn units)



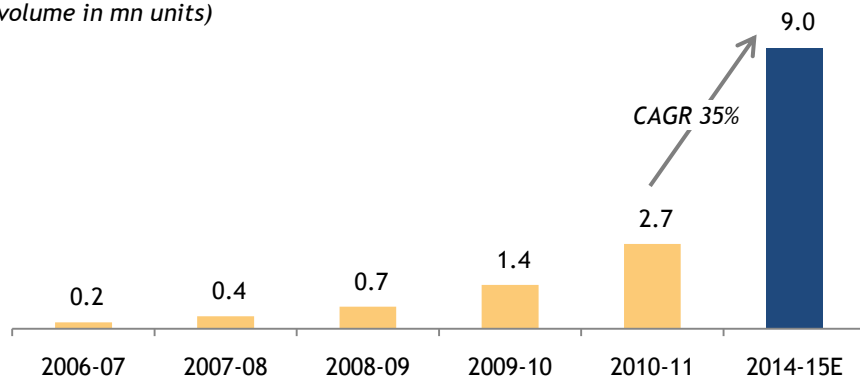
## Window AC Market Expected to Grow 13% Annually

(volume in mn units)



## LCD/LED TVs is the Fastest Growing Consumer Electronic

(volume in mn units)



## Key Growth Drivers for Consumer Electronics

- Rising affordability with rising per capita income
- Changing consumer preferences with increasing demand for lifestyle products
- Falling prices of consumer electronics
- Increasing urbanization
- Easy access to financing

*Consumer electronics is expected to be a high demand product category for the next few years*

## Introduction

- Effective from July 1, 2011, consumer products division of Fedders Lloyd transferred to Lloyd Electric
- Key products of CPD - window & split ACs and LCD/LED TVs
  - ⇒ Other products - tower & cassette ACs, clothes dryer, chest freezer & garment steamer
- Aggressive marketing campaign with celebrity brand ambassador

## Key Competitive Advantages

- Vertically integrated - cost control
- Rich product development experience, technologically at par with the best
- Significant capacity in India - better proximity to markets
- Leveraging brand across products
  - ⇒ Facilitated entry into LCD/LED TVs
- Strong brands with history of over 50 years

## Product Portfolio - High Growth Products



Window ACs



Split ACs



LCD/LED TVs

## Product Portfolio - Niche Consumer Products



Clothes dryer



Chest freezer



Garment steamer

*Poised for a long term play in consumer products with sustainable advantages*

## Differentiated Business Model

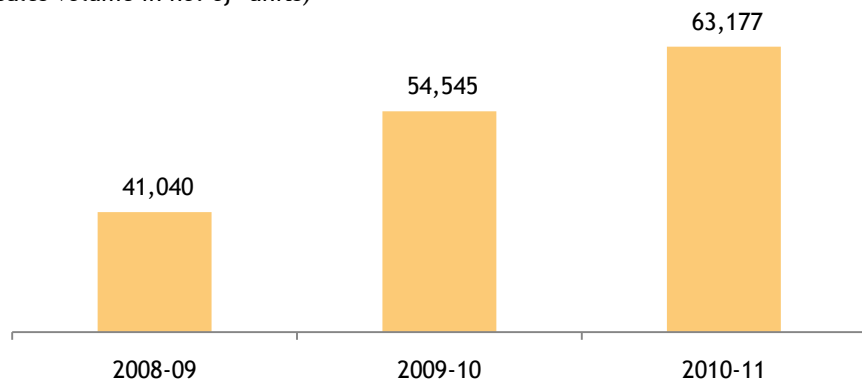
- Bouquet of high growth and niche products
- Active dealer management - unique 'Low Penetration - High Retention' business model where regional exclusivity is offered to dealers
- Higher margin for dealers vis-à-vis competition
- Tie up with large national retail chains along with regional retailers

## Marketing Strategy

- Aggressive marketing campaign with celebrity brand ambassador
- Comprehensive network of over 2,800 dealers nationwide
- Higher advertising spends with growing acceptance of the product in the market  
⇒ Rs 28 mn in 2008-09 to Rs 66 mn in 2010-11
- Extracting value of brand by entering new and niche product segments

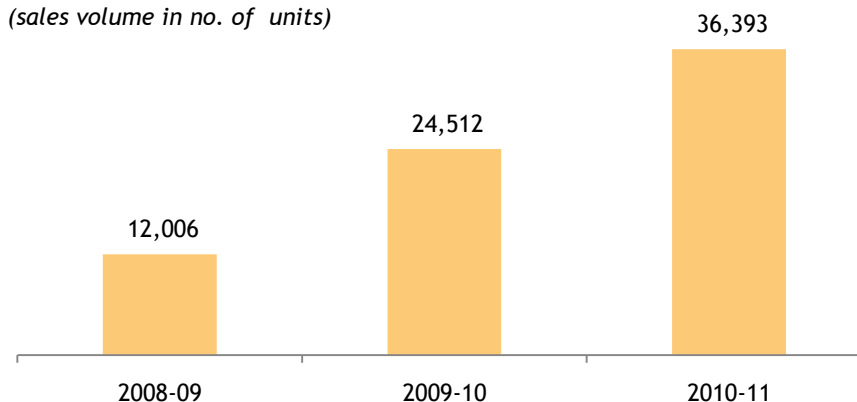
## Rapid Scale up in Sales of ACs in Last 2 Years...

(sales volume in no. of units)



## ...Accompanied by Expanding LCD/LED Sales

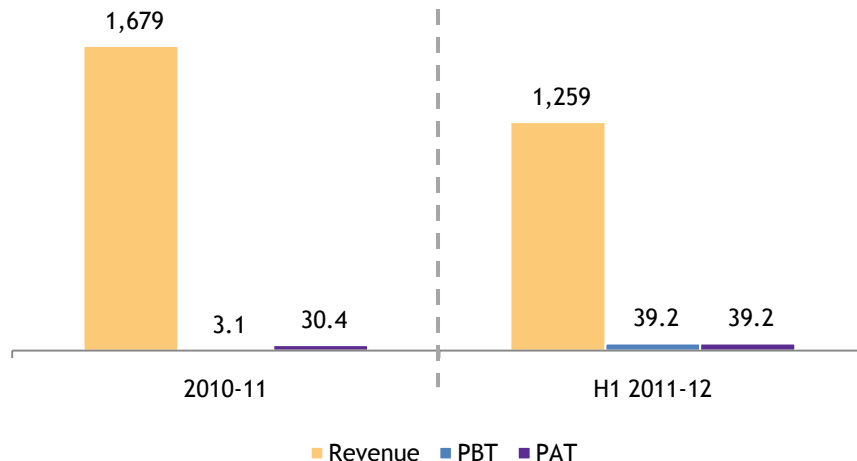
(sales volume in no. of units)



*With active marketing and differentiated strategy, the brand has made early inroads in the market*

## Overview

- Acquired from Luvata Group in May 2008, now 100% subsidiary of LEEL
- Manufacturing plant located in Prague, Czech Republic
  - ⇒ Sales offices in Lyon (France), Derby (UK), Essen (Germany)
- Market coverage across entire European region
  - ⇒ Key markets- France, Germany, Spain, Germany, UK, Slovakia
- Successfully transferred technology to Indian operations to cater to global client at multiple locations
- Key financials (Rs mn)<sup>(1)</sup>



## Product Portfolio

### Condenser coils for HVAC&R

*remote condensers, condensing units, close control AC, chillers, showcases, display cases, bottle coolers, milk tanks, transportation AC and refrigeration*



### Evaporator coils for HVAC&R

*close control AC, rooftops, air-handling units, fan-coils, ducted systems, air curtains and transportation AC, bottle coolers*



### Reversible coils

*heat pumps, dehumidifiers*



### Water & glycol coils

*unit heaters, fan coils, convectors, air handling units, ducted systems, air curtains and cold beams and glycol heat recuperation circuits*



### Special or industrial coils

*Oil coolers for hydraulic systems; water and liquid coolers for industry and power plants*



### Aluminum coils

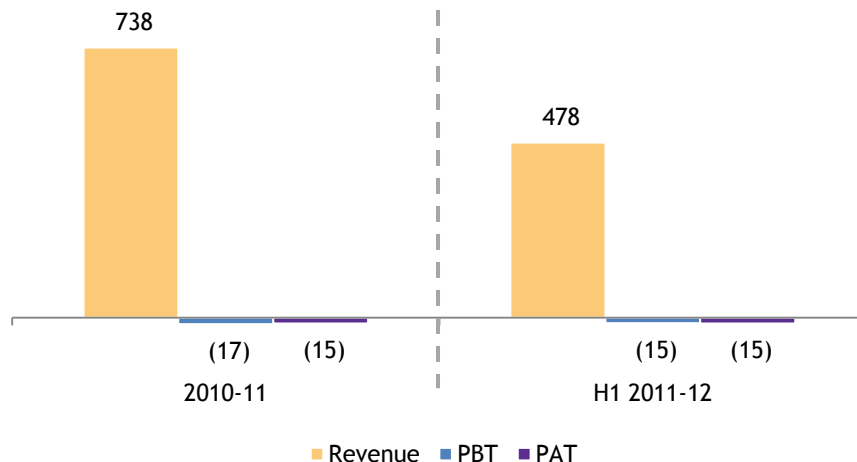
*lighter and cheaper substitute to copper coils*



*Gives access to international markets & technology*

## Overview

- Acquired from LENNOX, USA in 2009
- 100 years of experience in air conditioning solutions
- 100% subsidiary of LEEL
- Manufacturing plant located in Prague, Czech Republic
  - ⇒ Sales offices in Lyon (France), Derby (UK), Essen (Germany)
- Key financials (Rs mn)<sup>(1)</sup>



## Product Portfolio

Air handling units	<i>KLM, KLMV, KLME, KLMQ</i>
Air conditioning	<i>condensing unit, chillers, rooftops, fan coils, dry coolers, compact units</i>
Fans	<i>single inlet, double inlet, low pressure, middle pressure, specialized</i>
Industrial cooling	<i>duct &amp; steam heat exchangers, industrial heaters &amp; coolers, cooling batteries for locomotives</i>

## Highlights

- Single supplier of cooling units to nuclear power project in Slovakia
- Supplier to nuclear power project in Czech Republic
- Developing new range of Tram AC units for Prague tramways
- Development of under-ceiling unit under way

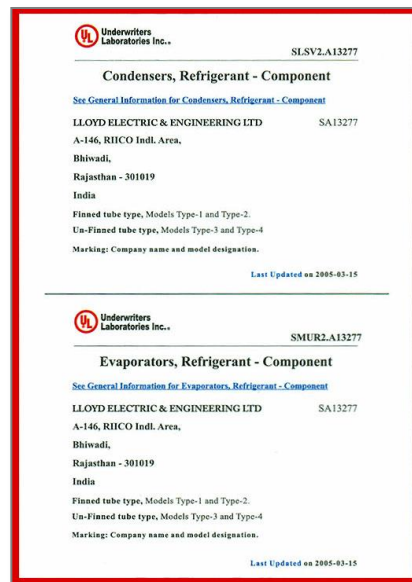
*Helps LEEL extend its core air conditioning skills to European markets*



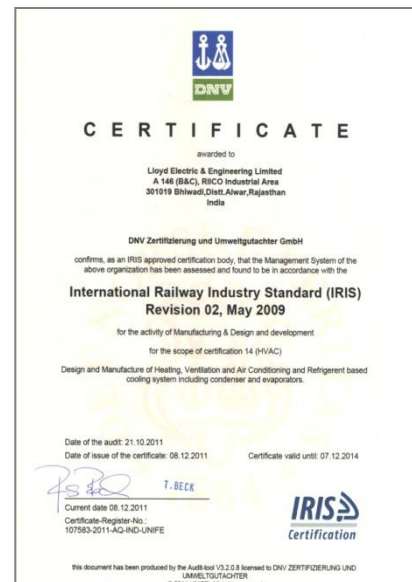
Location	Product Lines	Capacity (No. of Units)	Status
Bhiwadi, Rajasthan	Heat exchangers	1,025,000	Operational for last 23 years
	Fan coils, cooling units	10,000	
	A/Cs (railway)	2,000	
	Sheet metal	300,000	
Kala Amb, Himachal Pradesh	Heat exchangers	200,000	Operational
	A/Cs (window, split)	200,000	
Dehradun, Uttarakhand	A/Cs (window, split)	200,000	Operational
Pant Nagar, Uttarakhand	A/Cs (split)	201,000	Operational
Ranipet, Tamil Nadu	A/Cs (window, split)	100,000	Operational
Haridwar, Uttarakhand	A/Cs (railway)	6,000	To be commissioned in September 2012



ISO 9001-2008 - Quality Management System



UL Certification from Underwriters Laboratories, USA



International Railway Industry Standards (IRIS) certification



Company's quality policy



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## **Perfect Radiators & Oil Coolers Ltd(PROC)**

### *Company Overview*



## Introduction

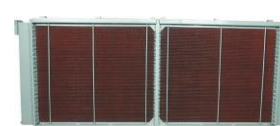
- One of the largest maker of mechanically bonded radiators in India
- Manufacturing capacity of 100,000 units/annum  
⇒ State of the art production facilities at Haridwar & Tauru
- Manpower of 400 including engineers, supervisors & workmen
- ISO 9001, ISO 14001 & OHSAS 18001, IRIS certified

## Key Financials

(Rs mn)	FY08	FY09	FY10	FY11
Revenue	950	1,129	1,311	1,456
EBITDA	30	50	85	101
PAT	16	15	108 <sup>(1)</sup>	53
Net worth	92	109	246	299
Net debt	318	278	232	55

(1) Profit on sale of investments of Rs 65mn

## Key Products



Mechanical Bonded Radiators



Oil coolers



Charge Air Coolers



Radiators - auto, farm eqpt, earthmoving eqpt



Shell & tube heat exchangers



Cooling systems components

## Key Application Areas

- Automobile cooling systems
- Earth moving equipment
- Compressors & air conditioning
- Captive power plants
- Defence systems
- Locomotives

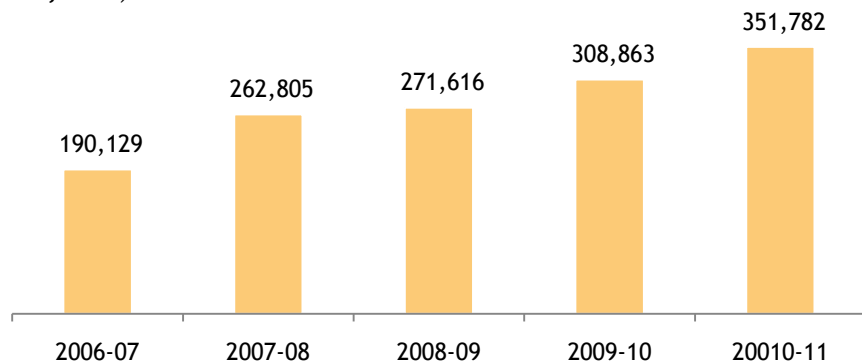


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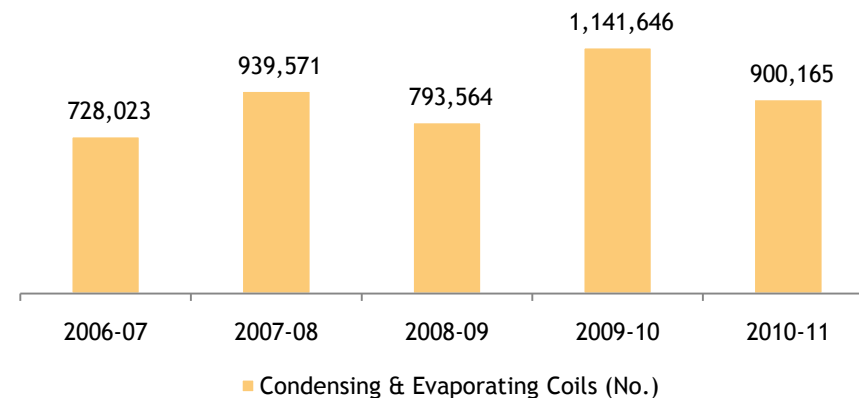
## Financial Overview

## Air Conditioner Sales Volume

(No. of units)

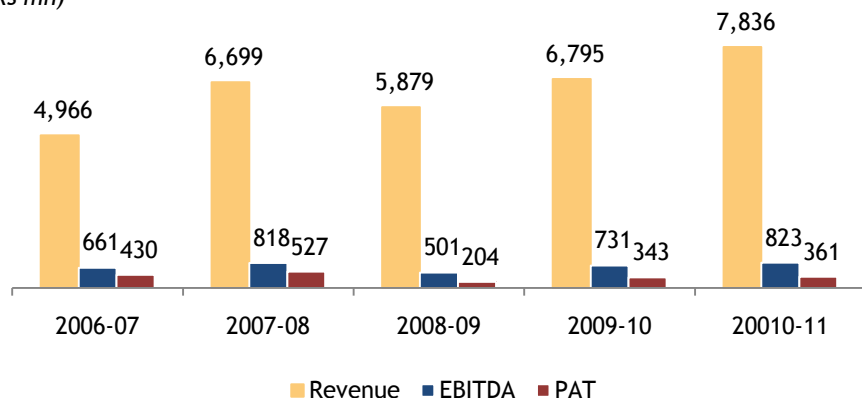


## Heat Exchangers Sales Volume

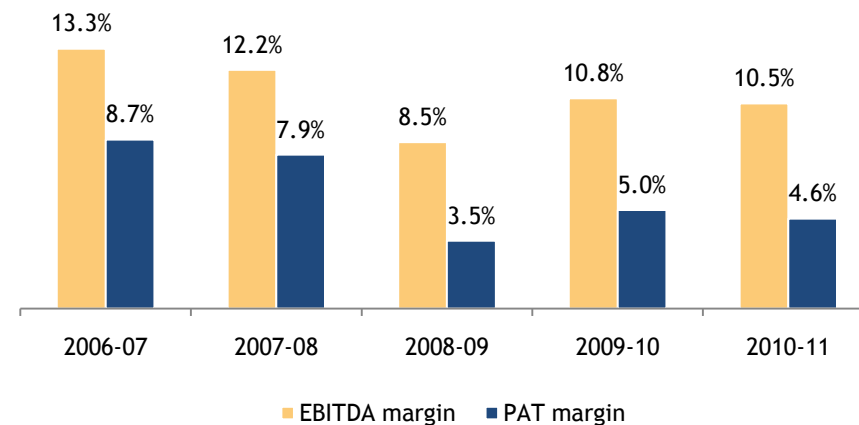


## Steadily Growing Topline (impact of recession in FY09)

(Rs mn)



## Raw Material Prices & Interest Rates Have Impacted Margins



Heat exchanger volumes vary with varying size of the product every year  
Margins have stabilized after re-adjustment of LME prices

# Key Financials - *Balance Sheet (standalone)*



(Rs mn)	2006-07	2007-08	2008-09	2009-10	2010-11
<b>SOURCES OF FUNDS</b>					
Shareholders' Funds	2,994	3,510	3,714	4,022	4,321
Debt	1,102	1,536	1,736	1,909	3,306
Deferred Tax Liability	57	33	47	78	106
<b>TOTAL</b>	<b>4,154</b>	<b>5,079</b>	<b>5,496</b>	<b>6,009</b>	<b>7,733</b>
<b>APPLICATION OF FUNDS</b>					
Net Fixed Assets (with CWIP)	1,478	1,939	1,997	2,126	2,402
Net Current Assets (ex-cash)	1,606	2,381	2,929	2,869	3,813
Cash	1,042	710	325	174	603
Others	28	48	245	840	915
<b>TOTAL</b>	<b>4,154</b>	<b>5,079</b>	<b>5,496</b>	<b>6,009</b>	<b>7,733</b>



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