

**IPCA LABORATORIES LIMITED**  
**Ratlam (Madhya Pradesh)**

**Unit Profile**

Ipca Laboratories Limited has been partnering healthcare globally in over 110 countries for more than 60 years. Company is manufacturing over 350 formulations and 80 APIs. During the financial year 2015- 16 company registered a total income of Rs. 2838.92 Crores with Net profit was Rs. 91.45 Crores.

Ipca Laboratories Limited, Ratlam Unit is one of the key manufacturing unit with installed capacity of 2425MT (Bulk Drugs & Intermediates Products) and continuously expanding to cater to future manufacturing needs of APIs. Ipca Ratlam Unit has obtained ISO 14001:2004 and OHSAS 18001:2007 to its credit. It is having number of approvals to its credit which are important from manufacturing and market aspects like, USFDA, MCA UK, and WHO etc. Here the quality assurance is an attitude of seeking sustainable betterment in every aspect of work.

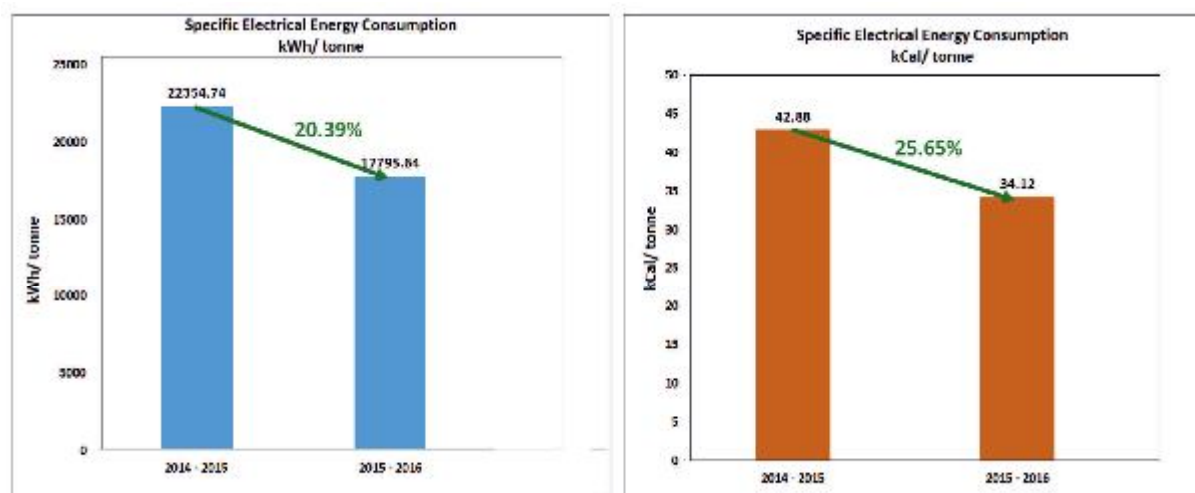


## Energy Consumption Details

Energy Conservation continues to be an area of major emphasis for this Unit. Many key initiatives have been taken to increase production at reduced energy consumption. The details of production and energy consumption for 2015- 16 are as below:

<b>Product Description</b>	<b>Bulk Drugs &amp; Intermediates Products</b>
<b>Installed Capacity, MT</b>	2425.00
<b>Actual Production, MT</b>	1,409.40
<b>Electricity Energy Consumption, Lacs kWh</b>	250.81
<b>Thermal Energy Consumption, Million kCal</b>	48,093.10

The Management of IPCA, Ratlam Unit has been continuously making efforts to reduce Specific Energy Consumption by both improving the Technology & Energy Efficiencies of the Systems and has been working hard to achieve sustainable production and use of renewable energy. As results Ratlam Unit has reduced specific energy consumption (both Thermal and Electrical) for year 2015-16.



Financial Year	Specific Electrical Energy Consumption kWh/ ton	Specific Thermal Energy Consumption kCal/ ton
<b>2014 - 2015</b>	22354.74	42.88
<b>2015 - 2016</b>	17795.64	34.12

## Energy Conservation Measures

Ipcra has Energy Conservation Cell headed by Unit General Manager assisted by Sr. General Manager Engineering, Assistant General Manager Engineering & Supported by Engineers & Technicians. This team identifies various energy saving potential in respective plants and utilities. This team makes the proposal after measuring basic data followed by its evaluation for feasibility through brainstorming session. A report is made and submitted to management for each case for necessary approvals. This dedicated team has implemented 45 cost saving project which lead to Electrical Saving of more than 100Lakh Units and Thermal saving of more than 24328Million kcal. The financial benefit from the projects was Rs.1035Lakh at an investment of Rs. 119.13Lakh. The major projects which lead to financial benefit of more than 10Lakh are as below –

Sr. No.	Description of Project	Electrical saving in Lacs kWh	Coal Saving in MT	Pet Coke Saving in MT	Saving in Rs Lacs	Investment in Rs. Lacs
1	Increasing operating hours of higher efficiency HP Cooling Pumps after close monitoring of pump running performance	16.90			113.05	3.25
2	Improvement in operational efficiency of Chiller and Brine plant	6.73			45.06	2.60
3	Improvement of loading of Utility & Process cooling tower	4.64			31.05	3.20
4	Arresting leakages in Compressed air network with in house team and network modifications	10.29			68.82	5.00
5	Installation of additional APFC and repairing non-operational capacitors to maintain higher power factor to reduce reactive power consumption in system	33.35			223.11	15.25
6	Provision for Stoppage of FFAV system of final crystallizer area when to reduce the ideal run time during opened man hole	1.62			10.84	3.50
7	Installation of control system in HVAC System for PP Area to reduce load on chillers during offloading hours based upon temperature	6.87			45.97	5.20

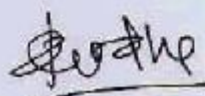
<b>8</b>	Interlocking of HVAC system with the Production line to avoid worthless operating hours of system.	8.37			55.99	3.90
<b>9</b>	Load shifting to get benefit of TOD based tariff and demand control				101.13	12.00
<b>10</b>	Installation of water level controller at drain collection pit to avoid the dry run of pumps	2.43			16.24	1.56
<b>11</b>	Removing of the DM water loop system for PP area 1,2	2.59			17.34	0.80
<b>12</b>	Installation of Energy saver on AHU, Centrifuge, Reactor, ETP and Pumps	1.51			10.11	2.60
<b>13</b>	Modification of HVAC System to re-circulation type form once through system to reduce the power consumption				12.69	2.00
<b>14</b>	Reduction in heat loss in unwanted long distance redundant steam lines		158.42	209.11	13.15	1.00
<b>15</b>	Improvement in Condensate recovery from 35% to 45%'		125.64	165.85	10.43	10.00
<b>16</b>	Reduction in Thermal Load and other cost factor in Effluent Treatment Plant by increasing recycling various drain		413.00	545.16	63.48	5.00
<b>17</b>	Reduction of steam heat loss by replacing existing pipelines with pipelines available in plant as per operating parameters		109.40	144.41	13.28	6.90

## Energy Policy

### ENERGY POLICY

We are committed to carry out our operations by giving high priority to energy conservation measures through regular review of generation, consumption and effective control on utilisation of energy.

We shall improve our efficiency in energy usage through increased level of awareness amongst employees, implementation of energy saving projects, energy usage audits and investments in technology up-gradation for reduction of energy consumption.



PREMCHAND GODHA  
MANAGING DIRECTOR

1<sup>st</sup> September, 2005

## **CADILA HEALTHCARE LIMITED**

**Baddi, Distt. Solan (Himachal Pradesh)**

### **Company Profile**

Zydus Cadila is a fully integrated, innovative global healthcare provider, with strengths all along the pharmaceutical value chain. With a core competence in the field of healthcare, Zydus Cadila provides total healthcare solutions ranging from formulations, active pharmaceutical ingredients and animal healthcare products to wellness products.

### **Unit Profile:**

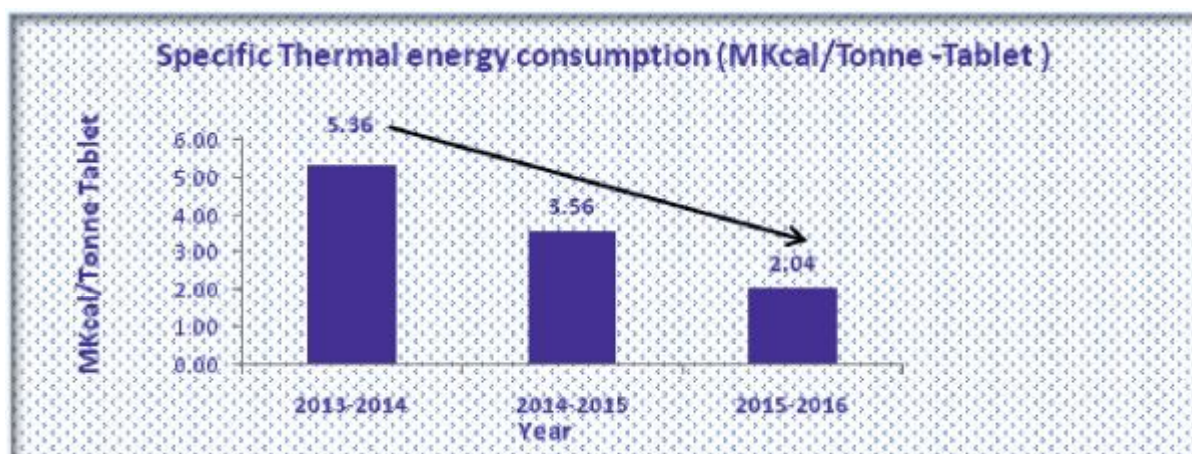
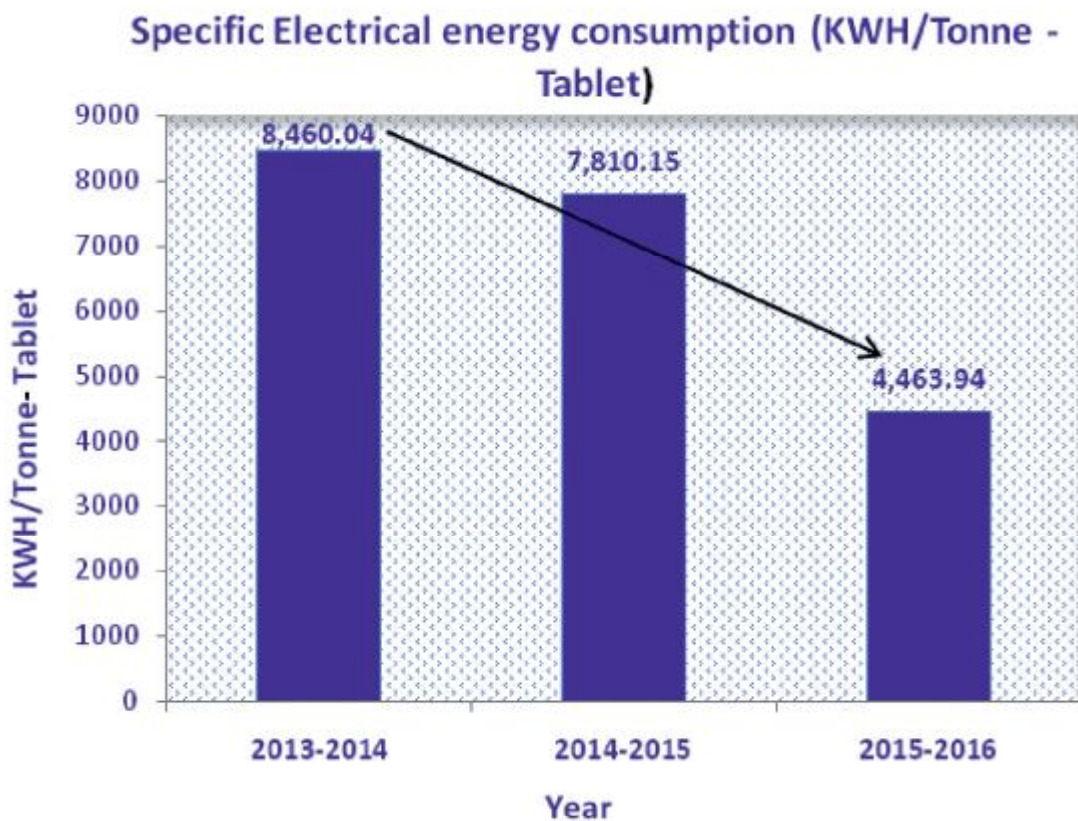
Situated at the foothills of Shivalik, Baddi plant commenced its operations in Sep. 2004. The plant is manned by a proficient team of 363 employees entailing Pharmacists, Chemists, Engineers and Operators & Commercial Staff.

CHL Baddi manufactures solid orals exporting it to the markets of U.S. and has reached the production of 23 CR. pills in 2016 as against 15 cr. in 2014

The products launched this year are Risperidone, Lamotrigine, Losartan and Spironolactone.



**Specific Energy Consumption:**



## Major Energy Conservation Initiatives : 2015-16:

SN	Project description	Achievement of Annual energy savings in 2015-16					Total savings (Rs. Lakhs)	Investment incurred on the project Rs. (Lakhs)
		Electricity	Fuels*					
		(Lakh kWh)	Coal /Briquette(tons)	F.Oil (kL)	Gas (lakh Nm <sup>3</sup> )	Total fuel (MTOE)		
1	<b>Adiabatic system for chillers.</b> During Summer season ambient temperature is high up to 47 Degree Celsius so chiller consumes more power for its operation, however, after installation of adiabatic system the ambient temperature is controlled to 30 degree Celsius to reduce chiller electrical power consumption.	0.58616	0	0	0	0	3.51696	1.85
2	<b>Automation of chiller pumps</b> Initially Chiller pumps were controlled manually, but now Balancing of chiller pumps with VFD is done according to pressure to avoid wastage of electrical power consumption.	0.29308	0	0	0	0	1.75848	0.15
3	<b>Installation of LED lights.</b> LED lights installed in place of CFL lamps to reduce electrical energy consumption.	0.14654	0		0	0	0.87924	2.5
4	<b>Installation of VFD unit ventilation.</b> VFD installed in AHU of process area to save energy by reducing the frequency for optimum utilization of energy without affecting supply of air in air. Earlier the AHU were on Star delta starters.	0.43962	0	0	0	0	2.63772	2
5	<b>Installation of steam condensate traps.</b> Installations of float traps in steam condensate lines in place of TD traps to save steam.	0	70.9784	0	0	0	4.04577	2.5



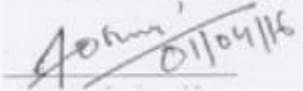
## Energy Policy:

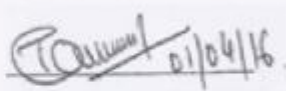
**Cadila Healthcare Limited** **Zydus**  
dedicated to life  
BADDI  
Date : 01 April 2016

**ENERGY POLICY**

Cadila Health care limited, Baddi unit, manufacturing pharmaceutical formulations is committed to excellence and continual improvement in its energy efficiency and Energy performance. This will be achieved by:

- Adopting energy conservations measures to enhance energy efficiency.
- Selecting and using energy efficient and eco friendly technology.
- Motivating employees to minimize the energy consumption by enhancing awareness.
- Maximizing capacity utilization for efficient use of energy.
- Conducting regulator energy audits through internal /external resources agencies to identify areas of improvement.
- Monitoring ,reviewing controlling & continuously improving the specific Energy consumptions of its products , processes, operations against Internal /external benchmarks .
- Identify areas of Improvement and initiate steps to reduce wastage of energy and to work on alternate renewable sources of energy

  
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**Ravinder Goyal**  
Plant Head