

RUCHI SOYA INDUSTRIES LIMITED

Chennai (Tamil Nadu)

Unit Profile

Ruchi Group Of Industries is a well-known industrial group based at Indore, MP with Ruchi Soya Industries as it's flagship company. It is widely spread all over the country having Edible Oil Refineries and Vanaspati manufacturing Plants. The group has diversified from edible oil refining business to Palm Plantations to Bio Fuels to Food Products to Steel business. The group has corporate headquarters at Indore, with offices in Mumbai, New Delhi, Kolkata, Chennai and all other major business centers in the country. The Group's business interests vary in different commodities. It deals in manufacturing and trading activities of Soybean products, Agri-business, Oils and Fats, Flat Steel, Galvanized Steel & Cold Rolled Steel etc. The Group also has long exposure in trading of Oil, Pulses and other agriculture crops. The combined business turnover for the year closed on 31st March 2015, Rs. 28,412 Crores.

This plant is located at outskirts of Chennai i.e in Thiruvallur District with total capacity of 865 TPD of refining edible oils like Soya bean, Palm, Sunflower, Rice Bran Oil etc. and producing Vanaspati. The Unit is also manufacturing Bakery Fats with product range of 10 different types of brands and supplying to major Biscuits and Bakery Industries. The unit has obtained 5S (Work Place Management), and ISO 9001 and 22000 certification for Foods Safety Management system.



Energy Consumption

1	Energy Consumption details	2013-14	2014-15
1.1	Electricity Consumption Units (Lakhs kWh/ year)		
(A)	<i>Purchased Electricity (Lakhs kWh/ year)</i>	57.31	66.27
(B)	<i>Own Generation (Lakhs kWh/ year)</i>		
a)	<i>Through DG sets (Lakhs kWh/ year)</i>	11.5	13.7
b)	<i>Through Steam and/or gas turbine route(Lakhs kWh/ year)</i>	0.00	0.00
c)	<i>Electricity supplied to the grid/ others (Lakhs kWh/ year)</i>	0.00	0.00
(C)	Own generated electricity consumption within the plant (Lakhs kWh/ year)[a + b – c]	11.50	13.70
(D)	Total consumption of electricity (purchased + own generated electricity consumption within the plant) (Lakhs kWh/ year) (A + C)	68.81	79.97
(E)	Total Electricity Consumption in MTOE (Metric tonne of oil equivalent)	591.77	687.74

1.2	Fuel Consumption for process heating	2013-14	2014-15
(A)	Coal		
(i)	Quantity used for process heating (tonnes/ year)	13850	15448
(ii)	Weighted Av. Gross Calorific value (GCV) (kCal/ kg)	5300	5300
(iii)	Total heat value of coal used (Million kCal/year) [A (i) x A (ii)]/1000	73405	81874.4

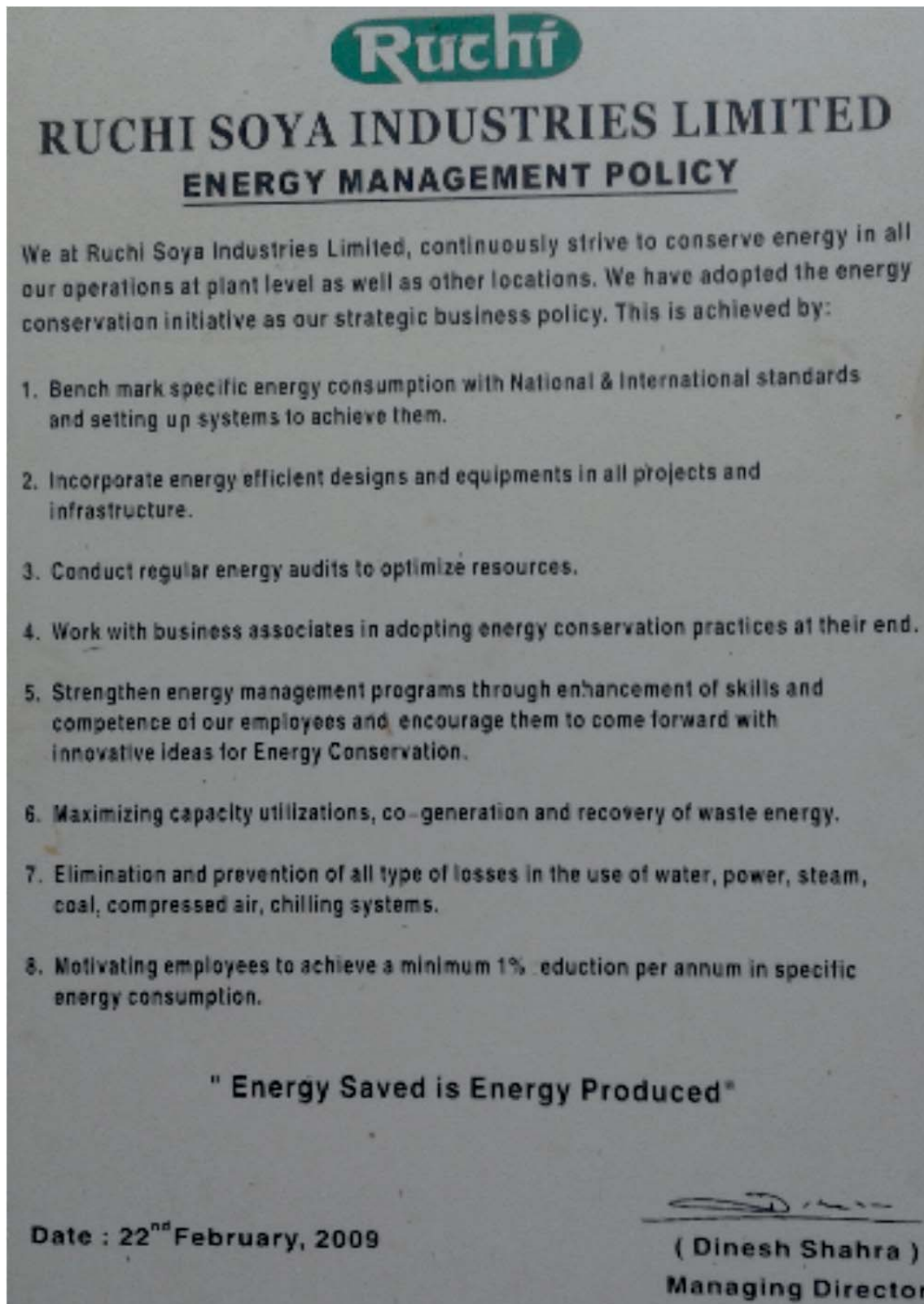
2. Summary

a. Specific Energy Consumption (SEC) Reduction during the period 2013 - 2015					
Year	Product	Specific Electrical Energy Consumption kWh/ tonne	% Reduction over 2013 -14	Specific Thermal Energy Consumption M. kCal/tonne	% Reduction over 2013 -14
2013-14	EDIBLE OIL / VANASPATI	45.91	—	0.49	—
2014-15	EDIBLE OIL / VANASPATI	40.75	11.24	0.42	14.81
b. Absolute Savings and its percentage over previous year energy consumption					
Elect. Saving (Lakh 2014-15)	Thermal (Fuel) Saving (Million kCal) in 2014-15	Elect. Consumption (lakh kWh) in 2013-14	Thermal (Fuel) Consumption (M. kCal) in 2013-14	% Elect. Saving (savings achieved/ electricity consumption of previous year) (i) / (iii) x 100	% Thermal (Fuel) Saving (savings achieved/ thermal energy consumption of previous year) (ii)/ (iv) x 100
(i)	(ii)	(iii)	(iv)		
10.12	14230	68.81	73405	14.71	19.39

Energy Conservation Achievements in 2014-15

Year of Commissioning of the projects	Project description	Achievement of Annual energy savings in 2014-15					Total savings (Rs. Lakhs)	Investment incurred on the project (Lakhs)	Rs.
		Electricity	Fuels*						
		(Lakh kWh)	Coal (tonnes)	F.Oil (kL)	Gas (lakh Nm ³)	Total fuel (MTOE)			
(i) Please list the projects title names which were implemented during the year									
1	2 Nos VFD provided to Boilre's 100 HP ID FANs	0.96					8.64	4.2	
2	2 Nos x 10 HP post washer motor were replaced by 5 HP in Vanaspathi plant	0.28					2.52	2.5	
3	100 HP clean water pump motor were replaced by 30 HP in cooling tower area	1.97					17.73	0.52	
4	VFD provided to 65 HP coolin tower fans	0.56					5.04	1.65	
5	10 HP Glycol water motor were replaced by 7.5 HP IN Refinery	0.07					0.63	0.45	
6	50 HP water pump motor were replaced by 15 HP in cooling tower area	0.88					7.92	0.55	
7	7.5 HP motor were replaced by 5 HP in BOT Agitator in Refinery plant.	0.09					0.81	0.45	
8	Cooling tower fan blade converted from Aluminium to FRP in 25 HP motor and run with seasonal settings	0.22					1.98	0.45	
9	Timer provided to all street lights with seasonal setting	0.013					0.117	0.1	
10	20 HP inlet water circulation pump motor replaced 15 HP in VAM chiller	0.17					1.53	0.45	
11	100 HP motor were replaced by 75 HP in Ammoniya compressor.	0.85					7.65	1.6	
12	Transperant sheet provided to all the plants and reduce day time lighting load	0.014					0.126	0.55	
13	30 HP motor were replaced by 20 HP IN CPO transfer pump	0.35					3.15	0.56	
14	Separate pipe line provided to oil section to refinery plant. Due to that we are reduced 30 HP	0.79					7.11	1.2	
15	We had installed HRS in our Refinery. So, we no need of running 2Nos x 30 HP clean cooling tower fans	1.81					16.29	0.18	
16	Based on our load calculation , Cooling tower belongs to 100 TPD plant (40HP) was shut and the same water circuit was connected with cooling tower in vanaspathy plant.	1.12					10.08	0.25	
17	Installed Heat recovery system (HRS) for Refinery plants to exchange the heat transfer from out going oil to in coming oil .Because of this we have by passed the Heating PHE which is heated by steam		1023.88				38.40	19	
18	RPO Directly sending to plant at 70 Deg to avoid furthur heating at the plant which minimised the steam consumption from 104kgs to 95 kgs per ton of oil processing		279.4				10.48	1.45	
19	Insulation provided to all steam line and condenser water tank,Fatty acid tank, Sterein tank then reduced steam consumption		334.5				12.54	14.6	
20	WPH coil installed at Boiler and few modification work was carried out for increase the feed water temperature and increase capacity utilization also.		618.9				23.21	18.35	
21	Condensate recovery sytem implemented thro APT 14 & 10,Flash steam recovery system & Magnetic level switch provided to feed water tank. Due to that we had increases the feed water temp by 30 Deg.Cent		430.3				16.13	6.5	
		10.15	2687				192	75.56	

Energy Policy



Ruchi


RUCHI SOYA INDUSTRIES LIMITED
ENERGY MANAGEMENT POLICY

We at Ruchi Soya Industries Limited, continuously strive to conserve energy in all our operations at plant level as well as other locations. We have adopted the energy conservation initiative as our strategic business policy. This is achieved by:

1. Bench mark specific energy consumption with National & International standards and setting up systems to achieve them.
2. Incorporate energy efficient designs and equipments in all projects and infrastructure.
3. Conduct regular energy audits to optimize resources.
4. Work with business associates in adopting energy conservation practices at their end.
5. Strengthen energy management programs through enhancement of skills and competence of our employees and encourage them to come forward with innovative ideas for Energy Conservation.
6. Maximizing capacity utilizations, co-generation and recovery of waste energy.
7. Elimination and prevention of all type of losses in the use of water, power, steam, coal, compressed air, chilling systems.
8. Motivating employees to achieve a minimum 1% reduction per annum in specific energy consumption.

" Energy Saved is Energy Produced "

Date : 22nd February, 2009


(Dinesh Shakra)
Managing Director