



### Energy Conservation Measure implemented in 2007-2008

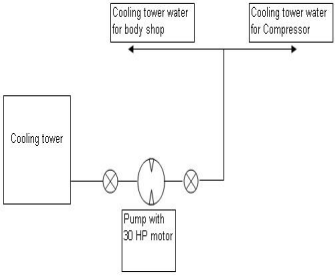
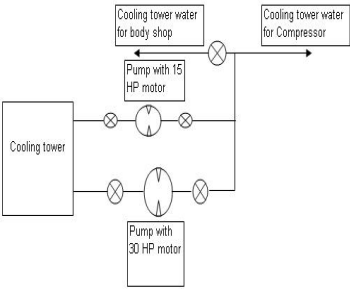
(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure	Sector : Automobile Sector			
Year to be filled by BEE	CFL lamps ( 18 W) used in place of conventional tube lights	Technology .....			
Description of the energy conservation measure: CFL lamps ( 18 W) used in place of conventional tube lights.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email):					
Total investment, Rs.:			Year of implementation: 2007-08		
First year energy cost savings, Rs.:2.83 Lakhs					
First year other savings, Rs.: Zero					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	113.119				
Energy consumption after	42408				
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4				
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradsh				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: Mr. B. Ravi Kumar, Energy Manager – EA-8145 Mobile No: 098493 99521				Signature	
				Date	

**Note: Please submit this sheet separately for each Energy Conservation Measure implemented in 2007-2008 and a CD containing the above information may be please be enclosed.**

## Energy Conservation Measure implemented in 2007-2008

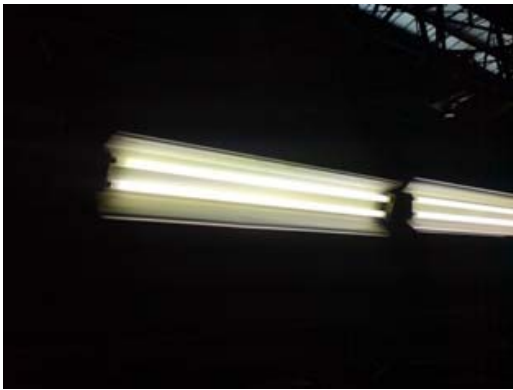

(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure <b>Isolation of Cooling tower from Body shop during non production hours</b>	Sector : Automobile Sector
Year to be filled by BEE		Technology .....
Description of the energy conservation measure:  After :Energy efficient pump provided by modifying the water circulation system which eliminates usage of cooling tower during body shop non production hours.		
<b>Picture/ sketch/ drawing before modification</b> (if available)	<b>Picture/ sketch/ drawing after modification</b>	
		
Agency that executed the project (with complete address and email):		
Total investment, Rs.:	Year of implementation: 2007-08	
First year energy cost savings, Rs.: 0.42 Lakhs		
First year other savings, Rs.: Zero		
On annual basis	kWh 000'	Coal (Tons)
Energy consumption before	14080	
Energy consumption after	3520	
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4	
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradsh		We authorise Bureau to use this information for dissemination
Contact person who could be contacted for more information: Mr. B. Ravi Kumar, Energy Manager – EA-8145 Mobile No: 098493 99521		Signature
		Date

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### Energy Conservation Measure implemented in 2007-2008



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ID to be filled by BEE	Title of the measure		Sector : Automobile Sector			
Year to be filled by BEE	<b>Elimination of one of the tube lights in twin tube lights in shop floor without compromising on required illumination level</b>		Technology .....			
Description of the energy conservation measure: <b>Before installation :</b> Earlier in shop floor area during production hours they are using twin tube lights across the along of the length of the line <b>After installation :</b> Now one of the tube lights eliminated, thus half of the earlier tube lights usage eliminated.						
<b>Picture/ sketch/ drawing before modification</b> (if available)			<b>Picture/ sketch/ drawing after modification</b>			
						
Agency that executed the project (with complete address and email):						
Total investment, Rs.:			Year of implementation: 2007-08			
First year energy cost savings, Rs.: 1.58 Lakhs						
First year other savings, Rs.: Zero						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before	39600					
Energy consumption after	0					
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4					
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination		
Contact person who could be contacted for more information: Mr. B. Ravi Kumar, Energy Manager – EA-8145 Mobile No: 098493 99521				Signature  Date		

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## Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure	Sector : Automobile Sector			
Year to be filled by BEE	<b>Replacement of Magnetic ballasts with High frequency electronic ballasts for HPSV lamps</b>	Technology .....			
Description of the energy conservation measure: <b>Before installation :</b> Copper ballasts for the HPSV & Tube lights lamps (150w) & tube lights. <b>After installation :</b> Replaced the conventional Magnetic ballasts with Electronic ballasts results in reduction of losses.					
<b>Picture/ sketch/ drawing before modification</b> (if available)			<b>Picture/ sketch/ drawing after modification</b>		
					
Agency that executed the project (with complete address and email):					
Total investment, Rs.:			Year of implementation: 2007-08		
First year energy cost savings, Rs.:5.77 Lakhs					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	64994				
Energy consumption after	50551				
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4				
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination	
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### Energy Conservation Measure implemented in 2007-2008


(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure		Sector : Automobile Sector			
Year to be filled by BEE	<b>Increasing the parts washer conveyor speed by replacing with higher RPM motor</b>		Technology .....			
Description of the energy conservation measure: <b>Before::</b> The motor having 960 rpm used to the parts Washer conveyor, results in lower speed & Higher electrical heaters power consumption <b>After:</b> Now the slow speed motor replaced with higher RPM motor of 1440 rpm thus heater usage period reduced results in power savings achieved.						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email):						
Total investment, Rs.:			Year of implementation: 2007-08			
First year energy cost savings, Rs.:2.66Lakhs						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before						
Energy consumption after						
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4					
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination		
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(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure	Sector : Automobile Sector			
Year to be filled by BEE	<b>Elimination of pumps in Pretreatment &amp; Effluent treatment plant</b>	Technology .....			
Description of the energy conservation measure: <b>Before::</b> <b>The motor having rating 3 hp &amp; 5 hp used to pump phosphate solution from filter press to the tank .</b>  <b>After:</b> <b>Now the filter press height increased to 15 ft so that the solution can flow to the tank due to gravity.</b>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email):					
Total investment, Rs.:			Year of implementation: 2007-08		
First year energy cost savings, Rs.:0.974 Lakhs					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	24349				
Energy consumption after	0				
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4				
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination	
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(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure		Sector : Automobile Sector		
Year to be filled by BEE	<b>Insulation replacement for the ED bring up &amp; Holding zones</b>		Technology .....		
Description of the energy conservation measure: <b>Before :</b> <b>Electro deposition oven bring up zone oven insulation damaged results into wastage of heat through ceiling &amp; side walls</b>  <b>After :</b> <b>Now the damaged insulation removed and replaced with new insulation eliminated heat losses.</b>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email):					
Total investment, Rs.:1.5 Lakhs			Year of implementation: 2007-08		
First year energy cost savings, Rs.:6.67 Lakhs					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	LP Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before			187 M KCal		
Energy consumption after					
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...					
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination  Signature  Date	
Contact person who could be contacted for more information: Mr. B. Ravi Kumar, Energy Manager – EA-8145 Mobile No: 098493 99521					

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### Energy Conservation Measure implemented in 2007-2008


(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure <b>Chilling Compressor cooling tower replacement with efficient one</b>	Sector : Automobile Sector			
Year to be filled by BEE		Technology .....			
Description of the energy conservation measure: <b>Before :</b> <b>Old &amp; inefficient cooling tower having higher rating 10 hp motor used for water circulation pump</b>  <b>After:</b> <b>New efficient cooling tower having lower rating 5.5 Kw motor used for water circulation pump.</b>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email):					
Total investment, Rs.:1.25			Year of implementation: 2007-08		
First year energy cost savings, Rs.:0.21 Lakhs					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	18900				
Energy consumption after	13680				
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4				
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh  Contact person who could be contacted for more information: Mr. B. Ravi Kumar, Energy Manager – EA-8145 Mobile No: 098493 99521				We authorise Bureau to use this information for dissemination  Signature  Date	

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### Energy Conservation Measure implemented in 2007-2008


(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure		Sector : Automobile Sector			
Year to be filled by BEE	<b>Replacement of old &amp; Inefficient pumps with Energy efficient pumps at parts washer machine</b>		Technology .....			
Description of the energy conservation measure: <b>Before:</b> <b>Old &amp; Inefficient (02 no's) 11 Kw kirloskar centrifugal pumps used to circulate chemical (degreasing) solution.</b> <b>After:</b> Now replaced with the energy efficient 5.5 KW grundfos pumps (02 no's) results in power saving						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
						
Agency that executed the project (with complete address and email):						
Total investment, Rs.:1.5 Lakhs			Year of implementation: 2007-08			
First year energy cost savings, Rs.:0.85Lakhs						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before	42240					
Energy consumption after	21120					
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4					
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination  Signature  Date		
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(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure		Sector : Automobile Sector			
Year to be filled by BEE	<b>Reactive power optimization by installing 250 KVAR Capacitor bank &amp; Panel</b>		Technology .....			
Description of the energy conservation measure: <b>Before:</b> <b>Maximum demand recorded was 2749 KVA at power factor of 0.96 lag.</b>  <b>After:</b> <b>Maximum demand recorded was 2693 KVA at power factor of 0.98 lag.</b>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
						
Agency that executed the project (with complete address and email):						
Total investment, Rs.:0.75			Year of implementation: 2007-08			
First year energy cost savings, Rs.:1.55 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before	2749 MD					
Energy consumption after	2693MD					
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4					
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination  Signature  Date		
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(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure		Sector : Automobile Sector			
Year to be filled by BEE	<b>Auto voltage selection for Electro Deposition dip stage</b>		Technology .....			
Description of the energy conservation measure: <b>Before::</b> In paint shop at electro deposition dip stage, due to manual selection of voltage & fixing it continuously for 3 Min, the power consumption was very high. <b>After:</b> Auto voltage & current selection system provided in turn vary voltage for the First 1 min & Next 2 Min depending upon the surface area & thickness of the coating on the body.						
<b>Picture/ sketch/ drawing before modification</b> (if available)			<b>Picture/ sketch/ drawing after modification</b>			
Agency that executed the project (with complete address and email):						
Total investment, Rs.:5.5 Lakhs			Year of implementation: 2007-08			
First year energy cost savings, Rs.:1.6Lakhs						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before	151200					
Energy consumption after	110782					
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4					
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination		
Contact person who could be contacted for more information: Mr. B. Ravi Kumar, Energy Manager – EA-8145 Mobile No: 098493 99521						
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(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure		Sector : Automobile Sector			
Year to be filled by BEE	<b>Replacement of old &amp; inefficient hoists with energy efficient IR &amp; Hitachi hoists</b>		Technology .....			
Description of the energy conservation measure: <b>Earlier for hoists we have motorized CT operations which moves over the conventional I beam</b> <b>After:</b> <b>All the motorized CT operations are eliminated by the procurement of the IR Rails along with Energy efficient hoist.</b>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
						
Agency that executed the project (with complete address and email):						
Total investment, Rs.:12.5			Year of implementation: 2007-08			
First year energy cost savings, Rs.: 0.29 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before	14400					
Energy consumption after	7200					
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4					
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination  Signature  Date		
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ID to be filled by BEE	Title of the measure	Sector : Automobile Sector			
Year to be filled by BEE	<b>VFD provision for parts washer pumps ( 2 No's )</b>	Technology .....			
Description of the energy conservation measure: <b>Before:</b> <b>Parts washer pumps were running at throttling, thus power consumption increased</b> <b>After:</b> <b>Now two VFD's provided to operate the pumps thus power consumption reduced.</b>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email):					
Total investment, Rs.:0.48			Year of implementation: 2007-08		
First year energy cost savings, Rs.:0.68 Lakhs					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	26400				
Energy consumption after	9600				
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4				
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination	
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ID to be filled by BEE	Title of the measure		Sector : Automobile Sector			
Year to be filled by BEE	<b>Provision of portable compressor in place of central compressor at rework areas &amp; during non production days</b>		Technology .....			
Description of the energy conservation measure: <b>Before:</b> Earlier they used to run 230 hp central compressor to do reworks during non production days increases power consumption. <b>After:</b> Now 15 hp portable compressors provided to do rework at that stages to reduce power consumption.						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
						
Agency that executed the project (with complete address and email):						
Total investment, Rs.:1.15			Year of implementation: 2007-08			
First year energy cost savings, Rs.:0.582 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before	20248					
Energy consumption after	5694					
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4					
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination		
Contact person who could be contacted for more information: Mr. B. Ravi Kumar, Energy Manager – EA-8145 Mobile No: 098493 99521				Signature  Date		

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ID to be filled by BEE	Title of the measure		Sector : Automobile Sector			
Year to be filled by BEE	<b>Usage of Battery operated torque nut runners instead of Air Operated pneumatic tools</b>		Technology .....			
Description of the energy conservation measure: <b>Before :</b> <b>Earlier pneumatically operated nut runners used in Assembly lines which is not energy efficient.</b> <b>After :</b> <b>Now battery operated nut runners are using in assembly lines</b>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
						
Agency that executed the project (with complete address and email):						
Total investment, Rs.:12.93			Year of implementation: 2007-08			
First year energy cost savings, Rs.:0.92 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before	23040					
Energy consumption after	0					
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4					
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination  Signature  Date		
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ID to be filled by BEE	Title of the measure <b>Replacement of pneumatic pumps with motor operated pumps.</b>	Sector : Automobile Sector			
Year to be filled by BEE		Technology .....			
Description of the energy conservation measure: <b>Before :</b> <b>Earlier pneumatically operated motors &amp; pumps used to pump fluids.</b> <b>After :</b> <b>Now electrically operated motors &amp; pumps are used to pump the fluids</b>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email):					
Total investment, Rs.:1.8			Year of implementation: 2007-08		
First year energy cost savings, Rs.:0.65 Lakhs					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	17280				
Energy consumption after	960				
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4				
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination	
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ID to be filled by BEE	Title of the measure <b>Auto switching on / off of body shop lighting &amp; air circulators</b>	Sector : Automobile Sector			
Year to be filled by BEE		Technology .....			
Description of the energy conservation measure: <b>Before :</b> <b>No complete control to restrict the utilization of power to conserve energy during non production hrs</b> <b>After :</b> <b>Control provided to restrict the utilization of plant lighting &amp; air circulators. They gets switched off during non production hrs and switched on body production hrs.</b>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email):					
Total investment, Rs.:0.5			Year of implementation: 2007-08		
First year energy cost savings, Rs.:1.65 Lakhs					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before					
Energy consumption after					
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4				
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination	
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ID to be filled by BEE	Title of the measure		Sector : Automobile Sector			
Year to be filled by BEE	<b>Interlocking provided for paint shop humidifier pumps</b>		Technology .....			
Description of the energy conservation measure: <b>Before::</b> <b>Paint booth humidifier pumps used to run continuously a day to maintain the humidity.</b>  <b>After::</b> <b>Study shows that running of pumps not required throughout the day. Interlock system provided to switch off motors during morning hrs &amp; late night hrs which reduces the power consumption.</b>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
						
Agency that executed the project (with complete address and email):						
Total investment, Rs.:0.09			Year of implementation: 2007-08			
First year energy cost savings, Rs.:1.51 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before	107100					
Energy consumption after	69300					
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4					
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination		
Contact person who could be contacted for more information: Mr. B. Ravi Kumar, Energy Manager – EA-8145 Mobile No: 098493 99521						
				Signature		
				Date		

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### Energy Conservation Measure implemented in 2007-2008


(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure		Sector : Automobile Sector			
Year to be filled by BEE	<b>Elimination of idle running of the motors for brake bleeding machine by the interlock</b>		Technology .....			
Description of the energy conservation measure: <b>Before:</b> <b>Earlier brake bleeding machines motors are running continuously throughout the shift.</b> <b>After installation :</b> <b>Interlock provided by which m/c's will operate whenever reuired.Thus eliminated the idle running of the two motors</b>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email):						
Total investment, Rs.:0.00			Year of implementation: 2007-08			
First year energy cost savings, Rs.:0.3 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before	7490					
Energy consumption after	0					
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4					
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination		
Contact person who could be contacted for more information: Mr. B. Ravi Kumar, Energy Manager – EA-8145 Mobile No: 098493 99521						
				Signature		
				Date		

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### Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure <b>Interlock provided for noise tester motors</b>	Sector : Automobile Sector			
Year to be filled by BEE		Technology .....			
Description of the energy conservation measure: <b>Before :</b> <b>Earlier noise tester machines motors are running continuously throughout the shift.</b> <b>After :</b> <b>Interlock provided by which m/c's will operate whenever reured.Thus eliminated the idle running of the motors</b>					
<b>Picture/ sketch/ drawing before modification</b> (if available)			<b>Picture/ sketch/ drawing after modification</b>		
					
Agency that executed the project (with complete address and email):					
Total investment, Rs.:0.02			Year of implementation: 2007-08		
First year energy cost savings, Rs.:0.62 Lakhs					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	15000				
Energy consumption after	0				
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4				
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: Mr. B. Ravi Kumar, Energy Manager – EA-8145 Mobile No: 098493 99521				Signature  Date	

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### Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure		Sector : Automobile Sector			
Year to be filled by BEE	<b>Lighting load reduction by elimination of Commonizing the lines</b>		Technology .....			
Description of the energy conservation measure: <b>Before :</b> <b>Earlier in bus assembly line we have 320 tube lights and 35 air circulators consuming high power.</b> <b>After :</b> <b>Now 160 tube lights and 16 air circulators removed and reduced power consumption.</b>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email):						
Total investment, Rs.:1.5			Year of implementation: 2007-08			
First year energy cost savings, Rs.:1.23 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before	31000					
Energy consumption after	0					
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4					
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination		
Contact person who could be contacted for more information: Mr. B. Ravi Kumar, Energy Manager – EA-8145 Mobile No: 098493 99521						
				Signature		
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### Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure				Sector : Automobile Sector	
Year to be filled by BEE	<b>Air leak minimization in shop floor to single digit % by the dedicated team</b>				Technology .....	
Description of the energy conservation measure: <b>Before :</b> <b>We are conducting air leak audits twice in a month to plug the air leakages.</b> <b>After :</b> <b>. Now we are conducting air leak audits weekly &amp; nominated a dedicated team to plug the air leakages. Thus air leakages reduced to Single digit percentage.</b>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email):						
Total investment, Rs.:1.95			Year of implementation: 2007-08			
First year energy cost savings, Rs.:3.12 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before	78000					
Energy consumption after	0					
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4					
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination  Signature  Date		
Contact person who could be contacted for more information: Mr. B. Ravi Kumar, Energy Manager – EA-8145 Mobile No: 098493 99521						

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### Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure	Sector : Automobile Sector			
Year to be filled by BEE	<b>Utilization of lunch time for Topcoat paint booth to increase the capacity utilization</b>	Technology .....			
Description of the energy conservation measure: <b>Before :</b> <b>Earlier during lunch break the paint booth equipments are running idle which increases power consumption.</b> <b>After :</b> <b>Now during lunch breaks the paint booths used to run without stopping any production.</b>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email):					
Total investment, Rs.:0			Year of implementation: 2007-08		
First year energy cost savings, Rs.:2.4 Lakhs					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	60000				
Energy consumption after	60000 but productio n				
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4				
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: Mr. B. Ravi Kumar, Energy Manager – EA-8145 Mobile No: 098493 99521				Signature	
				Date	

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### Energy Conservation Measure implemented in 2007-2008


(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure		Sector : Automobile Sector			
Year to be filled by BEE	<b>Shutoff the entire plant during low volume production days</b>		Technology .....			
Description of the energy conservation measure: <b>Before :</b> <b>Earlier plant used to run during low volume production days.</b> <b>After :</b> <b>Now management decided to shut off the plant for saving energy during low production days resulting 13 days shut off the plant.</b>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email):						
Total investment, Rs.:0			Year of implementation: 2007-08			
First year energy cost savings, Rs.:13.7 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before	346700					
Energy consumption after	0					
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4					
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination		
Contact person who could be contacted for more information: Mr. B. Ravi Kumar, Energy Manager – EA-8145 Mobile No: 098493 99521						
				Signature		
				Date		

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## Energy Conservation Measure implemented in 2007-2008


(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure <b>Switch off the computer monitor before leaving office</b>	Sector : Automobile Sector			
Year to be filled by BEE		Technology .....			
Description of the energy conservation measure: <b>Before :</b> <b>Earlier computer users are not switching off the computer monitor when not in use leads to wastage of power.</b> <b>After :</b> <b>Now awareness created among the employees on energy saving to switch off the monitors when not in use.</b>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email):					
Total investment, Rs.:0			Year of implementation: 2007-08		
First year energy cost savings, Rs.:0.72 Lakhs					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before	54000				
Energy consumption after	36000				
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...	4				
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh  Contact person who could be contacted for more information: Mr. B. Ravi Kumar, Energy Manager – EA-8145 Mobile No: 098493 99521				We authorise Bureau to use this information for dissemination  Signature  Date	

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### Energy Conservation Measure implemented in 2007-2008



(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure	Sector : Automobile Sector			
Year to be filled by BEE	<b>Usage of battery operated stackers &amp; Jumbos in place of diesel operated Fork Lifts.</b>	Technology .....			
Description of the energy conservation measure: <b>Before :</b> <b>Earlier for transporting the vehicle assembly parts from stores to assembly area we have used diesel operated fork lifts.</b> <b>After :</b> <b>Now Battery operated vehicles replaced in place of 3 No's of the diesel operated Material handling equipments</b>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email):					
Total investment, Rs.:9.87			Year of implementation: 2007-08		
First year energy cost savings, Rs.:3.15 Lakhs					
First year other savings, Rs.:					
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other
Energy consumption before				9	
Energy consumption after				0	
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...				35000	
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: Mr. B. Ravi Kumar, Energy Manager – EA-8145 Mobile No: 098493 99521				Signature	
				Date	

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## Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure		Sector : Automobile Sector			
Year to be filled by BEE	<b>Replacement of old &amp; inefficient fork Lift with efficient one</b>		Technology .....			
Description of the energy conservation measure: <b>Before :</b> <b>For assembly parts transportation Earlier we used old &amp; inefficient fork lifts leads to over consumption of diesel (1984 Model)</b> <b>After :</b> <b>To optimize diesel consumption now 1 No of the old &amp; inefficient fork lifts replaced with efficient one ( 2007 model).</b>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
						
Agency that executed the project (with complete address and email):						
Total investment, Rs.:13.52			Year of implementation: 2007-08			
First year energy cost savings, Rs.:3.15 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before						
Energy consumption after						
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...				35000		
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination		
Contact person who could be contacted for more information: Mr. B. Ravi Kumar, Energy Manager – EA-8145 Mobile No: 098493 99521				Signature		
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### Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure				Sector : Automobile Sector	
Year to be filled by BEE	<b>FUEL ENERGY SAVINGS BY DIFFERENT CATEGORIES</b>				Technology .....	
Description of the energy conservation measure:						
<b>Separate power point presentation attached with the folder name of " Transport Savings Backup"</b>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email):						
Total investment, Rs.:			Year of implementation: 2007-08			
First year energy cost savings, Rs.:Lakhs						
First year other savings, Rs.:						
On annual basis	kWh 000'	Coal (Tons)	Gas Nm <sup>3</sup>	Oil (kL)	Other	
Energy consumption before						
Energy consumption after						
Energy tariff, Rs/ kWh/ Ton/ Nm <sup>3</sup> / kL ...				35000		
Company complete address: Mahindra & Mahindra Ltd, Auto Sector, Zaheerabad Medak Distt, Andhra Pradesh				We authorise Bureau to use this information for dissemination		
Contact person who could be contacted for more information: Mr. B. Ravi Kumar, Energy Manager – EA-8145 Mobile No: 098493 99521						
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