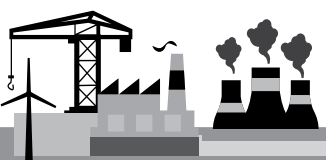




(xvii)	SH Steam Enthalpy (Operating)	Annual Average	kcal/kg							
(xviii)	Design Efficiency		%							
(xix)	Operating Capacity	(iii)/(iv)	TPH							
(xx)	Specific Energy Consumption	$\frac{[(v)x(vi) + (vii)x(viii) + (ix)x(x) + (xi)x(xii)]}{(iii)}$	kcal/kg of Steam							
(xxi)	Percentage of Coal Energy Used in steam Generation	$\frac{[(v)x(vi)]}{[(v)x(vi) + (vii)x(viii) + (ix)x(x) + (xi)x(xii)]}$	%							
B2.1.6	Total Steam Generation (Process Boiler)	B2.1.5(iii) + B2.1.4(iii) + B2.1.3(iii) + B2.1.2(iii) + B2.1.1 (iii)	Tonne							
B2.1.7	Total Operating Efficiency of Boiler (Process Boiler)	Weighted average of all 5 boilers	%							
B2.1.8	Total Operating Capacity of Boilers (Process Boiler)	B2.1.5(xix) + B2.1.4(xix) + B2.1.3(xix) + B2.1.2(xix) + B2.1.1 (xix)	TPH							
B2.1.9	Weighted Specific Energy Consumption (Process Boiler)	Weighted average of all 5 boilers	kcal/kg of Steam							
B2.1.10	Weighted Percentage of Coal Energy Used in steam Generation (Process Boiler)	Weighted average of all 5 boilers	%							



B3	Co-Gen Boiler used for Power generation																		
B3.1	Boiler 6	Co-Gen																	
(i)	Type																		
(ii)	Rated Capacity																		
(iii)	Total Steam Generation	Annual																	
(iv)	Running Hrs	Annual																	
(v)	Coal Consumption	Annual																	
(vi)	GCV of Coal	Annual Average																	
(vii)	Type of Fuel - 2 Name : Consumption	Annual																	
(viii)	GCV of any Fuel -2	Annual Average																	
(ix)	Type of Fuel - 3 Name : Consumption	Annual																	
(x)	GCV of any Fuel -3	Annual Average																	
(xi)	Type of Fuel - 4 Name : Consumption	Annual																	
(xii)	GCV of any Fuel -4	Annual Average																	
(xiii)	Feed water Temperature	Annual																	
(xiv)	Operating Efficiency	Annual Average																	
(xv)	SH Steam outlet Pressure (Operating)	Annual Average																	
(xvi)	SH Steam outlet Temperature (Operating)	Annual Average																	
(xvii)	SH Steam Enthalpy (Operating)	Annual Average																	
(xviii)	Design Efficiency																		
(xix)	Operating Capacity	(iii)/(iv)																	



(xx)	Specific Energy Consumption	$\frac{[(v) \times (vi) + (vii) \times (viii) + (ix) \times (x) + (xi) \times (xii)]}{(iii)}$	kcal/kg of Steam							
(xxi)	Percentage of Coal Energy Used in steam Generation	$\frac{[(v) \times (vi)]}{[(v) \times (vi) + (vii) \times (viii) + (ix) \times (x) + (xi) \times (xii)]}$	%							
B3.2	Boiler 7	Co-Gen								
(i)	Type									
(ii)	Rated Capacity		TPH							
(iii)	Total Steam Generation	Annual	Tonne							
(iv)	Running Hrs	Annual	Hrs							
(v)	Coal Consumption	Annual	Tonne							
(vi)	GCV of Coal	Annual Average	kcal/kg							
(vii)	Type of Fuel - 2 Name : Consumption	Annual	Tonne							
(viii)	GCV of any Fuel -2	Annual Average	kcal/kg							
(ix)	Type of Fuel - 3 Name : Consumption	Annual	Tonne							
(x)	GCV of any Fuel -3	Annual Average	kcal/kg							
(xi)	Type of Fuel - 4 Name : Consumption	Annual	Tonne							
(xii)	GCV of any Fuel -4	Annual Average	kcal/kg							
(xiii)	Feed water Temperature	Annual	°C							
(xiv)	Operating Efficiency	Annual Average	%							
(xv)	SH Steam outlet Pressure (Operating)	Annual Average	kg/cm ²							



(xvi)	SH Steam outlet Temperature (Operating)	Annual Average	°C																	
(xvii)	SH Steam Enthalpy (Operating)	Annual Average	kcal/kg																	
(xviii)	Design Efficiency		%																	
(xix)	Operating Capacity	(iii)/(iv)	TPH																	
(xx)	Specific Energy Consumption	$\frac{[(v) \times (vi) + (vii) \times (viii) + (ix) \times (x) + (xi) \times (xii)]}{(iii)}$	kcal/kg of Steam																	
(xxi)	Percentage of Coal Energy Used in steam Generation	$\frac{[(v) \times (vi)]}{[(v) \times (vi) + (vii) \times (viii) + (ix) \times (x) + (xi) \times (xii)]}$	%																	
B3.3	Boiler 8	Co-Gen																		
(i)	Type																			
(ii)	Rated Capacity		TPH																	
(iii)	Total Steam Generation	Annual	Tonne																	
(iv)	Running Hrs	Annual	Hrs																	
(v)	Coal Consumption	Annual	Tonne																	
(vi)	GCV of Coal	Annual Average	kcal/kg																	
(vii)	Type of Fuel - 2 Name : Consumption	Annual	Tonne																	
(viii)	GCV of any Fuel -2	Annual Average	kcal/kg																	
(ix)	Type of Fuel - 3 Name : Consumption	Annual	Tonne																	
(x)	GCV of any Fuel -3	Annual Average	kcal/kg																	
(xi)	Type of Fuel - 4 Name : Consumption	Annual	Tonne																	
(xii)	GCV of any Fuel -4	Annual Average	kcal/kg																	



(xiii)	Feed water Temperature	Annual	°C										
(xiv)	Operating Efficiency	Annual Average	%										
(xv)	SH Steam outlet Pressure (Operating)	Annual Average	kg/cm ²										
(xvi)	SH Steam outlet Temperature (Operating)	Annual Average	°C										
(xvii)	SH Steam Enthalpy (Operating)	Annual Average	kcal/kg										
(xviii)	Design Efficiency		%										
(xix)	Operating Capacity	(iii)/(iv)	TPH										
(xx)	Specific Energy Consumption	$\frac{[(v) \times (vi) + (vii) \times (viii) + (ix) \times (x) + (xi) \times (xii)]}{(iii)}$	kcal/kg of Steam										
(xxi)	Percentage of Coal Energy Used in steam Generation	$\frac{[(v) \times (vi)]}{[(v) \times (vi) + (vii) \times (viii) + (ix) \times (x) + (xi) \times (xii)]}$	%										
B3.4	Boiler 9	Co-Gen											
(i)	Type												
(ii)	Rated Capacity		TPH										
(iii)	Total Steam Generation	Annual	Tonne										
(iv)	Running Hrs	Annual	Hrs										
(v)	Coal Consumption	Annual	Tonne										
(vi)	GCV of Coal	Annual Average	kcal/kg										
(vii)	Type of Fuel - 2 Name : Consumption	Annual	Tonne										
(viii)	GCV of any Fuel -2	Annual Average	kcal/kg										
(ix)	Type of Fuel - 3 Name : Consumption	Annual	Tonne										



(x)	GCV of any Fuel -3	Annual Average	kcal/kg							
(xi)	Type of Fuel - 4 Name : Consumption	Annual	Tonne							
(xii)	GCV of any Fuel -4	Annual Average	kcal/kg							
(xiii)	Feed water Temperature	Annual	°C							
(xiv)	Operating Efficiency	Annual Average	%							
(xv)	SH Steam outlet Pressure (Operating)	Annual Average	kg/cm ²							
(xvi)	SH Steam outlet Temperature (Operating)	Annual Average	°C							
(xvii)	SH Steam Enthalpy (Operating)	Annual Average	kcal/kg							
(xviii)	Design Efficiency		%							
(xix)	Operating Capacity	(iii)/(iv)	TPH							
(xx)	Specific Energy Consumption	$\frac{[(v) \times (vi) + (vii) \times (viii) + (ix) \times (x) + (xi) \times (xii)]}{(iii)}$	kcal/kg of Steam							
(xxi)	Percentage of Coal Energy Used in steam Generation	$\frac{[(v) \times (vi)]}{[(v) \times (vi) + (vii) \times (viii) + (ix) \times (x) + (xi) \times (xii)]}$	%							
B3.5	Boiler 10	Co-Gen								
(i)	Type									
(ii)	Rated Capacity		TPH							
(iii)	Total Steam Generation	Annual	Tonne							
(iv)	Running Hrs	Annual	Hrs							
(v)	Coal Consumption	Annual	Tonne							
(vi)	GCV of Coal	Annual Average	kcal/kg							



(vii)	Type of Fuel - 2 Name : Consumption	Annual	Tonne							
(viii)	GCV of any Fuel -2	Annual Average	kcal/kg							
(ix)	Type of Fuel - 3 Name : Consumption	Annual	Tonne							
(x)	GCV of any Fuel -3	Annual Average	kcal/kg							
(xi)	Type of Fuel - 4 Name : Consumption	Annual	Tonne							
(xii)	GCV of any Fuel -4	Annual Average	kcal/kg							
(xiii)	Feed water Temperature	Annual	°C							
(xiv)	Operating Efficiency	Annual Average	%							
(xv)	SH Steam outlet Pressure (Operating)	Annual Average	kg/cm ²							
(xvi)	SH Steam outlet Temperature (Operating)	Annual Average	°C							
(xvii)	SH Steam Enthalpy (Operating)	Annual Average	kcal/kg							
(xviii)	Design Efficiency		%							
(xix)	Operating Capacity	(iii)/(iv)	TPH							
(xx)	Specific Energy Consumption	$\frac{[(v)x(vi) + (vii)x(viii) + (ix)x(x) + (xi)x(xii)]}{(iii)}$	kcal/kg of Steam							
(xxi)	Percentage of Coal Energy Used in steam Generation	$\frac{[(v)x(vi)]}{[(v)x(vi) + (vii)x(viii) + (ix)x(x) + (xi)x(xii)]}$	%							

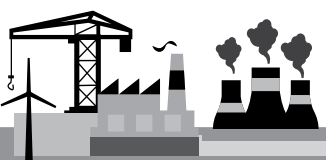


B4	Weighted Average Boiler 6-10	For Steam Generation Boiler																	
B4.1	Total Steam Generation (Co-Gen Boiler)	B3.5(iii) + B3.4(iii) + B3.3(iii) + B3.2(iii) + B3.1(iii)	Tonne																
B4.2	Total Operating Efficiency of Boiler (Co-Gen Boiler)	Weighted average of all 5 boilers	%																
B4.3	Total Operating Capacity of Boilers (Co-Gen Boiler)	B3.5(xix) + B3.4(xix) + B3.3(xix) + B3.2(xix) + B3.1(xix)	TPH																
B4.4	Weighted Specific Energy Consumption (Co-Gen Boiler)	Weighted average of all 5 boilers	kcal/kg of Steam																
B4.5	Weighted Percentage of Coal Energy Used in steam Generation (Co-Gen Boiler)	Weighted average of all 5 boilers	%																
B4.6	Weighted Boiler Efficiency for Boilers 1-10	Weighted average of all 5 boilers	%																
B5	Note: DCs to provide separate Excel sheet in the Boiler format as specified above if no. of boiler exceeds for additional nos of boilers installed for Co-Gen/ Steam																		
C	Own Generation																		
C.1.1	Through DG sets																		

[illegible]



C.1.2.1	Plant Availability Factor (PAF)	{8760 - C.1.2.(vii)} / 8760	%							
C.1.2.2	Plant Load Factor (PLF)	C.1.2.(iii) / C.1.2.(ii) * 8760 * C.1.2.1	%							
C.1.2.3	% of loss due to external Factors	C.1.2.(ix) / [C.1.2.(viii) + C.1.2.(ix)]	%							
C.1.3	Through Gas turbine									
(i)	Grid Connected		Yes/No							
(ii)	Installed Capacity	Annual	MW							
(iii)	Annual Gross Unit generation	Annual	Lakh kWh							
(iv)	Auxiliary Power Consumption	Annual	%							
(v)	Design Heat Rate	Annual	kcal/ kWh							
(vi)	Plant Load Factor (PLF)	Annual	%							
(vii)	Running Hrs	Annual	Hrs							
C.1.4	Through Waste Heat Recovery									
(i)	WHR Installed Capacity	Annual	MW							
(ii)	Annual Generation	Annual	Lakh kWh							
(iii)	WHR Running Hrs	Annual	Hrs							
C.1.5	Through Co-Generation (Extraction/Back Pressure)									
(i)	Grid Connected	Annual	Yes/No							
(ii)	Installed Capacity	Annual	MW							
(iii)	Annual Gross Units generation	Annual	Lakh kWh							
(iv)	Auxiliary Power Consumption	Annual	%							
(v)	Design Heat Rate	Annual	kcal/ kWh							



(vi)	Running Hrs	Annual	Hrs							
(vii)	Input Steam Enthalpy	Annual	kcal/kg							
(viii)	Input Steam Pressure	Annual	kg/cm ²							
(ix)	Input Steam Temperature	Annual	°C							
(x)	Input Steam Flow rate	Annual	Tonne							
(xi)	Steam Extraction 1									
(xii)	Steam Pressure	Annual	kg/cm ²							
(xiii)	Steam Temperature	Annual	°C							
(xiv)	Steam Enthalpy	Annual	kcal/kg							
(xv)	Mass Flow Rate	Annual	Tonne							
(xvi)	Steam Extraction 2									
(xvii)	Steam Pressure	Annual	kg/cm ²							
(xviii)	Steam Temperature	Annual	°C							
(xix)	Steam Enthalpy	Annual	kcal/kg							
(xx)	Mass Flow	Annual	Tonne							
(xxi)	Thermal energy used in process	Annual	Million kcal							
(xxii)	Thermal energy used in Power	Annual	Million kcal							
(xxiii)	% of thermal energy in Process	Annual	Factor							
C.1.6	Through Co-Generation (Extraction Cum Condensing)									
(i)	Grid Connected	Annual	Yes/No							
(ii)	Installed Capacity	Annual	MW							
(iii)	Annual Gross Units generation	Annual	Lakh kWh							
(iv)	Auxiliary Power Consumption	Annual	%							
(v)	Design Heat Rate	Annual	kcal/ kWh							
(vi)	Running Hrs	Annual	Hrs							
(vii)	Input Steam Enthalpy	Annual	kcal/kg							



(viii)	Input Steam Pressure	Annual	kg/cm ²						
(ix)	Input Steam Temperature	Annual	°C						
(x)	Input Steam Flow	Annual	Tonne						
(xi)	Steam Extraction 1								
(xii)	Steam Pressure	Annual	kg/cm ²						
(xiii)	Steam Temperature	Annual	°C						
(xiv)	Steam Enthalpy	Annual	kcal/kg						
(xv)	Mass Flow	Annual	Tonne						
(xvi)	Steam Extraction 2								
(xvii)	Steam Pressure	Annual	kg/cm ²						
(xviii)	Steam Temperature	Annual	°C						
(xix)	Steam Enthalpy	Annual	kcal/kg						
(xx)	Mass Flow	Annual	Tonne						
(xxi)	Thermal energy used in process	Annual	Million kcal						
(xxii)	Thermal energy used in Power	Annual	Million kcal						
(xxiii)	% of thermal energy in Process	Annual	Factor						
(xxiv)	Total % of thermal energy in Process from Co-Gen	Annual	Factor						
C.2	Total Own Generation of Electricity	C.1.1(iii)+C.1.2(iii)+C.1.3(iii)+C.1.4(i ii) + C.1.5(iii) +C.1.6(iii)	Lakh kWh						
C.3	Electricity Exported to Grid/others		Lakh kWh						
C.4	Electricity Supplied to Colony/others		Lakh kWh						
C.5	Electricity Supplied to Grid/Colony/others from CPP	C.4+[If C.5 > B.1 (xiv) then (C.5-B.1 (xiv))]	Lakh kWh						



C.6	Equivalent Thermal Energy supplied to grid/ others	C.6*2717/10	Million kcal							
C.7	Total Electricity Consumed	B.1.(xiv)+C.2-C.3-C.4	Lakh kWh							
D	Solid Fuel Consumption									
D.1	Coal (Indian)									
(i)	Landed Cost of fuel (Last purchase)	Basic Cost + Taxes + Freight	Rs/Tonne							
(ii)	Average Gross calorific value (As Fired Basis)	Annual	kcal/ kg							
(iii)	Quantity Purchased	Annual	Tonne							
(iv)	Average Total Moisture in coal (Indian)	Annual	%							
(v)	Quantity Used in Power Generation (CPP)	Annual	Tonne							
(vi)	Quantity Used in Power Generation (Co-Gen)	Annual	Tonne							
(vii)	Quantity Used in Process	Annual	Tonne							
(viii)	Total Quantity Consumed	(v)+(vi)+(vii)	Tonne							
(ix)	Thermal Energy Used in Power Generation(CPP)	(ii)x(v)/1000	Million kcal							
(x)	Thermal Energy Used in Power Generation(Co-Gen)	(ii)x(vi)/1000	Million kcal							
(xi)	Thermal Energy Used in Process	(ii)x(vii)/1000	Million kcal							
D.2	Coal 1									
(i)	Landed Cost of fuel (Last purchase)	Basic Cost + Taxes + Freight	Rs/Tonne							
(ii)	Average Gross calorific value (As Fired Basis)	Annual	kcal/ kg							
(iii)	Quantity Purchased	Annual	Tonne							



(iv)	Average Total Moisture in Coal 1	Annual	%								
(v)	Quantity Used in Power Generation (CPP)	Annual	Tonne								
(vi)	Quantity Used in Power Generation (Co-Gen)	Annual	Tonne								
(vii)	Quantity Used in Process	Annual	Tonne								
(viii)	Total Quantity Consumed	(v)+(vi)+(vii)	Tonne								
(ix)	Thermal Energy Used in Power Generation(CPP)	(ii)x(v)/1000	Million kcal								
(x)	Thermal Energy Used in Power Generation(Co-Gen)	(ii)x(vi)/1000	Million kcal								
(xi)	Thermal Energy Used in Process	(ii)x(vii)/1000	Million kcal								
D.3	Coal 2										
(i)	Landed Cost of fuel (Last purchase)	Basic Cost + Taxes + Freight	Rs/Tonne								
(ii)	Average Gross calorific value (As Fired Basis)	Annual	kcal/ kg								
(iii)	Quantity Purchased	Annual	Tonne								
(iv)	Average Total Moisture in Coal 2	Annual	%								
(v)	Quantity Used in Power Generation (CPP)	Annual	Tonne								
(vi)	Quantity Used in Power Generation (Co-Gen)	Annual	Tonne								
(vii)	Quantity Used in Process	Annual	Tonne								
(viii)	Total Quantity Consumed	(v)+(vi)+(vii)	Tonne								
(ix)	Thermal Energy Used in Power Generation(CPP)	(ii)x(v)/1000	Million kcal								
(x)	Thermal Energy Used in Power Generation(Co-Gen)	(ii)x(vi)/1000	Million kcal								



(xi)	Thermal Energy Used in Process	(ii)×(vii)/1000	Million kcal							
D.4	Coal(Imported)									
(i)	Landed Cost of fuel (Last purchase)	Basic Cost + Taxes + Freight	Rs/Tonne							
(ii)	Average Gross calorific value (As Fired Basis)	Annual	kcal/ kg							
(iii)	Quantity Purchased	Annual	Tonne							
(iv)	Average Total Moisture in Coal (Imported)	Annual	%							
(v)	Quantity Used in Power Generation (CPP)	Annual	Tonne							
(vi)	Quantity Used in Power Generation (Co-Gen)	Annual	Tonne							
(vii)	Quantity Used in Process	Annual	Tonne							
(viii)	Total Quantity Consumed	(v)+(vi)+(vii)	Tonne							
(ix)	Thermal Energy Used in Power Generation(CPP)	(ii)×(v)/1000	Million kcal							
(x)	Thermal Energy Used in Power Generation(Co-Gen)	(ii)×(vi)/1000	Million kcal							
(xi)	Thermal Energy Used in Process	(ii)×(vii)/1000	Million kcal							
D.5	Lignite									
(i)	Landed Cost of fuel (Last purchase)	Basic Cost + Taxes + Freight	Rs/Tonne							
(ii)	Average Gross calorific value (As Fired Basis)	Annual	kcal/ kg							
(iii)	Quantity Purchased	Annual	Tonne							
(iv)	Average Total Moisture in Lignite	Annual	%							
(v)	Quantity Used in Power Generation (CPP)	Annual	Tonne							



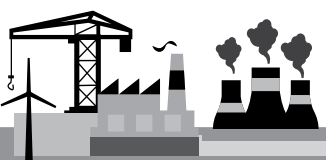
(vi)	Quantity Used in Power Generation (Co-Gen)	Annual	Tonne								
(vii)	Quantity Used in Process	Annual	Tonne								
(viii)	Total Quantity Consumed	(v)+(vi)+(vii)	Tonne								
(ix)	Thermal Energy Used in Power Generation(CPP)	(ii)x(v)/1000	Million kcal								
(x)	Thermal Energy Used in Power Generation(Co-Gen)	(ii)x(vi)/1000	Million kcal								
(xi)	Thermal Energy Used in Process	(ii)x(vii)/1000	Million kcal								
D.6	Other Solid Fuels										
(i)	Landed Cost of fuel (Last purchase)	Basic Cost + Taxes + Freight	Rs/Tonne								
(ii)	Average Gross calorific value (As Fired Basis)	Annual	kcal/ kg								
(iii)	Quantity purchased	Annual	Tonne								
(iv)	Average Moisture in Biomass	Annual	%								
(v)	Quantity used for power generation(CPP)	Annual	Tonne								
(vi)	Quantity Used in Power Generation (Co-Gen)	Annual	Tonne								
(vii)	Quantity Used in Process	Annual	Tonne								
(viii)	Total Quantity Consumed	(v)+(vi)+(vii)	Tonne								
(ix)	Thermal Energy Used in Power Generation(CPP)	(ii)x(v)/1000	Million kcal								
(x)	Thermal Energy Used in Power Generation(Co-Gen)	(ii)x(vi)/1000	Million kcal								
(xi)	Thermal Energy Used in Process	(ii)x(vii)/1000	Million kcal								



D.7	Bio mass or Other purchased Renewable solid fuels (pl. specify) bagasse, rice husk, etc.	Thermal Energy Input through Biomass not to be taken into account								
(i)	Landed Cost of fuel (Last purchase)	Basic Cost + Taxes + Freight	Rs/Tonne							
(ii)	Average Gross calorific value (As Fired Basis)	Annual	kcal/ kg							
(iii)	Quantity purchased	Annual	Tonne							
(iv)	Average Moisture in Biomass	Annual	%							
(v)	Quantity used for power generation(CPP)	Annual	Tonne							
(vi)	Quantity Used in Power Generation (Co-Gen)	Annual	Tonne							
(vii)	Quantity Used in Process	Annual	Tonne							
(viii)	Total Quantity Consumed	(v)+(vi)+(vii)	Tonne							
(ix)	Thermal Energy Used in Power Generation(CPP)	(ii)x(v)/1000	Million kcal							
(x)	Thermal Energy Used in Power Generation(Co-Gen)	(ii)x(vi)/1000	Million kcal							
(xi)	Thermal Energy Used in Process	(ii)x(vii)/1000	Million kcal							
D.8	Solid Waste (pl. specify and refer CPCB guidelines) rubber tyres chips, Municipal Solid waste etc.	Thermal Energy Input through Biomass not to be taken into account								
(i)	Quantity generated	Annual	Tonne							
(ii)	Average Gross calorific value as fired	Annual	kcal/ kg							



(iii)	Quantity used for power generation(CPP)	Annual	Tonne								
(iv)	Quantity used for power generation(Co-Gen)	Annual	Tonne								
(v)	Quantity used for process	Annual	Tonne								
(vi)	Total Quantity Consumed	(iii)+(iv)+(v)	Tonne								
(vii)	Thermal Energy Used in Power Generation (CPP)	(ii)x(iii)/1000	Million kcal								
(viii)	Thermal Energy Used in Power Generation (Co-Gen)	(iv)x(ii)/1000	Million kcal								
(ix)	Thermal Energy Used in Process	(ii)x(v)/1000	Million kcal								
D.9	Total Solid Fuel Energy Used in Power Generation (CPP)	D.1.(ix) + D.2.(ix) + D.3.(ix) + D.4.(ix) + D.5.(ix) + D.6.(ix) + D.7.(ix) + D.8.(vii)	Million kcal								
D.10	Total Solid Fuel Energy Used in Power Generation (Co-Gen)	Formula	Million kcal								
D.11	Total Solid Fuel Energy Used in Process	D.1.(xi) + D.2.(xi) + D.3.(xi) + D.4.(xi) + D.5.(xi) + D.6.(xi)	Million kcal								
E	Liquid Fuel Consumption										
E.1	Furnace Oil										
(i)	Landed Cost of fuel (Last purchase)	Basic Cost + Taxes + Freight	Rs/Tonne								



(ii)	Gross calorific value	Annual	kcal/ kg							
(iii)	Quantity purchased	Annual	kilolitre							
(iv)	Average Density	Annual	kg/Litre							
(v)	Quantity used for power generation (DG Set)	Annual	kilolitre							
(vi)	Quantity used for power generation (CPP)	Annual	kilolitre							
(vii)	Quantity used for power generation (Co-Gen)	Annual	kilolitre							
(viii)	Quantity used for Process	Annual	kilolitre							
(ix)	Total Furnace Oil Consumption as fuel	$((v) + (vi) + (vii) + (viii)) \times (iv)$	Tonne							
(x)	Thermal Energy Used in Power Generation (DG Set)	$(ii) \times (iv) \times (v) / 1000$	Million kcal							
(xi)	Thermal Energy Used in Power Generation (CPP)	$(ii) \times (iv) \times (vi) / 1000$	Million kcal							
(xii)	Thermal Energy Used in Power Generation (Co-Gen)	$(ii) \times (iv) \times (vii) / 1000$	Million kcal							
(xiii)	Thermal Energy Used in Process	$(ii) \times (iv) \times (viii) / 1000$	Million kcal							
E.2	Low Sulphur Heavy Stock (LSHS)									
(i)	Landed Cost of fuel (Last purchase)	Basic Cost + Taxes + Freight	Rs/Tonne							
(ii)	Gross calorific value	Annual	kcal/ kg							
(iii)	Quantity purchased	Annual	Tonne							
(iv)	Average Density	Annual	kg/Litre							
(v)	Quantity used for power generation (DG Set)	Annual	Tonne							
(vi)	Quantity used for power generation (CPP)	Annual	Tonne							



(vii)	Quantity used for power generation (Co-Gen)	Annual	Tonne							
(viii)	Quantity Used in Process	Annual	Tonne							
(ix)	Total LSHS Consumption as fuel	$((v) + (vi) + (vii) + (viii)) \times (iv)$	Tonne							
(x)	Thermal Energy Used in Power Generation (DG Set)	$(iv) \times (ii) / 1000$	Million kcal							
(xi)	Thermal Energy Used in Power Generation (CPP)	$(v) \times (ii) / 1000$	Million kcal							
(xii)	Thermal Energy Used in Power Generation (Co-Gen)	$(vi) \times (ii) / 1000$	Million kcal							
(xiii)	Thermal Energy Used in Process	$(vii) \times (ii) / 1000$	Million kcal							
E.3	High Sulphur Heavy Stock (HSHS)									
(i)	Landed Cost of fuel (Last purchase)	Basic Cost + Taxes + Freight	Rs/Tonne							
(ii)	Gross calorific value	Annual	kcal/ kg							
(iii)	Quantity purchased	Annual	Tonne							
(iv)	Average Density	Annual	kg/ Litre							
(v)	Quantity used for power generation (DG Set)	Annual	Tonne							
(vi)	Quantity used for power generation (CPP)	Annual	Tonne							
(vii)	Quantity used for power generation (Co-Gen)	Annual	Tonne							
(viii)	Quantity Used in Process	Annual	Tonne							
(ix)	Total HSHS Consumption as fuel	$((v) + (vi) + (vii) + (viii)) \times (iv)$	Tonne							



(x)	Thermal Energy Used in Power Generation (DG Set)	$(iv) \times (ii) / 1000$	Million kcal							
(xi)	Thermal Energy Used in Power Generation (CPP)	$(v) \times (ii) / 1000$	Million kcal							
(xii)	Thermal Energy Used in Power Generation (Co-Gen)	$(vi) \times (ii) / 1000$	Million kcal							
(xiii)	Thermal Energy Used in Process	$(vii) \times (ii) / 1000$	Million kcal							
E.4	High Speed Diesel (HSD)									
(i)	Landed Cost of fuel (Last purchase)	Basic Cost + Taxes + Freight	Rs/Tonne							
(ii)	Gross calorific value	Annual	kcal/ kg							
(iii)	Quantity purchased	Annual	kilolitre							
(iv)	Average Density	Annual	kg/ Litre							
(v)	Quantity used for power generation (DG Set)	Annual	kilolitre							
(vi)	Quantity used for power generation (CPP)	Annual	kilolitre							
(vii)	Quantity used for power generation (Co-Gen)	Annual	kilolitre							
	Quantity used for power generation (GG/GT)	Annual	kilolitre							
(viii)	Quantity used for Process / material handling / Transportation (Raw material handling, Loco, etc.)	Annual	kilolitre							
(ix)	Total HSD Consumption as fuel	$((v) + (vi) + (vii) + (viii)) \times (iv)$	Tonne							



(x)	Thermal Energy Used in Power Generation (DG Set)	$(iv) \times (iii) \times (i) / 1000$	Million kcal							
(xi)	Thermal Energy Used in Power Generation (CPP)	$(v) \times (iii) \times (i) / 1000$	Million kcal							
(xii)	Thermal Energy Used in Power Generation (Co-Gen)	$(vi) \times (i) / 1000$	Million kcal							
	Thermal Energy Used in Power Generation (GG/GT)		Million kcal							
(xiii)	Thermal Energy Used in Process	$(vi) \times (iii) \times (i) / 1000$	Million kcal							
E.5	Light Diesel Oil (LDO)									
(i)	Landed Cost of fuel (Last purchase)	Basic Cost + Taxes + Freight	Rs/Tonne							
(ii)	Gross calorific value	Annual	kcal/ kg							
(iii)	Quantity purchased	Annual	kilolitre							
(iv)	Average Density	Annual	kg/Litre							
(v)	Quantity used for power generation (DG Set)	Annual	kilolitre							
(vi)	Quantity used for power generation (CPP)	Annual	kilolitre							
(vii)	Quantity used for power generation (Co-Gen)	Annual	kilolitre							
(viii)	Quantity used for Transportation, if any	Annual	kilolitre							
(ix)	Total LDO Consumption as fuel	$((v) + (vi) + (vii) + (viii)) \times (iv)$	Tonne							
(x)	Thermal Energy Used in Power Generation (DG Set)	$(iv) \times (iii) \times (i) / 1000$	Million kcal							



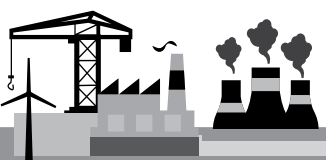
(xi)	Thermal Energy Used in Power Generation (CPP)	$(v) \times (iii) \times (i)/1000$	Million kcal							
(xii)	Thermal Energy Used in Power Generation (Co-Gen)	$(ii) \times (vi) \times (vii)/1000$	Million kcal							
(xiii)	Thermal Energy Used in Process	$(vi) \times (iii) \times (i)/1000$	Million kcal							
E.6	Liquid Waste - (pl. specify and refer CPCB guidelines, enclosed)	Thermal Energy Input through Liquid waste, mentioned in CPCB guidelines, not to be taken into account								
(i)	Landed Cost of fuel (Last purchase)	Basic Cost + Taxes + Freight	Rs/Tonne							
(ii)	Gross calorific value		kcal/ kg							
(iii)	Quantity purchased	Annual	kilolitre							
(iv)	Average Density		kg/ Litre							
(v)	Quantity used for power generation (DG Set)	Annual	kilolitre							
(vi)	Quantity used for power generation (CPP)	Annual	kilolitre							
(vii)	Quantity used for power generation (Co-Gen)	Annual	kilolitre							
(viii)	Quantity used for process	Annual	kilolitre							
(ix)	Total Liquid waste Consumption as fuel	$[(v) + (vi) + (vii) + (viii)] \times (iv)$	Tonne							
(x)	Thermal Energy Used in Power Generation (DG Set)	$[(v) \times (iv)] \times (ii)/1000$	Million kcal							



(xi)	Thermal Energy Used in Power Generation (CPP)	$[(vi) \times (iv)] \times (ii) / 1000$	Million kcal							
(xii)	Thermal Energy Used in Power Generation (Co-Gen)	$[(vii) \times (iv)] \times (ii) / 1000$	Million kcal							
(xiii)	Thermal Energy Used in Process	$[(ix) \times (iv)] \times (ii) / 1000$	Million kcal							
E.7	Total Liquid Energy Used in Power Generation (DG Set)	E.1.(x) + E.2.(x) + E.3.(x) + E.4.(x) + E.5.(x) + E.6.(x)	Million kcal							
E.8	Total Liquid Energy Used in Power Generation (CPP)	E.1.(xi) + E.2.(xi) + E.3.(xi) + E.4.(xi) + E.5.(xi) + E.6.(xi)	Million kcal							
E.9	Total Liquid Energy Used in Power Generation (Co-Gen)	Formula	Million kcal							
E.10	Total Liquid Energy Used in Process	E.1.(xiii)+E.2.(xiii)+E.3.(xiii)+E.4.(xiii)+E.5.(xiii)	Million kcal							
F	Gaseous Fuel									
F.1	Compressed Natural Gas (CNG/PNG/LNG)									
(i)	Landed Cost of the fuel(last purchase)	Basic cost + Taxes + Freight	Rs. / Tonne							
(ii)	Gross calorific value	Annual (As fired basis)	kcal/SCM							
(iii)	Quantity purchased	Annual	Million SCM							



(iv)	Quantity used for process heating (Boiler)	Annual	Million NM3						
(v)	Total Hydrogen Consumption as fuel	(iii)+(iv)	Million NM3						
(vi)	Thermal Energy Used in Power Generation	(iii)x(i)/1000	Million kcal						
(vii)	Thermal Energy Used in Process	(iv)x(i)/1000	Million kcal						
F.4.1	Total Gaseous Energy Used in Power Generation	F.1.(vii) + F.2.(vii) + F.3.(vi)	Million kcal						
F.4.2	Total Gaseous Energy Used in Process	F.1.(viii) + F.2.(viii) + F.3.(viii)	Million kcal						
F.5	Steam Import/Export								
F.5.1	Steam Import								
F.5.1.1	LP Steam Import								
(i)	Landed Cost of steam (Last purchase)	Basic Cost + Taxes + Freight	Rs/Tonne						
(ii)	LP Steam Energy	Annual	kcal/kg						
(iii)	LP Steam Quantity purchased	Annual	Tonne						
(iv)	Average Temperature	Annual	°C						
(v)	Average Pressure	Annual	bar						
(vi)	Thermal Energy Imported for LP Steam	(ii)x(iii)/1000	Million kcal						
F.5.1.2	HP Steam Import								
(i)	Landed Cost of steam (Last purchase)	Basic Cost + Taxes + Freight	Rs/Tonne						
(ii)	HP Steam Energy	Annual	kcal/kg						
(iii)	HP Steam Quantity purchased	Annual	Tonne						



(iv)	Average Temperature	Annual	°C							
(v)	Average Pressure	Annual	bar							
(vi)	Thermal Energy Imported for HP Steam	(ii)×(iii)/1000	Million kcal							
F.5.1.3	Thermal Energy Imported for LP & HP Steam	K.8.1.1.(vi) + K.8.1.2.(vi)	Million kcal							
F.5.2.1	LP Steam Export									
(i)	Landed Cost of steam (Last purchase)	Basic Cost + Taxes + Freight	Rs/Tonne							
(ii)	LP Steam Enthalpy	Annual	kcal/kg							
(iii)	LP Steam Quantity purchased	Annual	Tonne							
(iv)	Average Temperature	Annual	°C							
(v)	Average Pressure	Annual	bar							
(vi)	Thermal Energy Exported for LP Steam	(ii)×(iii)/1000	Million kcal							
F.5.2.2	HP Steam Export									
(i)	Landed Cost of steam (Last purchase)	Basic Cost + Taxes + Freight	Rs/Tonne							
(ii)	HP Steam Enthalpy	Annual	kcal/kg							
(iii)	HP Steam Quantity purchased	Annual	Tonne							
(iv)	Average Temperature	Annual	°C							
(v)	Average Pressure	Annual	bar							
(vi)	Thermal Energy Exported for HP Steam	(ii)×(iii)/1000	Million kcal							
F.5.2.3	Thermal Energy Exported for LP and HP Steam	F.5.2.2.(vi) + F.5.2.1.(vi)	Million kcal							



F.5.2.4	Weighted Average Boiler Efficiency (Boiler 1-16)																		
F.5.2.5	Total Thermal Energy Exported for Steam	(F.5.2.3 / F.5.2.4) x 100	Million kcal																
F.5.3	Total Thermal Energy for Steam (Import-Export)	F.5.1.3-F.5.2.5	Million kcal																
G	Total Thermal Energy																		
G.1	Total Thermal Energy Used in Power Generation (including DG set)	F.4.1 + E.7 + E.8 + E.9 + D.9 + D.10	Million kcal																
G.2	Total Thermal Energy Used in Process	F.4.2 + E.10 + D.11	Million kcal																
G.3	Total Thermal Energy Input through all Fuels	G.1+G.2	Million kcal																
H	Gross Heat Rate																		
H.1	Gross Heat Rate of DG Set	E.7x10/ C.2.1.(ii)	kcal/kWh																
H.2	Gross Heat Rate of CPP (Steam Turbine)	(D.7+E.8) x10/C.2.2.(ii)	kcal/kWh																
H.3	Gross Heat Rate of CPP (Gas Turbine)	F.3x10/ C.2.3.(ii)	kcal/kWh																
H.4	Gross Heat Rate of Co-Gen (Extraction cum condensing)	C.2.6(vii) * C.2.6(x) - C.2.6(xiii) * C.2.6(xiv) - C.2.6(xvii) * C.2.6(xviii) *1000 / B4.2 / 100) * C.2.6(iii) * 10^5	kcal/kWh																



H.5	Gross Heat Rate of Co-Gen(Extraction/Backpressure)	C.2.6.1(vii) * C.2.6.1(x) - C.2.6.1(xiii) * C.2.6.1(xiv) - C.2.6.1(Xvii) * C.2.6.1(xviii) * 1000 / B4.2 / 100) * C.2.6.1(iii) * 10^5	kcal/kWh							
H.6	Weighted Average Heat Rate	H.1 * C.2.1(iii) + H.2 * C.2.2(iii) + H.3 * C.2.5(iii) + H.4 * C.2.3(iii) + H.5 * C.2.4(iii) + H.6 * C.2.6(iii) + H.7 * C.2.6.1(iii) + C.1.(xiv) * 860 / C.2.1(iii) + C.2.2(iii) + C.2.5(iii) + C.2.4(iii) + C.2.6(iii) + C.2.6.1(iii) + C.1.(xiv)	kcal/kWh							
I	Performance Indicators									
I.1	Electrical SEC Caustic Soda	Annual	kWh/ Tonne							
I.2	Electrical SEC (Liquified CL)	Annual	kWh/ Tonne							
I.3	Electrical SEC (Hydrogen Bottled)	Annual	kWh/ Lakh SCM							



I.4	Thermal SEC (Caustic Soda Flakes)	Annual	kcal/Tonne						
I.5	Electrical SEC (Caustic Soda Flakes)	Annual	kWh/Tonne						
J	Coal Quality in CPP & Co-Gen (As Fired Basis)								
J.1	Ash	Annual	%						
J.2	Moisture	Annual	%						
J.3	Hydrogen	Annual	%						
J.4	GCV	Annual	kcal/kg						
K	Hydrogen Mix								
K.1	Total Hydrogen Generated (as per plant stoichiometric ratio)	Annual	Lakh NM ³						
K.2	Total Hydrogen Generated (taking Stoichiometric 280)	A.1(ii) *280 / 10 ^{^5}	Lakh NM ³						
K.3	Hydrogen used as fuel	Annual	Lakh NM ³						
K.4	Hydrogen bottled	Annual	Lakh NM ³						
K.5	Hydrogen used for other products (HCl)	Annual	Lakh NM ³						
K.6	Hydrogen vented	K.2-K.3-K.4-K.5	Lakh NM ³						
L	Stoichiometric Ratio								
K.6	Caustic Soda	Annual	Tonne						
k.7	Chlorine Gas	Annual	Tonne						
k.8	Hydrogen Gas	Annual	NM ³						
M	Miscellaneous Data*								
M.1	Additional Equipment installation after baseline year due to Environmental Concern								



(i)	Additional Electrical Energy Consumed	Annual	Lakh kWh						
(ii)	Additional Thermal Energy Consumed	Annual	Million kcal						
M.2	Biomass/ Alternate Fuel availability								
(i)	Biomass replacement with Fossil fuel due to Biomass un-availability (used in the process)	Annual	Tonne						
(ii)	Alternate Solid Fuel replacement with Fossil fuel due to Alternate Solid Fuel un-availability (used in the process)	Annual	Tonne						
(iii)	Alternate Liquid Fuel replacement with Fossil fuel due to Alternate Liquid Fuel un-availability (used in the process)	Annual	Tonne						
M.3	Project Activities (Construction Phase)								
(i)	Electrical Energy Consumed due to commissioning of Equipment	Annual	Lakh kWh						
(ii)	Thermal Energy Consumed due to commissioning of Equipment	Annual	Million kcal						
M.4	New Line/Unit Commissioning								



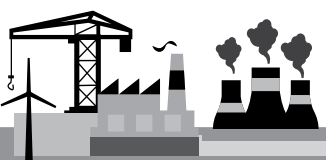
(i)	Electrical Energy Consumed due to commissioning of New process Line/Unit till it attains 70% of Capacity Utilization	Annual	Lakh kWh						
(ii)	Thermal Energy Consumed due to commissioning of New Process Line/Unit till it attains 70% of Capacity Utilization	Annual	Million kcal						
(iii)	Caustic Soda Lye Production till new line attains 70% of Capacity utilization	Annual	Tonne						
(iv)	Caustic Soda flakes Production till new line attains 70% of Capacity utilization	Annual	Tonne						
(v)	Date of Commissioning (70% Capacity Utilization)	Date							
(vi)	Electrical Energy Consumed from external source due to commissioning of New Line/Unit till it attains 70% of Capacity Utilization in Power generation	Annual	Lakh kWh						



(vii)	Thermal Energy Consumed due to commissioning of New Line/Unit till it attains 70% of Capacity Utilization in Power generation	Annual	Million kcal																	
(viii)	Net Electricity Generation till new line/unit attains 70% Capacity Utilization in Power Generation/ Co-Gen	Annual	Lakh kWh																	
(ix)	Steam Generation From Co-Gen till new line/Unit attains 70% of Capacity Utilization in Power Generation/Co-Gen	Annual	Tonne																	
(x)	Date of Commissioning (70% Capacity Utilization)	Date																		
M.5	Unforeseen Circumstances																			
(i)	Electrical Energy to be Normalized	Annual	Lakh kWh																	
(ii)	Thermal Energy to be Normalized	Annual	Million kcal																	
*Authentic documents in support of claim in Thermal and Electrical Energy is required																				
N	Documentation for Normalization																			
(i)	Hydrogen Mix-Documents Available for Normalization	Annual	Yes/No																	
(ii)	Fuel Quality in CPP & Co-Gen-Documents Available for Normalization	Annual	Yes/No																	



(iii)	CPP PLF- Document Available for Normalization	Annual	Yes/No							
(iv)	Power Mix-Document Available for Normalization	Annual	Yes/No							
(v)	Product Mix- Document Available for Normalization	Annual	Yes/No							
(vi)	Others Factors- Document Available for Normalization	Annual	Yes/No							
O	Investment made for achieving target	Annual	Million Rs							
P	Specific Power Consumption v/s Membrane Cycle (Yearly) per Tonne of Caustic Soda before and after membrane change (kindly specify the month and year of the membrane change)									
P.1	Capacity Utilization (Quarterly) for Current Year									
P.2	Total Energy Consumption (Cell Power + Aux Power)	Quarterly								
	Lakh kWh									
P.3	Total AC Power Consumption in Electrolysis	Quarterly	Lakh kWh							
P.4	Total Auxiliary Power Consumption	Quarterly	Lakh kWh							



P.5	Auxiliary Power Consumption in brine section	Quarterly	Lakh kWh						
P.6	Total Caustic Soda Production (100% basis)	Quarterly	Tonne						
P.7	Specific Energy Consumption of Caustic Soda Lye	Quarterly	kWh/Tonne						
P.8	Time of membrane change	Date	Month and Year						
Q	Other Details								
Q.1	Current Density maintained	Quarterly	Amperes						
Q.2	Membrane Change (Complete Electrolyzer)	Month and Year							
Q.3	Coating Change								
Q.4	Anode	Month and Year							
Q.5	Cathode	Month and Year							
Q.6	Technology Licensor								
Q.7	Guaranteed Specifications								
R	Energy Saving and Investment								
R.1	Investment made to achieve saving	Annual	Million Rs.						
R.2	Thermal Saving Achieved during the year								
a	Solid Fuel								
b	Coal	Annual	Million kcal						

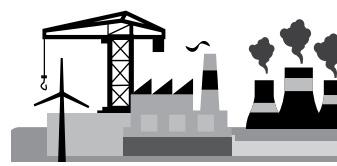


c	Lignite	Annual	Million kcal							
d	Petro Coke	Annual	Million kcal							
e	Biomass/Waste	Annual	Million kcal							
R.3	Liquid Fuel (FO/HSD/LDO/LSHS/HSHS etc.)	Annual	Million kcal							
R.4	Gaseous Fuel	Annual	Million kcal							
R.5	Electrical energy saving achieved during the year	Annual	Lakh kWh							
S	Process Flow Diagram Attached	Yes/No								



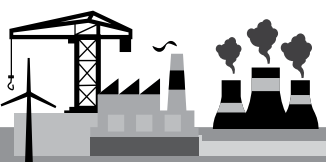
List of additional Equipment installed due to Environmental Concern after baseline year													
Sr No	Name of the Unit			Section	Date of Commissioning	Electrical Rated Capacity	Thermal Rated Capacity	Running Load	Running Hrs	Assessment Year		Source of Data	Remarks
	Equip -ment Name	Equip -ment Sr No								Electricity Consum -ption \$	Thermal Consum -ption \$\$		
				Date	kW	Million kcal/ annum	kW		Hrs/ Annum	Lakh kWh/ Annum	Million kcal/ Annum		
1													
2													
3													
4													
5													
n													
Total													
\$ Equipment wise Energy Meter Reading or Energy Management System Data required in support of the claim													
\$\$ Equipment wise Document related to consumption of Liquid Fuel, Solid Fuel Alternate Fuel is required in support of the claim													

List of Equipment and Energy consumed during project activity up to commissioning during the Assessment year													
Sr No	Name of the Unit			Project Activity Start Date	Date of Commi - ssioning	Electrical Rated Capacity	Thermal Rated Capacity	Run - ning Load	Run - ning Hrs	Assessment Year		Source of Data	Remarks
	Equip -ment Name	Equip -ment Sr No	Sec - tion							Electricity Consum - ption ^{\$}	Thermal Consum - ption ^{\$\$}		
				Date	Date	kW	Million kcal/ annum	kW	Hrs / Annum	Lakh kWh/ Annum	Million kcal/ Annum		
1													
2													
3													
4													
5													
n													
Total													



Supporting Pro-forma Sd: Fertilizer

Form-Sd (General Information)			
Sector - Fertilizer Sector			
1	Name of the Unit		
2	i) Year of Establishment		
	ii) Registration No (As provided by BEE)		
3	Sub-Sector		
4	Plant Contact Details & Address		
a	City/Town/Village		
	Post Office		
	District		
	State	Pin	
	Telephone	Fax	
b	Plant's Chief Executive Name		
	Designation		
	Telephone with STD Code	Fax	
	Mobile	E-mail	
5	Registered Office		
a	Company's Chief Executive Name		
	Designation		
	Address		
	City/Town/Village		
	Post Office		
	District		
	State	Pin	
	Telephone with STD Code	Fax	
6	Energy Manager Details		
a	Name		
	Designation	Whether EA or EM	
	EA/EM Registration No.		
	Telephone	Fax	
	Mobile	E-mail	



Form Sd: (Details of Production and Energy Consumption)

Sector: Fertilizer							
Name of the Unit							
S. No	Particulars	Unit	Year 1 (20__ - 20__)	Year 2 (20__ - 20__)	Year 3/ Previous Year (20__ - 20__)	Baseline Year (Average of Year 1 to Year 3)	Current/ Assessment/ Target Year (20__ -20__)
A	Production and capacity utilization details						
A.1	Product (Ammonia)						
(i)	Name						
(ii)	Installed capacity	Tonne					
(iii)	Re-assessed capacity	Tonne					
(iv)	Re-vamp capacity	Tonne					
(v)	Year of revamp	Tonne					
(vi)	Actual Production	Tonne					
(vii)	Capacity Utilization (based on re-assessed)	%					
(viii)	Capacity Utilization (based on re-vamp capacity)	%					
	(Based on re-assessed capacity. Revamp capacity can be used if supported by documentary evidence from DOF)						
A.2	Product (Urea)						
(i)	Name						
(ii)	Installed capacity	Tonne					
(iii)	Re-assessed capacity	Tonne					
(iv)	Baseline production	Tonne					
(iv)	Re-vamp capacity	Tonne					
(v)b	Year of revamp						
(vii)	Actual Production	Tonne					
(viii)	Capacity Utilization(based on re-assessed) (%)(Based on baseline production)	%					



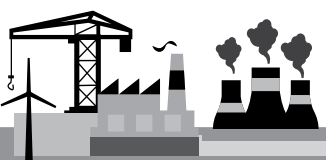
(vii)	Capacity Utilization (based on re-vamp capacity)	%								
	(Based on re-assessed capacity. Revamp capacity can be used if supported by documentary evidence from DOF)									
A.3	Product3									
(i)	Name									
(ii)	Installed Capacity	Tonne								
(iii)	Actual Production	Tonne								
(iv)	Capacity Utilization (%)	%								
A.4	Product4									
(i)	Name									
(ii)	Installed Capacity	Tonne								
(iii)	Actual Production	Tonne								
(iv)	Capacity Utilization (%)	%								
A.5	Product5									
(i)	Name									
(ii)	Installed Capacity	Tonne								
(iii)	Actual Production	Tonne								
(iv)	Capacity Utilization (%)	%								
A.6	Product6									
(i)	Name									
(ii)	Installed Capacity	Tonne								
(iii)	Actual Production	Tonne								
(iv)	Capacity Utilization (%)	%								
A.7	Product7									
(i)	Name									
(ii)	Installed Capacity	Tonne								
(iii)	Actual Production	Tonne								
(iv)	Capacity Utilization (%)	%								
A.7	Product7									
(i)	Name									
(ii)	Installed Capacity	Tonne								
(iii)	Actual Production	Tonne								
(iv)	Capacity Utilization (%)	%								
B	Electricity Consumption and cost									
B.1	Source of Purchase (Grid / others)									



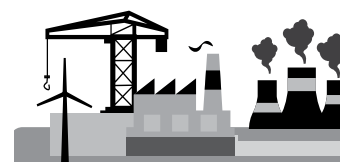
a	Total quantity purchased	Lakh kWh							
b	Total Cost	Rs. Lakh/ year							
c	Quantity allocated for urea productionas per TOP	Lakh kWh							
d	Plant Connected Load	MW							
e	Contract demand with utility	MVA							
f	Plant Running Hrs	Hrs							
g	Total purchased electrical energy allocated for urea production	TOE							
B.2	Own Generation								
B.2.1	Through DG Set								
B.2.1.1	Power generation								
a	Annual power generation (Gross)	Lakh kWh							
b	Auxiliary Power Consumption	%							
c	Annual power generation (Net)	Lakh kWh							
d	Total annual fuel cost	Rs. Lakh							
e	Cost of Electricity	Rs./ kWh							
f	Heat rate of power	kcal/ kWh							
g	Power allocated for urea production	Lakh kWh							
B.2.1.2	Fuel (Specify)								
a	Gross calorific value of Fuel	kcal/ kg							
b	Net calorific value of fuel	kcal/ kg							
c	Annual fuel consumption	kL							
d	Average Density of Fuel	kg/litre							
B.2.1.3	DG Set electricity energy consumed for urea production	TOE							
B.2.2	Through Steam turbine/ generator								
B.2.2.1	Power generation								
a	Annual power generation (Gross)	Lakh kWh							
b	Auxiliary Power Consumption	%							
c	Annual power generation (Net)	Lakh kWh							
d	Total annual fuel cost	Rs. Lakh							



e	Cost of Electricity	Rs./ kWh					
f	Heat rate of power	kcal/ kWh					
g	Power allocated for urea production	Lakh kWh					
B.2.2.2	Fuel (Specify)						
B.2.2.2.1	Coal (Imported)						
a	Gross calorific value of Fuel	kcal/ kg					
b	Net calorific value of fuel	kcal/ kg					
c	Annual fuel consumption	kg					
B.2.2.2.2	Grade Indigenous (Specify)						
a	Gross calorific value of Fuel	kcal/ kg					
b	Net calorific value of fuel	kcal/ kg					
c	Annual fuel consumption	kg					
B.2.2.2.3	Liquid Fuel (FO/Naptha etc)						
a	Gross calorific value of Fuel	kcal/SCM					
b	Net calorific value of fuel	kcal/ SCM					
c	Annual fuel consumption	kL kg					
d	Density	kggm/ltr					
B.2.2.2.4	Gaseous Fuel(NG)						
a	Net calorific value of fuel	kcal/ SCM					
b	Annual fuel consumption	MMSCM					
B.2.2.3	Total Electricity Generated through Steam Turbine	TOE					
B.2.2.4	Energy allocated to urea plant	TOE					
B.2.3	Through Gas turbine						
B.2.3.1	Power generation						
a	Annual power generation (Gross)	Lakh kWh					
b	Auxiliary Power Consumption	%					
c	Annual power generation (Net)	Lakh kWh					
d	Total annual fuel cost	Rs. Lakh					
e	Cost of Electricity	Rs./ kWh					
f	Heat rate of power	kcal/ kWh					
g	Power allocated for urea production	Lakh kWh					



B.2.3.2	Fuel used (specify)									
B.2.3.2.1	Fuel (NG)									
a	Net calorific value					kcal/ SCM				
b	Annual fuel consumption					Lakh SCM				
c	Total annual fuel cost					Rs. Lakh				
B.2.3.2.2	Fuel (Others)									
a	Name of Fuel used									
b	Gross calorific value					kcal/ SCM				
c	Net calorific value					kcal/ SCM				
d	Annual fuel consumption					Lakh SCM				
e	Total annual fuel cost					Rs. Lakh				
B.2.3.3	Total Electrical EnergyGenerated through Gas Turbine					Lakh kWhTOE				
B.2.3.4	Total electricity allocated for urea production					Lakh kWh				
B.2.3.45	Total electrical energy allocated for urea productionthrough Gas turbine					TOE				
B.2.4	Total Generation of Electricity (DG Set + steam turbine + gas turbine)					Lakh kWh				
B.2.5	Electricity exported to Grid/others					Lakh kWh				
B.2.6	Steam production through Co-Generation									
a	Co-Gen Capacity					MW				
b	Annual Generation					Lakh kWh				
c	Heat Input					Million kcal				
d	Heat Output					Million kcal				
e	Plant Load Factor					%				
f	Electricity Allocated for urea production					Lakh kWh				
C	Overall energy inputs at battery limit of entire complex									
C.1	Solid Fuel Consumption									
(i)	Type of Coal used									



C.1.1	Coal (Indigenous, specify)								
a	Gross calorific value (Power Generation)	kcal/ kg							
b	Gross calorific value (Process)	kcal/ kg							
c	Net calorific value (Average)	kcal/ kg							
d	Quantity balance in store	Tonne							
e	Quantity purchased	Tonne							
f	Total Quantity Consumed	Tonne							
g	Quantity allocated for urea production	Tonne							
g.i	Quantity used for power generation	Tonne							
g.ii	Quantity used for raw material	Tonne							
g.iii	Quantity used for process heating	Tonne							
C.1.2	Coal (Imported)								
a	Gross calorific value (Power Generation)	kcal/ kg							
b	Gross calorific value (Process)	kcal/ kg							
c	Net calorific value (Average)	kcal/ kg							
d	Quantity balance in store	Tonne							
e	Quantity purchased	Tonne							
f	Total Quantity Consumed	Tonne							
g	Quantity allocated for urea production								
g.i	Quantity used for power generation	Tonne							
g.ii	Quantity used for raw material	Tonne							
g.iii	Quantity used for process heating	Tonne							
C.1.3	Total energy consumption (Gross)of solid fuel	TOE							
C.1.4	Total energy (Net)of solid fuel allocated for urea production	TOE							
D	Liquid Fuel Consumption								
D.1	Furnace Oil								
a	Gross calorific value (Yearly Average)	kcal/ kg							
b	Net calorific value (Yearly Average)	kcal/ kg							
c	Quantity balance in store	kL							
d	Quantity purchased	kL							



e	Average Density	kg/ltr							
f	Total Quantity Consumed	kL							
g	Quantity allocated for urea production	Tonne							
g.i	Quantity used for power generation	kL							
g.ii	Quantity used for raw material	kL							
g.iii	Quantity used for process heating	kL							
D.2	Low Sulphur Heavy Stock (LSHS)								
a	Gross calorific value (Yearly Average)	kcal/ kg							
b	Net calorific value (Yearly Average)	kcal/ kg							
c	Quantity balance in store	Tonne							
d	Quantity purchased	Tonne							
e	Average Density	kg/ltr							
f	Total Quantity Consumed	Tonne							
g	Quantity allocated for urea production	Tonne							
g.i	Quantity used for power generation	Tonne							
g.ii	Quantity used for raw material	Tonne							
g.iii	Quantity used for process heating	Tonne							
D.3	High Sulphur Heavy Stock (HSHS)								
a	Gross calorific value (Yearly Average)	kcal/ kg							
b	Net calorific value (Yearly Average)	kcal/ kg							
c	Quantity balance in store	Tonne							
d	Quantity purchased	Tonne							
e	Average Density	kg/ltr							
f	Total Quantity Consumed	Tonne							
g	Quantity allocated for urea production	Tonne							
g.i	Quantity used for power generation	Tonne							
g.ii	Quantity used for raw material	Tonne							
g.iii	Quantity used for process heating	Tonne							
D.4	Others								
a	Gross calorific value (Yearly Average)	kcal/ kg							
b	Net calorific value (Yearly Average)	kcal/ kg							
c	Quantity balance in store	Tonne							



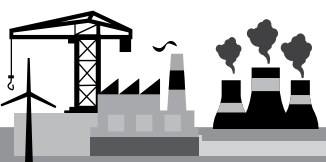
d	Quantity purchased	kL							
e	Average Density	kg/ltr							
f	Total Quantity Consumed	kL							
g	Quantity allocated for urea production	Tonne							
g.i	Quantity used for power generation	kL							
g.ii	Quantity used for raw material	kL							
g.iii	Quantity used for process heating	kL							
D.5	Total energy consumption (Gross)of liquid fuel	TOE							
D.6	Total energy of liquid fuel allocated for urea production	TOE							
E	Gaseous Fuel								
E.1	Natural Gas (Total)								
a	Gross calorific value (Yearly Average)	kcal/SCM							
b	Net calorific value (Yearly Average)	kcal/SCM							
c	Quantity purchased	Lakh SCM							
d	Quantity allocated for urea production	Lakh SCM							
d(i)	Quantity used for power generation	Lakh SCM							
d(ii)	Quantity used as raw material	Lakh SCM							
d(iii)	Quantity used for transportation, if any	Lakh SCM							
d(iv)	Quantity used for process heating	Lakh SCM							
E.2	Naphtha (used as an alternative to NG)								
a	Gross calorific value (Yearly Average)	kcal/kg							
b	Net calorific value (Yearly Average)	kcal/kg							
c	Specific gravity	kggm/ltr							
d	Quantity balance in store	Tonne							
e	Quantity purchased	Tonne							
f	Quantity allocated for urea production	Tonne							
f(i)	Quantity used for power generation	Tonne							
f(ii)	Quantity used as raw material, if any	Tonne							
f(iii)	Quantity used for process heating	Tonne							



E.3	TOTAL ENERGY_ GAS FUEL FOR UREA PRODUCTION	TOE							
F	Waste generated in the plant and used as fuel								
F.1	Solid Waste								
a	Name of Solid Waste								
b	Quantity balance in store	Tonne							
c	Gross calorific value (Yearly Average)	kcal/ kg							
d	Net calorific value (Yearly Average)	kcal/ kg							
e	Quantity Generated	Tonne							
f	Quantity consumed	Tonne							
F.2	Liquid Waste								
a	Name of Liquid Waste								
b	Quantity balance in store	kL							
c	Gross calorific value (Yearly Average)	kcal/ kg							
d	Net calorific value (Yearly Average)	kcal/ kg							
e	Average Density	kg/Litre							
f	Quantity Generated	kL							
f	Quantity consumed	kL							
F.3	Gaseous Waste								
a	Name of gas Waste								
b	Quantity balance in store	Lakh SCM							
c	Gross calorific value (Yearly Average)	kcal/ SCM							
d	Net calorific value (Yearly Average)	kcal/ kg							
e	Quantity Generated	Lakh SCM							
f	Quantity consumed	Lakh SCM							
F.4	Others								
a	Name of the Fuel(Specify)								
b	Type of Fuel								
c	Quantity balance in store	Tonne							
d	Average Gross calorific value (Yearly Average)	kcal/ kg							



e	Net calorific value (Yearly Average)	kcal/ kg						
f	Average Density	kg/litre						
g	Quantity Generated	Tonne						
h	Annual cost of the others source	Rs. Lakh/ year						
F.5	TOTAL ENERGY_WASTE HEAT	TOE						
F.6	Total Renewable Electrical Energy Consume	Lakh kWh						

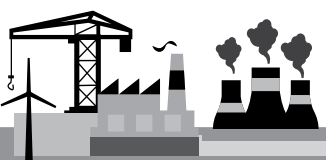


Technical Annexure to Supporting Pro-forma Sd

S. No	Particulars		Unit	Year 1 (20__ - 20__)	Year 2 (20__ - 20__)	Year 3/ Previous Year (20__ - 20__)	Baseline Year (Average of Year 1 to Year 3) (20__ - 20__)	Current/ Assessment/ Target Year (20__ -20__)
A	Ammonia Plant							
1.a.i	Installed capacity	Ammonia	MT					
1.a.ii	Re-assessed capacity	Ammonia	MT					
1.a.iii	Re-vamp capacity	Ammonia	MT					
1.b	Production	Ammonia	MT					
1.c	Actual Stream Days		Days					
2 (i)	Input As	Feed NG	MMSCM					
2(ii)		Fuel NG	MMSCM					
2(iii)		Feed Naptha	MT					
2(iv)		Fuel Naptha	MT					
2(v)		NG Feed NCV	kcal/SM3					
2(vi)		NG Fuel NCV	kcal/SM3					
2(vii)		Naptha Feed NCV	kcal/kg					
2(viii)		Naptha Fuel NCV	kcal/kg					
2(ix)		Total Steam Import (2)						
2(ix) a		Pressure of steam	kg/cm2g					
2(ix) b		Temperature of steam	°C					
2(ix) c	Energy of Steam per MT (Based on TOP 19.09)		kcal/kg					
2(ix) d		Steam Import	MT					



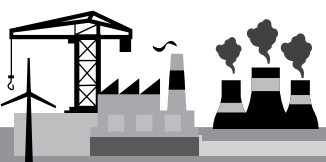
2(ix) e		Steam Export to Urea	MT						
2(ix) f		Steam Export to other Plants	MT						
2(ix) g		Net Steam Import	MT						
2(x)		Total Power (1)							
2(x) a		Generated power (allocated to ammonia)	MWh						
2(x) b		Purchased power(allocated to ammonia)	MWh						
2(x) c		Power from any other source	MWh						
2(x) d		Total power (allocated to ammonia)	MWh						
2(x)e	Heat Rate of generated power per MWh (Based on TOP 19.10)		Mkcal						
2(x) f	Conversion factor for purchased Power		Mkcal						
3 (i)	Energy Consumption / te ammonia	Feed	Mkcal						
3(ii)		Fuel	Mkcal						
3(iii)		Total Power Captive	Mkcal						
3(iv)		Total Steam	Mkcal						
3(v)		Total Power Purchased	Mkcal						
3(vi)		Credits / debits	Mkcal						
3(vii)		DM Water / Boiler feed water	Mkcal						
3(viii)		Steam condensate	Mkcal						
3(ix)		Any other	Mkcal						



3(x)	Total Energy/MT of NH3	Actual	Mkcal						
B	Urea Plant								
1.a	Installed Capacity	Urea	MT						
1.ba	Re-assessed Capacity	Urea	MT						
1.c	Re-vamp Capacity	Urea	MT						
1.db	Production	Urea	MT						
1.ec	Actual Stream Days		Days						
1.fd	Capacity Utilization		%						
2 (i)	Input As	Steam	MT						
2(i) a		Pressure of steam	kg/ cm2g						
2(i) b		Temperature of steam	°C						
2(i) c	Energy of Steam per MT (Based on TOP 19.09)		kcal/kg						
2(i) d		Steam Import	MT						
2 (i) e		Steam Export to other Plants	MT						
2 (i) f		Net Steam Import	MT						
2(ii) a		Ammonia							
2(ii) b		From Ammonia Plant	MT						
2(ii) c		From other source	MT						
2(ii) d		Total	MT						
2(iii)		Total Power (3)							
2(iii) a		Generated power(allocated to urea)	MWh						
2(iii) b		Purchased power(allocated to urea)	MWh						



2(iii) c		Power from any other source (allocated to urea)	MWh						
2(iii) d		Total power (allocated to urea)	MWh						
4 (i)	Specific Consumption	Ammonia	MT/MT						
(ii)		Steam	MT/MT						
5 (i)	Energy Consumption per Tonne of Urea	Steam	Mkcal						
5(ii)		Ammonia	Mkcal						
5(iii)		Total Power Captive	Mkcal						
5(iv)		Total Purchased Power	Mkcal						
5(v)		Credits / debits	MT						
5(vi)		DM Water / Boiler feed water	Mkcal						
5(vii)		Steam condensate	Mkcal						
5(viii)		Any other	Mkcal						
6	Total Energy per MT of Urea	Actual	Mkcal						
6(i)	Total Energy per MT of Urea (Ex-cluding township power)	Actual	Mkcal						
6(ii)	Total Energy per MT of Urea (Including township power)	Actual	Mkcal						
7	Net "Normalization factor (NF)								
8	Normalized SEC for assessment year								

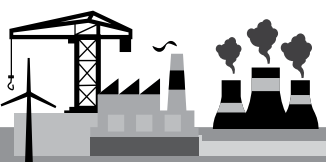


Block diagram showing total energy input at Plant BL as well as allocated for urea production. Also shows credit / debit of energy at intermediate stages for verification of specific energy consumption (SEC).									
Data to be filled-in									
Plant Railway Limit (Ammonia / Urea complex)									
Description	Total energy input at Plant BL	Energy allocated for urea production	COP & HCU				Any other product or energy credit of the same		
			SAB MIT	MT	Generated power Kwh, Kcal / hwh	Generated steam			
Solid fuels NCV	MT / year Kcal/Kg	MT / year Kcal/Kg							
Grid power	MWh / year Kcal / HWh	MWh / year Kcal / HWh							
Steam	MT / year Kcal / Kg	MT / year Kcal / Kg							
Steam at diff pressures levels									



Supporting Pro-forma Se₁: Steel (Integrated Steel Plant)

Form-Se ₁ (General Information)			
Sector - Steel (ISP)			
1	Name of the Unit		
2	i) Year of Establishment		
	ii) Registration No (As provided by BEE)		
3	Sub-Sector	Integrated Steel Plant	
4	Plant Contact Details & Address		
a	City/Town/Village		
	Post Office		
	District		
	State	Pin	
	Telephone	Fax	
b	Plant's Chief Executive Name		
	Designation		
	Telephone with STD Code	Fax	
	Mobile	E-mail	
5	Registered Office		
a	Company's Chief Executive Name		
	Designation		
	Address		
	City/Town/Village		
	Post Office		
	District		
	State	Pin	
	Telephone with STD Code	Fax	
6	Energy Manager Details		
a	Name		
	Designation	Whether EA or EM	
	EA/EM Registration No.		
	Telephone	Fax	
	Mobile	E-mail	



Form-Se₁ (Details of Energy Consumption)

Sector :- Iron & Steel (ISP)									
Name of the Unit									
S. No	Particulars		Unit	Year-1 (20__ - 20__)	Year-2 (20__ - 20__)	Year-3/ Previous Year (20__ - 20__)	Baseline Year (Average of Year 1 to Year 3)(20__ - 20__)	Current/ Assessment/ Target Year (20__ -20__)	Source of Data
A.0	Production and capacity utilization details								
1	Installed Capacity of Crude Steel	Annual	Tonne						
2	Total Crude Steel Production	A.2.18	Tonne						
3	Capacity Utilization	(A.2 / A.1) *100	%						
A.1	Material Inputs								
A.1a	Coke Oven Plants								
1	Total Quantity Non-coking Coal & Petro Coke Consumed in Coke Oven Plants	C.1.6	Tonne						
2	Total Quantity Coking Coal Consumed in Coke Oven Plants	C.2.6	Tonne						
A.1b	Pellet Plants								
3	Total Quantity Produced Coke Breeze / Fines Consumed in Pellet Plants	C.4.41	Tonne						



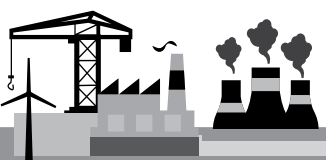
4	Total Quantity Purchased Coke Breeze / Fines Consumed in Pellet Plants	C.3.37	Tonne							
5	Total Quantity Iron ore charged in Pellet Plants	Annual	Tonne							
A.1c	Sinter Plants									
6	Total Quantity Produced Nut Coke Consumed in Sinter Plants	C.4.35	Tonne							
7	Total Quantity Purchased Nut Coke Consumed in Sinter Plants	C.3.25	Tonne							
8	Total Quantity Produced Coke Breeze / Fines Consumed in Sinter Plants	C.4.42	Tonne							
9	Total Quantity Purchased Coke Breeze / Fines Consumed in Sinter Plants	C.3.39	Tonne							
10	Total Quantity Return Sinter from other shops Charged in Sinter Plants	Annual	Tonne							
11	Total Quantity Iron ore charged in Sinter Plants	Annual	Tonne							
A.1d	Gas-based Hot Briquetted Iron (HBI) / Direct Reduced Iron (DRI) Plants									
12	Produced Pellet charged in Gas-based HBI/DRI Plants	Annual	Tonne							
13	Purchased Pellet charged in Gas-based HBI/DRI Plants	Annual	Tonne							



14	Iron ore charged in Gas-based HBI/DRI Plants	Annual	Tonne							
A.1e	Coal-based Hot Briquetted Iron (HBI) / Direct Reduced Iron (DRI) Plants									
15	Total Quantity Produced Nut Coke Consumed in Coal-based HBI/DRI Plants	C.4.36	Tonne							
16	Total Quantity Purchased Nut Coke Consumed in Coal-based HBI/DRI Plants	C.3.27	Tonne							
17	Total Quantity Produced Coke Breeze / Fines Consumed in Coal-based HBI/DRI Plants	C.4.43	Tonne							
18	Total Quantity Purchased Coke Breeze / Fines Consumed in Coal-based HBI/DRI Plants	C.3.41	Tonne							
19	Produced Pellet charged in Coal-based HBI/DRI Plants	Annual	Tonne							
20	Purchased Pellet charged in Coal-based HBI/DRI Plants	Annual	Tonne							
21	Iron ore charged in Coal-based HBI/DRI Plants	Annual	Tonne							
A.1f	Corex Plants									
22	Total Quantity Produced BF Grade Coke Consumed in Corex Plants	C.4.31	Tonne							



23	Total Quantity Purchased BF Grade Coke Consumed in Corex Plants	C.3.17	Tonne							
24	Total Quantity Produced Nut Coke Consumed in Corex Plants	C.4.37	Tonne							
25	Total Quantity Purchased Nut Coke Consumed in Corex Plants	C.3.29	Tonne							
26	Produced Pellet charged in Corex Plants	Annual	Tonne							
27	Purchased Pellet charged in Corex Plants	Annual	Tonne							
28	Sinter charged in Corex Plants	Annual	Tonne							
29	Produced Gas-based HBI/DRI charged in Corex Plants	Annual	Tonne							
30	Purchased Gas-based HBI/DRI charged in Corex Plants	Annual	Tonne							
31	Produced Coal-based HBI/DRI charged in Corex Plants	Annual	Tonne							
32	Purchased Coal-based HBI/DRI charged in Corex Plants	Annual	Tonne							
33	Iron ore charged in Corex Plants	Annual	Tonne							
34	All Flux charged in Corex Plants	Annual	Tonne							
35	BOF slag charged in Corex Plants	Annual	Tonne							
A.1g	Blast Furnace (BF) Plants									



36	Total Quantity Produced BF Grade Coke Consumed in BF Plants	C.4.32	Tonne							
37	Total Quantity Purchased BF Grade Coke Consumed in BF Plants	C.3.19	Tonne							
38	Total Quantity Produced Nut Coke Consumed in BF Plants	C.4.38	Tonne							
39	Total Quantity Purchased Nut Coke Consumed in BF Plants	C.3.31	Tonne							
40	Produced Pellet charged in BF Plants	Annual	Tonne							
41	Purchased Pellet charged in BF Plants	Annual	Tonne							
42	Sinter charged in BF Plants	Annual	Tonne							
43	Produced Gas-based HBI/DRI charged in BF Plants	Annual	Tonne							
44	Purchased Gas-based HBI/DRI charged in BF Plants	Annual	Tonne							
45	Produced Coal-based HBI/DRI charged in BF Plants	Annual	Tonne							
46	Purchased Coal-based HBI/DRI charged in BF Plants	Annual	Tonne							
47	Iron ore charged in BF Plants	Annual	Tonne							
48	Flux charged in BF Plants	Annual	Tonne							
49	BOF slag charged in BF Plants	Annual	Tonne							



A.1h	Pig Casting (PC)/ Granulated Pig Iron (GPI) Plants																			
50	Hot Metal charged in PC / GPI Plants	Annual	Tonne																	
A.1i	Calcining Plants																			
51	Dolomite & Limestone charged in Calcining Plants	Annual	Tonne																	
A.1j	Steel Melting & Casting (SMC) Plants																			
52	Total Quantity Produced BF Grade Coke Consumed in SMC Plants	C.4.33	Tonne																	
53	Total Quantity Purchased BF Grade Coke Consumed in SMC Plants	C.3.21	Tonne																	
54	Total Quantity Produced Nut Coke Consumed in SMC Plants	C.4.39	Tonne																	
55	Total Quantity Purchased Nut Coke Consumed in SMC Plants	C.3.33	Tonne																	
56	Total Quantity Produced Coke Breeze / Fines Consumed in SMC Plants	C.4.44	Tonne																	
57	Total Quantity Purchased Coke Breeze / Fines Consumed in SMC Plants	C.3.43	Tonne																	
58	Produced Pellet charged in SMC Plants	Annual	Tonne																	
59	Purchased Pellet charged in SMC Plants	Annual	Tonne																	
60	Produced Gas-based HBI/DRI charged in SMC Plants	Annual	Tonne																	



61	Purchased Gas-based HBI/DRI charged in SMC Plants	Annual	Tonne							
62	Produced Coal-based HBI/DRI charged in SMC Plants	Annual	Tonne							
63	Purchased Coal-based HBI/DRI charged in SMC Plants	Annual	Tonne							
64	Hot Metal charged in SMC Plants	Annual	Tonne							
65	Produced Pig / GPI charged in SMC Plants	Annual	Tonne							
66	Purchased Pig / GPI charged in SMC Plants	Annual	Tonne							
67	Produced Calcined Dolomite & Lime charged in SMC Plants	Annual	Tonne							
68	Purchased Calcined Dolomite & Lime charged in SMC Plants	Annual	Tonne							
A.1k	Mills									
69	Ingots processed in Wheel Mills to produce Wheels	Annual	Tonne							
70	Total Quantity Produced Coke Breeze / Fines Consumed in Blooming Mills	C.4.45	Tonne							
71	Total Quantity Purchased Coke Breeze / Fines Consumed in Blooming Mills	C.3.45	Tonne							
72	Ingots processed in Blooming Mills to produce Blooms	Annual	Tonne							



73	Total Quantity Produced Coke Breeze / Fines Consumed in Slabbing Mills	C.4.46	Tonne							
74	Total Quantity Purchased Coke Breeze / Fines Consumed in Blooming Mills	C.3.45	Tonne							
75	Ingots processed in Slabbing Mills to produce Slabs	Annual	Tonne							
76	Blooms processed in Billet Mills to produce Billets	Annual	Tonne							
77	Blooms processed in Light Merchant Mills to produce Billets & Bars (including Round, Flat & Rod)	Annual	Tonne							
78	Blooms processed in Medium Merchant & Structural Mills to produce Bars (including Round, Flat & Rod), Rails & Sections	Annual	Tonne							
79	Blooms processed in Rail / Beam / Section / Heavy Structural Mills to produce Rails & Sections	Annual	Tonne							
80	Blooms processed in Axle Mills to produce Axles	Annual	Tonne							
81	Billets processed in Skelp Mills to produce Skelps	Annual	Tonne							



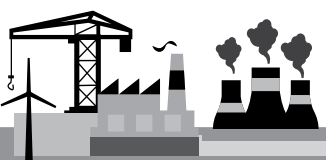
82	Billets processed in all Merchant Mills to produce Bars (including Round, Flat & Rod), Rails & Sections	Annual	Tonne							
83	Billets processed in Bar & Rod Mills to produce Bars (including Round, Flat & Rod)	Annual	Tonne							
84	Billets processed in Wire Rod Mills to produce Wire Rods	Annual	Tonne							
85	Billets processed in Light Structural Mills to produce Rails & Sections	Annual	Tonne							
86	Slabs processed in Plate Mills to produce Plates	Annual	Tonne							
87	Slabs processed in Hot Strip Mills to produce Hot Strips	Annual	Tonne							
88	Thin Slabs processed in Compact Strip Mills to produce Hot Strips	Annual	Tonne							
89	Hot Strips processed in Cold Rolling Mills to produce Cold Rolled Non-alloyed & Stainless Steels	Annual	Tonne							
90	Hot Strips processed in Pipe Mills to produce Pipes	Annual	Tonne							
91	Hot Strips processed in Silicon Steel Mills to produce Cold Rolled Silicon-electrical Steels	Annual	Tonne							



18	Crude Steel Production in SMC Plants	A.2.13 + A.2.14 + A.2.15 + A.2.16 + A.2.17	Tonne							
19	Wheel Production in Wheel Plants from Ingots	Annual	Tonne							
20	Bloom Production in Blooming Mills from Ingots	Annual	Tonne							
21	Slab Production in Slabbing Mills from Ingots	Annual	Tonne							
22	Billet Production in Billet Mills from Blooms	Annual	Tonne							
23	Billet Production in Light Merchant Mills from Blooms	Annual	Tonne							
24	Bar (including Round, Flat & Rod) Production in Light Merchant Mills from Blooms	Annual	Tonne							
25	Rail & Section Production in all Medium Merchant & Structural Mills from Blooms	Annual	Tonne							
26	Bar (including Round, Flat & Rod) Production in all Medium Merchant & Structural Mills from Blooms	Annual	Tonne							
27	Rail & Section Production in Rail / Beam / Section / Heavy Structural Mills from Blooms	Annual	Tonne							



28	Axle Production in Axle Mills from Blooms	Annual	Tonne								
29	Skelp Production in Skelp Mills from Billets	Annual	Tonne								
30	Bar (including Round, Flat & Rod) Production in Merchant Mills from Billets	Annual	Tonne								
31	Rail & Section Production in Merchant Mills from Billets	Annual	Tonne								
32	Bar (including Round, Flat & Rod) Production in Bar & Rod Mills from Billets	Annual	Tonne								
33	Wire Rod Production in Wire Rod Mills from Billets	Annual	Tonne								
34	Rail & Section Production in Light Structural Mills from Billets	Annual	Tonne								
35	Plate Production in Plate Mills from Slabs	Annual	Tonne								
36	Hot Strip Production in Hot Strip Mills from Slabs	Annual	Tonne								
37	Hot Strip Production in Compact Strip Mills from Thin Slabs	Annual	Tonne								
38	Cold Rolled Non-alloyed & Stainless Steel Production in Cold Rolling Mills from Hot Strips	Annual	Tonne								
39	Pipe Production in Pipe Mills from Hot Strips	Annual	Tonne								



40	Cold Rolled Silicon-electrical Steel Production in Silicon Steel Mills from Hot Strips	Annual	Tonne							
A.3	Utility Outputs									
1	Oxygen Production in Oxygen Plant	F.1.2	1,000 Nm ³							
2	Process Steam Production in Boilers (not included in other Plants / Mills)	F.2.31	Tonne							
3	Electricity Production in Power Plants (through Diesel Generators)	B.1.4	MWh							
4	Electricity Production in Power Plants (through Steam Turbine)	B.1.5	MWh							
5	Electricity Production in Power Plants (through Gas Turbine)	B.1.6	MWh							
6	Producer Gas Production in Producer Gas Plant	E.8.2	1,000 Nm ³							
A.4	Material Sold									
1	BF Coke Sold	Annual	Tonne							
2	Nut Coke Sold	Annual	Tonne							
3	Coke Breeze/Fines Sold	Annual	Tonne							
4	Total Coke Sold	A.4.1 + A.4.2 + A.4.3	Tonne							
5	Pellet Sold	Annual	Tonne							
6	Sinter Sold	Annual	Tonne							
7	Gas-based HBI/DRI Sold	Annual	Tonne							
8	Coal-based HBI/DRI Sold	Annual	Tonne							
9	Pig / Granulated Pig Iron / Iron skull Sold	Annual	Tonne							



7	Coal-based HBI/DRI Purchased	Annual	Tonne								
8	Pig / Granulated Pig Iron / Iron skull Purchased	Annual	Tonne								
9	Calcined Dolomite & Lime Purchased	Annual	Tonne								
10	Ingot Purchased	Annual	Tonne								
11	Bloom (including Semi-finished Round Bar & Beam Blank) Purchased	Annual	Tonne								
12	Billet Purchased	Annual	Tonne								
13	Slab Purchased	Annual	Tonne								
14	Thin Slab Purchased	Annual	Tonne								
15	Hot Strip Purchased	Annual	Tonne								
A.6	Production Ratios										
1	Produced Coke	{A.6.3 x A.1.3/A.2.5} +{A.6.5 x (A.1.6 +A.1.8) / A.2.6} +{A.6.8 x(A.1.15 +A.1.17) / A.2.8} +{A.6.10 x(A.1.22 + A.1.24)/ A.2.9} +{A.6.11 x (A.1.36 + A.1.38) / A.2.10} +{(A.1.52 +A.1.54 + A.1.56) / A.2.18} +{A.6.21 x A.1.70 / A.2.20} +{A.6.23 x A.1.73/ A.2.21}	Tonne Coke / Tonne Crude Steel								



2	Purchased Coke	$\{A.6.3 \times A.1.4 / A.2.5\} + \{A.6.5 \times (A.1.7 + A.1.9) / A.2.6\} + \{A.6.8 \times (A.1.16 + A.1.18) / A.2.8\} + \{A.6.10 \times (A.1.23 + A.1.25) / A.2.9\} + \{A.6.11 \times (A.1.37 + A.1.39) / A.2.10\} + \{(A.1.52 + A.1.55 + A.1.57) / A.2.18\} + \{A.6.21 \times A.1.71 / A.2.20\} + \{A.6.22 \times A.1.74 / A.2.21\}$	Tonne Coke / Tonne Crude Steel						
3	Produced Pellet	$(A.6.6 \times A.1.12 / A.2.7) + (A.6.8 \times A.1.19 / A.2.8) + (A.6.10 \times A.1.26 / A.2.9) + (A.6.11 \times A.1.40 / A.2.10) + (A.1.58 / A.2.18)$	Tonne Pellet / Tonne Crude Steel						



4	Purchased Pellet	(A.6.6 x A.1.13 / A.2.7) + (A.6.8 x A.1.20 / A.2.8) + (A.6.10 x A.1.27 / A.2.9) + (A.6.11 x A.1.41 / A.2.10) + (A.1.59 / A.2.18)	Tonne Pellet / Tonne Crude Steel						
5	Sinter	(A.6.10 x A.1.28 / A.2.9) + (A.6.11 x A.1.42 / A.2.10)	Tonne Sinter / Tonne Crude Steel						
6	Produced Gas-based HBI/DRI	(A.6.10 x A.1.29 / A.2.9) + (A.6.11 x A.1.43 / A.2.10) + (A.1.60 / A.2.18)	Tonne Gas-based HBI & DRI / Tonne Crude Steel						
7	Purchased Gas-based HBI/DRI	(A.6.10 x A.1.30 / A.2.9) + (A.6.11 x A.1.44 / A.2.10) + (A.1.61 / A.2.18)	Tonne Gas-based HBI & DRI / Tonne Crude Steel						
8	Produced Coal-based HBI/DRI	(A.6.10 x A.1.31 / A.2.9) + (A.6.11 x A.1.45 / A.2.10) + (A.1.62 / A.2.18)	Tonne Coal-based HBI & DRI / Tonne Crude Steel						



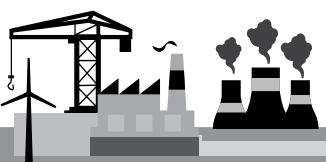
9	Purchased Coal-based HBI/DRI	$(A.6.10 \times A.1.32 / A.2.9) + (A.6.11 \times A.1.46 / A.2.10) + (A.1.63 / A.2.18)$	Tonne Coal-based HBI & DRI / Tonne Crude Steel						
10	Produced Hot Metal in Corex	$\{A.1.64 + (A.1.65 \times A.1.50 / A.2.11)\} \times \{A.2.9 / (A.2.9 + A.2.10)\} / A.2.18$	Tonne Hot Metal / Tonne Crude Steel						
11	Produced Hot Metal in BF	$\{A.1.64 + (A.1.65 \times A.1.50 / A.2.11)\} \times \{A.2.10 / (A.2.9 + A.2.10)\} / A.2.18$	Tonne Hot Metal / Tonne Crude Steel						
12	Purchased Pig / GPI / Iron Skull	$A.1.66 / A.2.18$	Tonne Hot Metal / Tonne Crude Steel						
13	Produced Calcined Dolomite & Lime	$A.1.67 / A.2.18$	Tonne Cal. Dolo & Lime / Tonne C Steel						
14	Purchased Calcined Dolomite & Lime	$A.1.68 / A.2.18$	Tonne Cal. Dolo & Lime / Tonne C Steel						



15	Ingot Produced in SMC Plants	A.2.13 / A.2.18	Tonne Ingot / Tonne Crude Steel							
16	Bloom Produced in SMC Plants	A.2.14 / A.2.18	Tonne Bloom / Tonne Crude Steel							
17	Billet Produced in SMC Plants	A.2.15 / A.2.18	Tonne Billet / Tonne Crude Steel							
18	Slab Produced in SMC Plants	A.2.16 / A.2.18	Tonne Slab / Tonne Crude Steel							
19	Thin Slab Produced in SMC Plants	A.2.17 / A.2.18	Tonne Thin Slab / Tonne Crude Steel							
20	Wheels Produced in Wheel Mills	A.2.19 / A.2.18	Tonne Wheel / Tonne Crude Steel							
21	Bloom Produced in Blooming Mills	A.6.15 x A.2.20 / (A.1.69 + A.1.72 + A.1.75 + A.4.11)	Tonne Bloom / Tonne Crude Steel							



22	Slab Produced in Slabbing Mills	A.6.15 x A.2.21 / (A.1.69 + A.1.72 + A.1.75 + A.4.11)	Tonne Slab / Tonne Crude Steel						
23	Billet Produced in Billet Mill	A.6.43 x A.2.22 / (A.1.76 + A.1.77 + A.1.78 + A.1.79 + A.1.80 + A.4.12)	Tonne Billet / Tonne Crude Steel						
24	Billet Produced in Light Merchant Mills	A.6.43 x A.2.23 / (A.1.76 + A.1.77 + A.1.78 + A.1.79 + A.1.80 + A.4.12)	Tonne Billet / Tonne Crude Steel						
25	Bar Produced in Light Merchant Mill	A.6.43 x A.2.24 / (A.1.76 + A.1.77 + A.1.78 + A.1.79 + A.1.80 + A.4.12)	Tonne Bar / Tonne Crude Steel						
26	Rail & Section Produced in Medium Merchant & Structural Mills	A.6.43 x A.2.25 / (A.1.76 + A.1.77 + A.1.78 + A.1.79 + A.1.80 + A.4.12)	Tonne Rail & Section / Tonne Crude Steel						
27	Bar Produced in Medium Merchant & Structural Mills	A.6.43 x A.2.26 / (A.1.76 + A.1.77 + A.1.78 + A.1.79 + A.1.80 + A.4.12)	Tonne Bar / Tonne Crude Steel						
28	Rail & Section Produced in Rail / Beam / Section / Heavy Structural Mills	A.6.43 x A.2.27 / (A.1.76 + A.1.77 + A.1.78 + A.1.79 + A.1.80 + A.4.12)	Tonne Rail & Section / Tonne Crude Steel						



29	Axle Produced in Axle Mills	A.6.43 x A.2.28 / (A.1.76 + A.1.77 + A.1.78 + A.1.79 + A.1.80 + A.4.12)	Tonne Axle / Tonne Crude Steel						
30	Skelp Produced in Skelp Mills	A.6.45 x A.2.29 / (A.1.81 + A.1.82 + A.1.83 + A.1.84 + A.1.85 + A.4.13)	Tonne Skelp / Tonne Crude Steel						
31	Bar Produced in Merchant Mills	A.6.45 x A.2.30 / (A.1.81 + A.1.82 + A.1.83 + A.1.84 + A.1.85 + A.4.13)	Tonne Bar / Tonne Crude Steel						
32	Rail & Section Produced in Merchant Mills	A.6.45 x A.2.31 / (A.1.81 + A.1.82 + A.1.83 + A.1.84 + A.1.85 + A.4.13)	Tonne Rail & Section / Tonne Crude Steel						
33	Bar Produced in Bar & Rod Mills	A.6.45 x A.2.32 / (A.1.81 + A.1.82 + A.1.83 + A.1.84 + A.1.85 + A.4.13)	Tonne Bar / Tonne Crude Steel						
34	Wire Rod Produced in Wire Rod Mills	A.6.45 x A.2.33 / (A.1.81 + A.1.82 + A.1.83 + A.1.84 + A.1.85 + A.4.13)	Tonne Wire Rod / Tonne Crude Steel						



35	Rail & Section Produced in Light Structural Mills	A.6.45 x A.2.34 / (A.1.81 + A.1.82 + A.1.83 + A.1.84 + A.1.85 + A.4.13)	Tonne Rail & Section / Tonne Crude Steel						
36	Plate Produced in Plate Mills	A.6.44 x A.2.35 / (A.1.86 + A.1.87 + A.4.14)	Tonne Plate / Tonne Crude Steel						
37	Hot Strip Produced in Hot Strip Mills	A.6.44 x A.2.36 / (A.1.86 + A.1.87 + A.4.14)	Tonne Hot Strip / Tonne Crude Steel						
38	Hot Strip Produced in Compact Strip Mills	A.6.19 x A.2.37 / (A.1.88 + A.4.15)	Tonne Hot Strip / Tonne Crude Steel						
39	Cold Rolled Non-alloyed & Stainless Steel Produced in Cold Rolling Mills	A.6.46 x A.2.38 / (A.1.89 + A.1.90 + A.1.91 + A.4.23)	Tonne CR NA & SS / Tonne Crude Steel						
40	Pipe Produced in Pipe Mills	A.6.46 x A.2.39 / (A.1.89 + A.1.90 + A.1.91 + A.4.23)	Tonne Pipe / Tonne Crude Steel						
41	Cold Rolled Silicon-electrical Steel Produced in Silicon Steel Mills	A.6.46 x A.2.40 / (A.1.89 + A.1.90 + A.1.91 + A.4.23)	Tonne CR Si-El S / Tonne Crude Steel						



42	Total Bloom Produced	A.6.16 + A.6.21	Tonne Bloom / Tonne Crude Steel						
43	Total Slab Produced	A.6.18 + A.6.22	Tonne Slab / Tonne Crude Steel						
44	Total Billet Produced	A.6.17 + A.6.23 + A.6.24	Tonne Billet / Tonne Crude Steel						
45	Total Hot Strip Produced	A.6.37 + A.6.38	Tonne Hot Strip / Tonne Crude Steel						
46	Total Bar Produced	A.6.25 + A.6.27 + A.6.31 + A.6.33	Tonne Bar / Tonne Crude Steel						
47	Total Rail & Section Produced	A.6.26 + A.6.28 + A.6.32 + A.6.35	Tonne Rail & Section / Tonne Crude Steel						
48	Ingot Sold	A.6.15 x A.4.11 / (A.1.69 + A.1.72 + A.1.75 + A.4.11)	Tonne Ingot / Tonne Crude Steel						



49	Bloom Sold	A.6.43 x A.4.12 / (A.1.76 + A.1.77 + A.1.78 + A.1.79 + A.1.80 + A.4.12)	Tonne Bloom / Tonne Crude Steel							
50	Billet Sold	A.6.45 x A.4.13 / (A.1.81 + A.1.82 + A.1.83 + A.1.84 + A.1.85 + A.4.13)	Tonne Billet / Tonne Crude Steel							
51	Slab Sold	A.6.44 x A.4.14 / (A.1.86 + A.1.87 + A.4.14)	Tonne Slab / Tonne Crude Steel							
52	Thin Slab Sold	A.6.19 x A.4.15 / (A.1.88 + A.4.15)	Tonne Thin Slab / Tonne Crude Steel							
53	Hot Strip Sold	A.6.46 x A.4.23 / (A.1.89 + A.1.90 + A.1.91 + A.4.23)	Tonne Hot Strip / Tonne Crude Steel							
54	Light Merchant Mills producing Billet & Bar from Blooms	A.6.24 + A.6.25	Tonne Billet & Bar / Tonne Crude Steel							
55	Medium Merchant & Structural Mills producing Bar, Rail & Section from Bloom	A.6.26 + A.6.27	Tonne Bar, Rail & Section / Tonne Crude Steel							



56	Merchant Mills producing Bar, Rail & Section from Billets	A.6.31 + A.6.32	Tonne Bar, Rail & Section / Tonne Crude Steel							
57	Oxygen Plant	A.3.1 / A.2.18	1,000 Nm3 O2 / Tonne Crude Steel							
58	Boilers (not included in other Plants / Mills)	A.3.2 / A.2.18	Tonne Steam / Tonne Crude Steel							
59	Power Plant (DG)	A.3.3 / A.2.18	MWh Power / Tonne Crude Steel							
60	Power Plant (ST)	A.3.4 / A.2.18	MWh Power / Tonne Crude Steel							
61	Power Plant (GT)	A.3.5 / A.2.18	MWh Power / Tonne Crude Steel							
62	Producer gas plant	A.3.6 / A.2.18	1,000 Nm3 PG / Tonne Crude Steel							
A.7	Yield (t product / t input)									



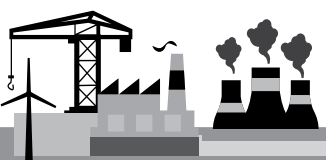
1	Wheel Mills	A.2.19 / A.1.69	t Wheel / t Ingot							
2	Blooming Mills	A.2.20 / A.1.72	t Bloom / t Ingot							
3	Slabbing Mills	A.2.21 / A.1.75	t Slab / t Ingot							
5	Billet Mills	A.2.22 / A.1.76	t Billet / t Bloom							
6	Light Merchant Mills	(A.2.23 + A.2.24) / A.1.77	t Billet & Bar / t Bloom							
7	Medium Merchant & Structural Mills	(A.2.25 + A.2.26) / A.1.78	t Bar, Rail & Section / t Bloom							
8	Rail / Beam / Section / Heavy Structural Mills	A.2.27 / A.1.79	t Rail & Section / t Bloom							
4	Axle Mills	A.2.28 / A.1.80	t Axle / t Bloom							
9	Skelp Mills	A.2.29 / A.1.81	t Skelp / t Billet							
12	Merchant Mills	(A.2.30 + A.2.31) / A.1.82	t Bar, Rail & Section / t Billet							
11	Bar & Rod Mills	A.2.32 / A.1.83	t Bar / t Billet							
10	Wire Rod Mills	A.2.33 / A.1.84	t Wire Rod / t Billet							
13	Light Structural Mills	A.2.34 / A.1.85	t Rail & Section / t Billet							
14	Plate Mills	A.2.35 / A.1.86	t Plate / t Slab							
15	Hot Strip Mills	A.2.36 / A.1.87	t Hot Strip / t Slab							



16	Compact Strip Mills	A.2.37 / A.1.88	t Hot Strip / t Thin Slab							
17	Cold Rolling Mills	A.2.38 / A.1.89	t Cold Rolled NA & SS / t Hot Strip							
18	Pipe Mills	A.2.39 / A.1.90	t Pipe / t Hot Strip							
19	Silicon Steel Mills	A.2.40 / A.1.91	t Cold Rolled Si- El Steel / t Hot Strip							
B.1	Electricity									
1	Purchased Non- renewable Electricity from Grid	Annual	MWh							
2	Purchased Renewable Electricity from all sources	Annual	MWh							
3	Purchased Non- renewable Electricity from Sister / Joint Venture Plant by wheeling or not	Annual	MWh							
4	Electricity generated from own Diesel Generator Set	Annual	MWh							
5	Electricity generated from own Captive Power Plant (through Steam Turbines)	Annual	MWh							
6	Electricity generated from own Captive Power Plant (through Gas Turbines)	Annual	MWh							
7	Electricity Supplied to Grid / others	Annual	MWh							



8	Electricity Supplied to Colony / Project related activities / others	Annual	MWh							
9	Renewable purchase Obligation of Plant (RPO) (Solar & Non-Solar)	Annual	%							
10	Renewable Purchase obligation of plant (RPO) (Solar & Non-Solar)	Annual	MWh							
11	Renewable Energy generator as approved by MNRE	--	MW							
12	Quantum of Renewable Energy Certificates (REC) obtained as a Renewal Energy Generator (Solar & Non-Solar)	Annual	MWh							
13	Quantum of Energy sold under preferential tariff	Annual	MWh							
14	Plant Connected Load	Annual	MW							
15	Contract demand with utility	Annual	MVA							
16	Notified Baseline SEC		TOE/ Tonne							
17	Notified Target SEC		TOE/ Tonne							
18	Saving Target in TOE/ ton of product as per PAT scheme Notification		TOE/ Tonne							
19	Equivalent Major Product Output in Tons as per PAT scheme Notification		Tonne							
20	Electricity Consumption within DC's premises	Sum (B.1.1:B.1.6) - B.1.7 - B.1.8	MWh							



21	Electricity used in Coke Oven Plant	Annual	MWh								
22	Electricity used in Pellet Plant	Annual	MWh								
23	Electricity used in Sinter Plant	Annual	MWh								
24	Electricity used in Gas based HBI/DRI Plant	Annual	MWh								
25	Electricity used in Coal-based HBI/DRI Plant	Annual	MWh								
26	Electricity used in Corex Plant	Annual	MWh								
27	Electricity used in Blast Furnace Plant	Annual	MWh								
28	Electricity used in Calcining Plant	Annual	MWh								
29	Electricity used in Steel Melting & Casting Plant	Annual	MWh								
30	Electricity used in Wheel Mills	Annual	MWh								
31	Electricity used in Blooming Mills	Annual	MWh								
32	Electricity used in Slabbing Mills	Annual	MWh								
33	Electricity used in Billet Mills	Annual	MWh								
34	Electricity used in Light Merchant Mills	Annual	MWh								
35	Electricity used in Medium Merchant & Structural Mills	Annual	MWh								
36	Electricity used in Rail / Beam / Section / Heavy Structural Mills	Annual	MWh								



37	Electricity used in Axle Mills	Annual	MWh														
38	Electricity used in Skelp Mills	Annual	MWh														
39	Electricity used in Merchant Mills	Annual	MWh														
40	Electricity used in Bar & Rod Mills	Annual	MWh														
41	Electricity used in Wire Rod Mills	Annual	MWh														
42	Electricity used in Light Structural Mills	Annual	MWh														
43	Electricity used in Plate Mills	Annual	MWh														
44	Electricity used in Hot Strip Mills	Annual	MWh														
45	Electricity used in Compact Strip Mills	Annual	MWh														
46	Electricity used in Cold Rolling Mills	Annual	MWh														
47	Electricity used in Pipe Mills	Annual	MWh														
48	Electricity used in Silicon Steel Mills	Annual	MWh														
49	Electricity used in Oxygen Plants	Annual	MWh														
50	Electricity used in Boilers (not included in other Plants / Mills)	Annual	MWh														
51	Electricity used in Power Plants (DG)	Annual	MWh														
52	Electricity used in Power Plants (ST)	Annual	MWh														
53	Electricity used in Power Plants (GT)	Annual	MWh														



54	Electricity used in Producer Gas Plant	Annual	MWh							
55	Electricity used in Auxiliary Plants	Annual	MWh							
56	Electricity lost in DC's premises	B.1.20 - Sum(B.1.21 : B.1.55)	MWh							
57	Upstream Heat Rate	Annual	kcal/kWh							
58	Equivalent Thermal Energy of Net Purchased Electricity from Grid / Other	{ Sum(B.1.1 : B.1.3) - Sum(B.1.7 : B.1.8) } x B.1.57 / 1000	Gcal							
	Own Generation									
B.2.1	Through Diesel Generator (DG) sets									
1	Install Capacity	Annual	MW							
2	Annual generation	Gross Unit Generation	MWh							
3	Designed Gross Heat Rate of DG Set	Annual	kcal/kWh							
4	Running Hrs	Annual	Hrs							
B.2.2	Through Steam turbine/ generator									
1	Install Capacity	Annual	MW							
2	Annual Gross Unit generation	Annual	MWh							
3	Auxiliary Power Consumption	Annual	%							
4	Design Heat Rate	Annual	kcal/ kWh							
5	Operative gross heat rate	Annual	kcal/ kWh							
6	Operative Net heat rate	Annual	kcal/ kWh							
7	Standard heat rate	Annual	kcal/ kWh							
8	Plant Load Factor (PLF)	Annual	%							
9	Running Hrs	Annual	Hrs							