

**Project:** Municipal Solid Waste (MSW) to Solid Recovered Fuel (SRF) Production Plant.  
(Waste to Energy and Resource Recovery Plant)

**Solid Recovered Fuel (SRF):**

SRF is a sustainable fuel and a prime renewable energy source which is used to replace coal in industrial applications such as cement kilns, steel mills, power plants, brick kilns, etc. SRF is a standard defined by ISO Specification of TC 300 and European Standard of CEN/TC 343.



To produce SRF, the Municipal Solid Waste (MSW) passes through a series of shredders, screens, air classifiers/density separators and magnets. Inert materials, recyclable plastics and metals are extracted from the shredded material, leaving a mix of mainly non-recyclable paper, card, wood, textiles and plastic which is the main ingredient of SRF. The production may involve some or all of the following steps:

- Preliminary separation/sorting
- Bio-Drying
- Course, pre-shredding
- Size screening
- Magnetic separation
- Refining separation
- Fine, secondary shredding
- Baling & wrapping

Solid Recovered Fuel (SRF) offers almost 30% financial savings over coal for the same amount of heat value. Compared to the emission of coal, SRF emits 30% less Carbon, 85% less Nitrogen, 90% less Sulfur, 50% less Chlorine and 40% more Hydrogen. This makes a tremendous difference on environment of using SRF instead of coal.

Apart from the huge financial savings (almost 30%) for the same amount of heat generated by SRF over coal, a major advantage of SRF is that the Net Calorific Value (NCV) fully configurable within the range of 7 to 28 MJ/Kg, which gives the customer

complete flexibility to get the exact heat output required by their system.

**Capacity:** 300 tons MSW to be processed and produce 120 tons of SRF has been approved for Sirajganj Plant.

**Issuing Authority:**  
Ministry of LGRDC (Local Government, Rural Development & Co-operatives),  
Government of Bangladesh

**Signing Authority:**  
Sirajganj Pourashava

**Executing Organization:**  
Sirajganj Eco-Energy Limited

**Contract Period:**  
20 Years

**Plant Location:** Banbaria, Sirajganj, Bangladesh

**Land Allocated:** 6.25 Acre, already handed over to the Executing Organization

**Final Output Required:**  
Solid Recovered Fuel (SRF) Class 3 or better as defined in European standard  
EN 15359 or ISO TC300.

**Off Taker Agreement:**  
Lafarge Holcim Bangladesh Limited

**Investment Requirement:**  
US\$ 14 million

**Return on Investment:**  
6.8 Years

**Others Aspects:**

1. Bangladesh consumes 12 million tons of coal per year and it is still increasing.
2. The project has approval for import or RDF/SRF at 1:1 ratio to the production capacity. Thus, this gives us an opportunity to import RDF/SRF in Bangladesh. This plant satisfies the requirement of a R12 facility as required by UK/EU Environment Agency for approving exporting of RDF/SRF.