



SAVITUR ROCKLAND

 **GREEN ENERGY**



STEAM



Together We Work, Together We Build

PAY ONLY FOR THE STEAM USED

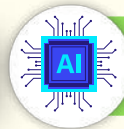
Our steam service include supply of steam utilizing your existing boiler and steam lines. Green kit is installed with your boiler which is then operated, maintained and fueled by us while you save your money , time and efforts. Companies can pay us based on the steam supplied as per reading from steam flow meter.

- ₹ **Save Money , Time and resources**
- 🌱 **Enjoy Boiler energy efficiency**
- 🔧 **Quick installations and service**
- ⊕ **Boiler health improvement**
- CO₂ **Reduces CO₂ emissions by 67%**
- 📄 **Zero government Paperwork**



GREEN PACK

Green Pack refers to our sophisticated and advanced boiler retrofit kit that converts Oil/ Gas fired boilers to green biomass fired boilers. The technology is based on various trials and errors concept. The robust technology manufactured thereafter, consists of components such as combustion unit, centrifugal induced draft fan , mechanical dust collector and bag house. Green kit consists of the following features:



AI DRIVEN AUTOMATION



ZERO MAINTENANCE



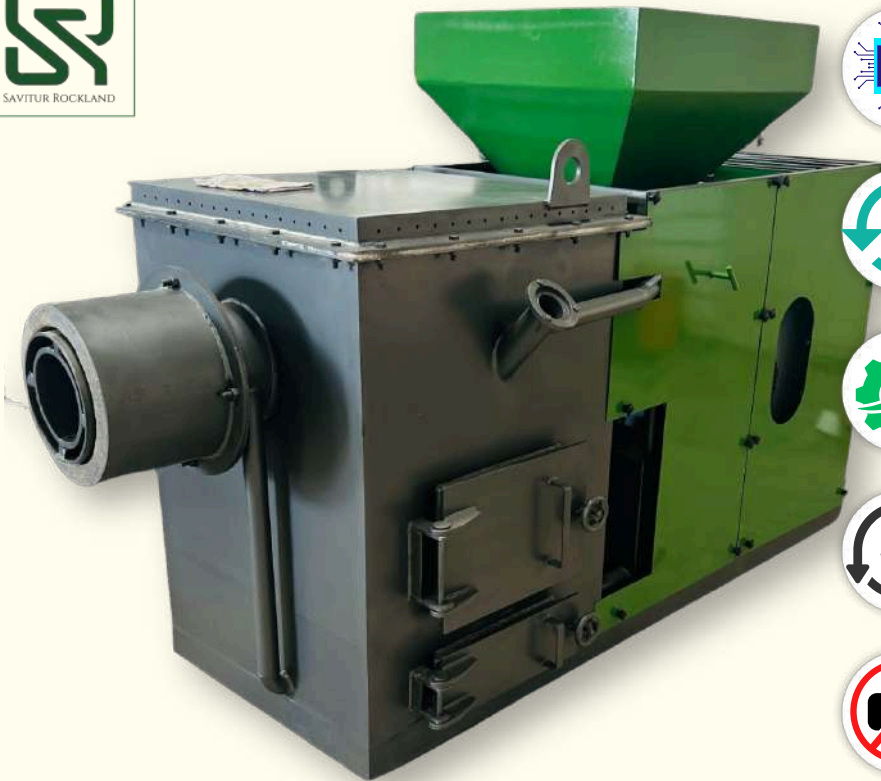
FUEL EFFICIENCY



BOILER REMAINS SAME



COMPACT & SILENT



Purposeful Service, Mutual Growth.

COMBUSTION UNIT

Combustion Unit is an all in one setup for delivering all boiler heating requirements meticulously. Equipped with a compact and tailor made body which amends itself as per site requirement, the combustion unit is built with following features:

FEATURES



Dual PLC system: There is a separate real time controlled PLC system for meeting the temperature and pressure requirements of boiler system. Using our robust technology, our machine fulfills your steam needs effortlessly.



Powder Coated: Most of the fuel interaction area of the machine is high temperature powder coated on top of stainless steel structure to improve the overall life and durability of the machine structure.



Three Layered Fire Nozzle: The fire nozzle between the burner and boiler consists of a three layered SS 304 body caked with specialized refractory to send out a better and more efficient flame into the boiler.



Pressurized Fixed grate: Our system is built using the core boiler technology similar to pressurized fixed grate wherein fire bars in our furnace replicate the same technology as fixed grate boilers to deliver a smooth and clean combustion. It ensures complete fuel utilization and lower unburnt particles.



Japanese inbuilt system: Our bought out gearbox consists of Japanese technology that is run using a reputed motor for ensuring a smooth transfer of fuel from the hopper up to the furnace using twin screw feeder technology.



PLC driven Panel: The combustion unit's heart is located in this panel controls. The panel compiles all the feedback of boiler, green kit and manpower feedbacks to auto synchronize all activities.



POLLUTION CONTROL DEVICES



Pollution control devices or PCD is the second and extremely useful component of Green Kit that is curated as per the local conditions at site. The equipments are completely tailor made for suiting the space availability at site with addressing the state pollution norms effectively. PCD consists of mechanical dust collector, centrifugal induced draft fan and bag house. The solutions are further selected as per requirements.

COMPONENTS

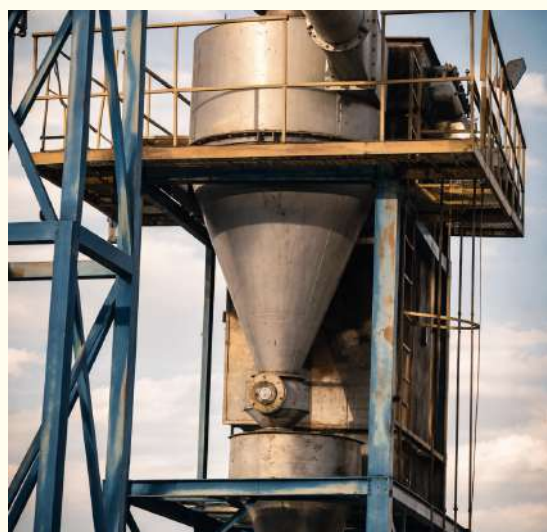
Bag house or bag filter which is usually equipped in our Green Kit to meet state's pollution norms due to our specialized bags. Our tightly stitched PTFE bags and hard fabricated body of the equipment ensures that every particle of dust is removed from the flue gas before a cleaner emission. Our bag filter consists of pulse jet system for automatic cleaning of the bags to ensure continuous operations and the long lasting safety of bags. Curated for high temperatures upto 300 degrees Celsius and variable gas quantity, bag filters would work effectively in most conditions.



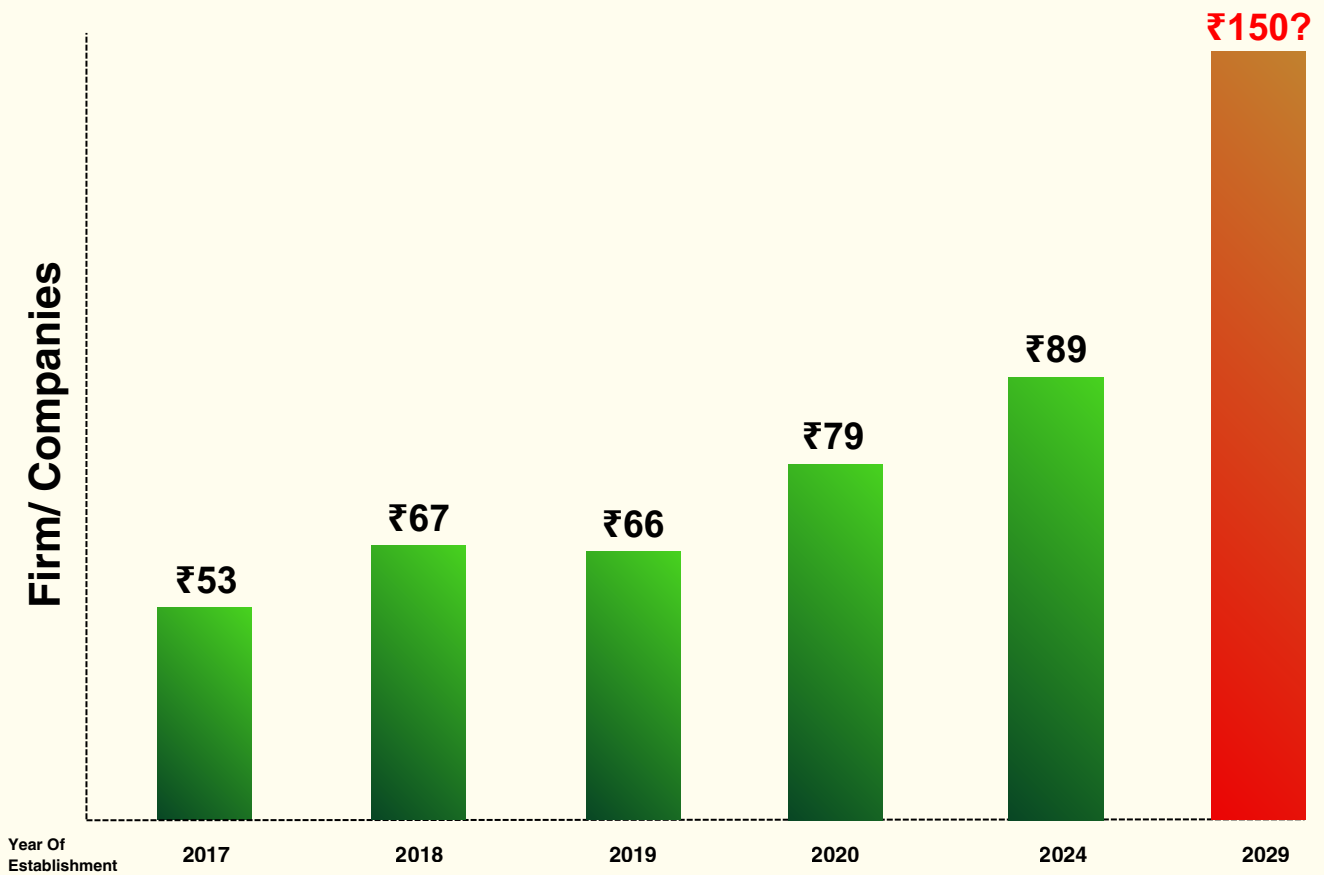
Induced Draft Fan or ID fan is a core equipment which ensures that all the flue gas resulting from the boiler operations is safely passed through all the pollution control devices and released to open air using the chimney. The MS structure is a drive based system that operates over recommended AC motor. A high fan static efficiency of 82.7% ensures proper removal of gases up to the industrial standards.



Centrifugal Mechanical dust collector is a cylindrical shaped MS structure using which the fumes are passed up to the ID fan for next further steps. Rotary air lock system is used for dust disposal arrangements through a dust disposal slide gate. The equipment runs on a gear motor which is linked to a chain drive. The equipment is tailor made as per the equipment and site requirements of the customer.



DIESEL PRICE TREND



Year	2017	2018	2019	2020	2024	2029
Diesel Price (₹)	53	67	66	79	89	150?

Sharp increase of 68% between 2017-2024.



Steam cost savings. 32.8% to 36%

CO₂ emission savings 50% to 60%

Equivalent to 126 to 146 trees planted daily



Why Us ?



50%

Save Upto 50% of steam Costs



Automate all steam related operations



Upto 52% CO₂ Emission reductions
(Equals planting 2000 + trees / monthly)

FUEL SAVINGS ANALYSIS

Fuel Type	KCAL/kg	Saving Potential Range	Reduction in CO ₂ Emissions
HSD (Diesel)	9500	30%-50%	52.00%
LPG	11200	20%-40%	52.00%
PNG	8500	30%-50%	52.00%
FO	10000	30%-40%	51.00%
LDO	10000	20%-40%	46.00%

GREEN HD BIOMASS

Green High Density Biomass is one of the fuels which can be used for Green Pack. It is a high performance, low ash biomass driven eco-friendly fuel made of only pine wood dried wood chips and agricultural wastages like cashew nut shell, Ground nut shell, stalks. This innovative fuel is developed by our in house team for meeting critical energy requirements of our clients. These products are useless to the society unless processed for a proper use case. This ensures and defines the term “Waste to Energy”.

FEATURES

- ✔ **Consistent Quality:** Sized between 5 MM to 20 MM and processed to remove impurities for an even and consistent performance.
- ✔ **Easy Storage:** Tightly packed in high thickness gunny bags.
- ✔ **High GCV:** Contains 4200–4500 Kcal/kg gross calorific value. Serves a number of industries.
- ✔ **Low Ash Content:** Produces high recovery of fuel and lowers machine cleaning/ downtime.
- ✔ **Eco friendly:** Carbon neutral fuel as the carbon emitted by the fuel equals carbon earlier absorbed by the trees/ crops.
- ✔ **Industry Specific:** As Yagya fuels is customised as per end application demand and supplied accordingly.

Parameter	Value
Gross Calorific value	>4200 Kcal/kg
Moisture	<10%
Ash content	<3.5%
Size	5 to 25mm
Bulk Density	330 kg/m ³



COMPARISION OF PELLETS VS STEAM

Particulars	6 MM Pinewood Pellet for burner	STEAM
Price inc GST (Ex-Guwahati)	21500	Green HD Biomass
GCV	4200 Kcal/Kg	4200-4500 kcal/kg
Ash %	Below 4%	Below 3%
Raw Material	Pinewood with Hardwood mixing	Pine dried wood chips, Processed Agro waste
Steam Output per Kg	4.8 kg of Steam	5.1 kg of steam
Cost Per Kg of Steam inc. gst	Rs 4.69	Rs 4.4
Scope of work	Material delivered without unloading	Machine Designing, Installation. Operations and Maintenance manpower. Fuel supply upto Steam production.

FUEL PERFORMANCE COMPARISON

Parameters	Diesel	LDO	Yagya Fuels
Boiler Capacity	2 Tons	2 Tons	2 Tons
Steam Requirement	348 T/M	348 T/M	348 T/M
Fuel Requirement	26700 litres	29,000 Ltrs	69600 kg
Fuel:Steam Ratio	1:13	1:12	1:5
Price per Unit	₹6.92	₹5.58	Inclusive
CO ₂ Emission/Month	85440 kg	1,01,500 kg	34,800 kg
Total Steam costs	2,408,160	1,943,000	1,618,200

Installation FAQs

1. Boiler Integrity: We ensure that the boilers remains the same and no changes are done to maintain the integrity. We only remove the existing gas or oil burners and replace the same with Green pack.

2. Space Requirement: The customer would only require to provide 10 feet × 6 feet area front of the boiler for the installation of Green pack. The above measurement is for upto 2 tons boiler. A similar space requirement is for seamless function of higher capacity of boilers as well. Space for both fuel and machine should be shedded, clean and dry throughout the year.

3. Back to fossil fuels: Customer always has the option to change to old fossil fuels by reinstalling the previous oil/gas burners from Green pack.

4. IBR Norms: There is no requirement of change of IBR certificate in Green pack since there is no change in the pressure parts of the boiler system.

5. PCB Norms: There would be an addition of biomass fuel in the list of fuels added during CTE and CTO. As biomass is a government initiative, it seamlessly falls under green energy.

6. Relax and improve the environment: Improve the health of company with the blessings of nature. We too with the same objective, automate all your requirements upto providing your required steam.



Both Environment and Pocket Friendly

Contact Us

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