MICRO GAS TURBINE

INTRODUCTION

The Micro Gas Turbine (MGT) is capable of combusting various types of liquid fuels including low grade fuels from waste cooking oil. One of the key feature is its mobility and handling for on-site power generation. The MGT is capable of generating power output between 10 kW to 30kW capacities.

Complete assembly of Micro Gas Turbine (MGT)

NEEDS

- Reduce waste disposal E.g.: waste cooking oil
- Remote areas electricity supply.
- Renewable energy product.

APPROACH

- The MGT is capable of using low grade fuels from agriculture waste.
- The size is small enough to be portable.
- Utilise proven vehicle turbo unit.
- Power output between 10 to 30 kW.
- Targeted to couple up with electric generation unit.

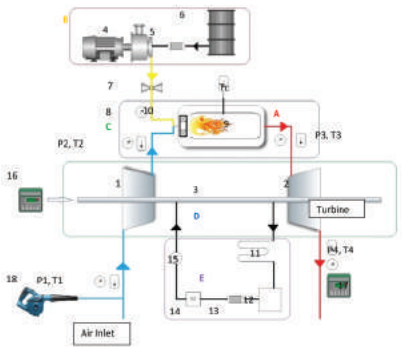
BENEFITS PER COST

- To benefit remote communities with electritiy supply.
- Cost: Cheaper than petroleum based systems.

COMPETITORS

- Grid connected electricity.
- Normal small engine based generator (requires high quality fuels).
- Mini gas turbine (power output <100 kW).

Working diagram of Micro Gas Turbine (MGT)



A	Combustor system	1	Turbocharger compressor	11	Cooling coil
B	Fuel supply system	2	Turbocharger turbine	12	Oil tank
C	Ignition system	3	Turbocharger shaft	13	Oil filter
D	Air supply system	4	Fuel pump	14	Oil pump
E	Lubrication system	5	Fuel filter	15	Oil pressure meter
		6	Fuel tank	16	Portable tachometer
		7	Fuel valve controller	17	Horiba gas analyzer
		8	Fuel pressure meter	18	Portable leaf blower
		9	Combustor chamber		
		10	Air-fuel mixer		

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