

# Reusable Sand Power Generation

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**Abstract---** The work presents development and modernization the electricity demand is increasing at a great extent. To fulfill this demand is growing at a great extent. The work is sourced and condition, but the most common sand. The processes function by using ordinary sand placed in the main funnel from the allow to fall on the blades of the hand wheel with the generation of power starts and stored in a DC battery. In the case of the external power source is provided, this sand generation is useful for producing sufficient energy. It is beneficial to produce electric power generation and also use multiple time to generate efficient power.

power which can be utilized to basic needs of homes and by this work reduce power crises. In the future point we are using sand which was available any time. In the economical point of view today generation of the power is not obvious because the efficiency is very low from installed plants and also losses are more when the power reaches to the consumers

By the generation is limited as the availability of natural resources is limited which is restricting the corporate to expand their capacities because of underutilization of installed capacities. Mostly depends on energy in the form of electricity. It is going to refectory to produce a huge amount of energy. The ordinary sand placed in the main conveyor is allowed to fall on the rotational of a sand turbine, the rotation of the turbine which is used to generate power and stored in a battery storage system. The location of that converting would not be restricted to the suitable water elevation

The method of sand is used as a source for rotating the sand conveyor to generate power. The materials of sand vary, depending on the local rock sand materials, but the most common constitutes of sand non tropical coastal settings in usually from various areas in the eco system. Based on the finalized concepts will be verified virtually using energy.

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## I. INTRODUCTION

The invention provides a sand power electricity generation device. The sand power electricity generation devices comprise a sand box used for collecting sand materials, an electric generator impeller used for receiving the sand materials, where in a conveying device used for conveying the sand materials, where in a sand tank to the sand box, a discharge pot. we choose this project to produce electricity in a different manner which was in go green, hence we are using sand for power generation. Here our concept is to reuse the sand for power generation. The concept is to reuse the sand and generate the power the

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## II. LITERATURE SURVEY

Sands operations are playing an increasingly important oil supplies. Extracting and processing from oil sands is an energy intensive process that requires both electricity and steam which are usually sourced through fossil fuel conversions [1]. There are two methods to treat the multiphase flows. The comparison between these two

approaches was performed. It has been shown that generally, for this kind of problems (solid-gas) especially where the dispersed second phase occupies a low volume fraction, the E-L approach is the most complicated but also the most appropriate [2].

To study numerically the flow around wind turbines, several techniques, these last ones are categorized as the best accurate and complete numerical prediction methods without the need for any restrictions neither on the equations nor on the level of the rotor modeling [3]. As a result, the soil has widespread water content, which generates electrical impedance values throughout the clock line [4].

Soil mixed, ie dense or loose, soil and dry density have significant impact on moisture content. In each case, effective dielectric constant is determined from data collected from DDTR and FDR test, and the values are comparable to computations [5].

This model represents the best measured cell variables, since there are two standard deviations of the measured current, except data that measure scalable measurement. Computer Simulation Technology (CSD) Micro way Studio uses the tools to test the contents of various soil moisturizers in an angle cell [7].

Simulation confirms that the dielectric constant transformation through the soil is the result of widespread humidity spread [8].

The content of soil moisture has had great impact on the resulting dielectric constant measurements or modelling. In the coaxial-cell device, soil moisture migration during the testing period results in a heterogeneous moisture regime and a temporal dielectric constant [8].

This is particularly exaggerated for high-hydraulic conductivity soils such as sand. Current soil-type characteristics include water infiltration rate, moisture content, porosity, total unit weight, and degree of saturation [9]. Each characteristic of the soil can significantly affect

the RF wave and the effective dielectric constant as it propagates through the soil [10].

### III. PROJECT DESCRIPTION

In the proposed method the sand turbine storage system is a storage system and the conveyor is used the sand turbine to produce electric energy. The battery stores the input source. The boost converter is boosted up the input source when the energy is low from the input and output is displayed on the displayed unit

This is the separate form of electricity generation which could be very well discontinued if the terminal is converting the input plan is laid out to use this source of power produced.

In current this is unutilized as the conversation has seen the positives of this form of energy generation and started to work on these materials.

Once this process starts to generate power from the sand storage element it may leave behind all the conventional sources of generating energy available materials that without any damage effects on the power produced. In the method we can use repealed sand again and again.

Energy and DC Electricity is generated in the form of source of energy produced. Batteries can be used for this purpose. The small and low power generated in this work will have regular changes, often the need for alternative and expensive.

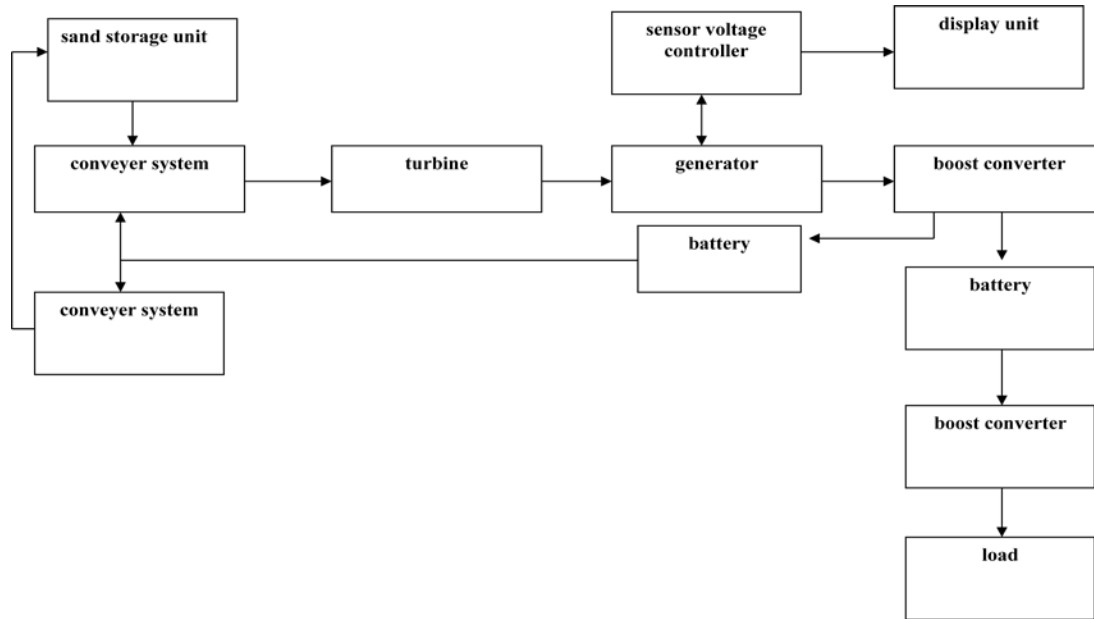
Almost all electronic products are Dc. Converts a distribution into the distribution.

The substitution of converting to DC is called a part electricity.

There is a step-down transformer in power supply in power supply.

Converts input source filter, then recorder with a voltage regulator circuit (a diode circuit). , The base of the power supply is transformed into a transformer, a redirect, a filter, and a regulator.

**Block Diagram**



Power generation is used to provide a constant voltage across turbine cones in power generation. The circuits of each element of the source of electricity supply operate. D.C. The power voltage required for the solid-state circuits provided by the power supply is the alternator circuit step or step-down (usually step-down) work voltage. This is an important concept from the supply line. This prevents unnecessary electric noise signaling, power supply and hassle burden.

**IV. HARDWARE DESCRIPTION**

**PIC16F877A Introduction**

PIC Microcontroller Pic16f877a is one of the most popular microcontrollers in the company. This controller is very convenient to use, this controller is more easy to index or programming. One of the major advantages is that it can write and erase many times by using flash memory technology. This is the total number of 40 pins and the input and output are 33 pins. Pic16f877a is used in many PIC microcontroller programs. Pic16f877a Digital Electronics Circuit has many applications. Pic16f877a is finding its apps with a large number of devices. It is used in remote sensors, security and safety devices, home automation and many industrial equipment. An EEPROM is included in

which it can be stored for some of the information permanently It does the same thing as if we set a bit of a TRIS register 1, corresponding portable bit acting digital input.

**LCD**

The LCD display is used to show voltage reading. When the program runs, it goes to the initial messages showing the first application name. If Arduino sketch launches the circle, the voltage supplied to the street lamp is displayed on the LCD screen. The 16X2 LCD display is attached to the Arduino port, enabling its data injections to Arduino port 3 to 6. The LCD's RS and E Pins micro controller are connected to 13 and 12 respectively. The LCD's RW pin is built.

**Battery**

The basis of a battery function is to transfer the electrons between two chemical reactions, an oxidation reaction and reduction reaction. The main feature of a battery that differentiates from other oxidation reduction reactions (such as stainless processes) is physically separated by oxidation and reduction reaction. When the reactions are physically separated, a load will be inserted between the two loads. The difference in electrical

chemistry between the two batteries corresponds to the battery voltage which drives the load, and corresponds to the current going through the load of the electrons between the two reactions. The method for transferring between the charged ions.

### **Conveyer System**

Depending on whether a conveyer or engine is a motor driven or manual, it can contain grasses, rollers, wheels and belts. A frame supports a frame that takes a frame from one point to another. Burn the head regularly with the head to move the belt and move it into the carrying object. It can be used to move, utilize bulk materials, use large quantities of resources, produce products, and agricultural products. With the proposed application of systems, conveyor belts are usually made by PVC or rubber. Belts are often made of plates for providing shape and linear strength.

### **Turbine**

It is designed to capture some energy from a moving fluid (a liquid or a gas), so it can be used. When the air is blown over a gaseous germ, they rotate, which will replace the wind's energy (movement of the movement) and transform the factory into a mechanical energy that turns into the woods with heavy, rotating stones. Fast winds, the power it possesses; The faster the standing and the rotating, the more energy is given to the plant. Adding more passengers to the windmill or replacing their designs helps climb the air's energy and capture good air power.

### **Boost Converter**

A Boost Converter, Switch to Design D.C. Converter, where output voltage is higher than input voltage. It is also called a modification step. The input voltage comes from the name of a relatively modifying transition to a higher level of transform than a single input voltage. The input power through the Energy Security Act should be equal to the power output (assuming no losses on the circuit).

## **V. CONCLUSION**

This is the non complex method form of produced

generation which could be very well proper action plan. At present this is unutilized as nobody has seen the positives of this form of energy generation and started to work on this avenue. This is done process starts to generate electricity it may leave behind all the sources of generating energy available in the sector that too without any hazardous effects on the environment. By the use of sand again & again there is no problem of procuring the raw material continuously.

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