

# Perpetual Energy Loop (MOC)

Prince

*Department of Electronics and Communication Engineering, Rayat-Bahra Institute of Engineering and Nanotechnology, Punjab Technical University, Hoshiarpur, Punjab, India*

Pooja

*Department of Electronics and Communication Engineering, Rayat-Bahra Institute of Engineering and Nanotechnology, Punjab Technical University, Hoshiarpur, Punjab, India*

**Abstract** -Today we are seeing a fast growing availability of renewable energy harvesters. While the energy conversion process of these devices produces little to no pollution, the power that is generated is often intermittent and unreliable. This paper proposes a novel technology to convert the rotational free energy available from rotating machines to electrical energy. Energy becomes free only at a point after which we don't have to pay for power generation after commissioning the unit. Chemical energy is stored in the battery. An average person willing to invest the time could actually build this magnetic generator. There is an interesting equivalence between the various parameters describing electrical and mechanical forms of energy. People with either electrical or mechanical backgrounds find this equivalence useful to the understanding of the physical process in either form of energy. Many new technologies were discovered with time which led a drastic change in the perception of electric energy. But at the same time there is misconception of FREE ENERGY.

**Keywords** - Perpetual, MOC, Loop, Energy, Generator,

## I. INTRODUCTION

In the today era generating the electricity is a common thing, but main brain ology is that to produce free electrical energy with using combination of electrical and electronic gadgets. The heart of the project is battery. Batteries convert chemical energy directly to electrical energy. A battery consists of some number of voltaic cells. Each cell consists of two half-cells connected in series by a conductive electrolyte containing anions and cations. One half-cell includes electrolyte and the negative electrode, the electrode to which anions (negatively charged ions) migrate; the other half-cell includes electrolyte and the positive electrode to which cations (positively charged ions) migrate.

In a simple motor, magnetic field is created by the electric coils generally Cu, Al coils. These motors continuously need electrical supply to produce magnetic field. This generates a energy loop of 220v.

## II. IMPLEMENTATION METHODOLOGY

The various components used in the present work are described in the following:-

### 2.1. Alternate Current Motor

The two main types of AC motors are classified as induction and synchronous. The induction motor (or asynchronous motor) always relies on a small difference in speed between the stator rotating magnetic field and the rotor shaft speed called slip to induce rotor current in the rotor AC winding. The synchronous electrical generator (also called alternator) belongs to the family of electric rotating machines. Other members of the family are the direct current (dc) motor or generator, the induction motor or generator, and a number of derivatives of all these three. What is common to all the members of this family is that the basic physical process involved in their operation is the conversion of electromagnetic energy to mechanical energy, and vice versa. Therefore, to comprehend the physical principles governing the operation of electric rotating machines, one has to understand some rudiments of electrical and mechanical engineering.



Fig. 1: Ac Washing machine motor

### 2.2. Direct Current Alternator Motor (Car)

The working principle of alternator is very simple. It is just like basic principle of DC generator. It also depends upon Faraday's law of electromagnetic induction which says the current is induced in the conductor inside a magnetic field when there is a relative motion between that conductor and the magnetic field. But generally in practical construction of alternator, armature conductors are stationary and field magnets rotate between them. The rotor of an alternator or a synchronous generator is mechanically coupled to the shaft or the turbine blades, which on being made to rotate at synchronous speed under some mechanical force results in magnetic flux cutting of the stationary armature conductors housed on the stator. As a direct consequence of this flux cutting an induced electromagnetic flux and current starts to flow through the armature conductors which first flow in one direction for the first half cycle and then in the other direction for the second half cycle for each winding with a definite time lag of  $120^\circ$  due to the space displaced arrangement of  $120^\circ$  between them as shown in the figure below. This particular phenomena results in  $3\phi$  power flow out of the alternator which is then transmitted to the distribution stations for domestic and industrial uses.



Fig. 2: Dc Alternator motor (Car)

### 2.3. Battery (Chemical Energy)

A battery is a chemical energy storage device. A battery generally consists of an anode, a cathode, and an electrolyte. A battery is an electrochemical cell (or enclosed and protected material) that can be charged electrically to provide a static potential for power or released electrical charge when needed. Batteries come in many shapes and sizes, from miniature cells used to power hearing aids and wristwatches to small, thin cells used in smartphones, to large lead acid batteries used in cars and trucks, and at the largest extreme, huge battery banks the size of rooms that provide standby or emergency power for telephone exchanges and computer data centers. Lead acid batteries were developed by a French physician Gaston Plante in 1859 and are the oldest and most widely used electrical storage unit. They can take a fair amount of abuse, high discharge rates and fast charging, but need to be maintained at full charge when not used to ensure that degeneration of the plates integrity and depth of discharge is not compromised. For long term storage lead acid has the most favorable characteristics, losing 40% of its charge over one year as compared to 6 months with NiMH. State of charge can be determined from the terminal voltage, though care should be taken since a cold battery has higher than expected value while a hot one has lower than expected voltage which can prevent a charge cycle from terminating causing over-saturation and potentially damaging itself and nearby equipment. Allowing 4-8 hours of rest from charging will provide an accurate measurement of terminal voltage to determine state of charge.



Fig. 3: Dc Battery

### 2.3. Connecting leads

Connecting leads are used for making connection between inverter and battery. Also used for connecting the measuring instruments such as volt meter and ampere meter. In electronics, a lead is an electrical connection consisting of a length of wire or metal pad that comes from a device. Leads are used for physical support and to transfer power.



Fig. 4: Connecting Leads with terminals

### 2.5. Inverter

Intelligent Inverters are currently available on the market. Microchip Technologies provides a detailed list for the functions of an intelligent inverter (below).

- Digital On/Off control for low standby power
- Power supply sequencing and hot-swap control
- Programmable soft-start profile
- Power supply history logging and fault management
- Output voltage margining
- Current fold back control
- Load sharing and balancing
- Regulation reference adjustment
- Compensation network control and adjustment
- Full digital control of power control loop
- Communications for status monitoring and control
- AC RMS voltage measurement
- Power factor correction

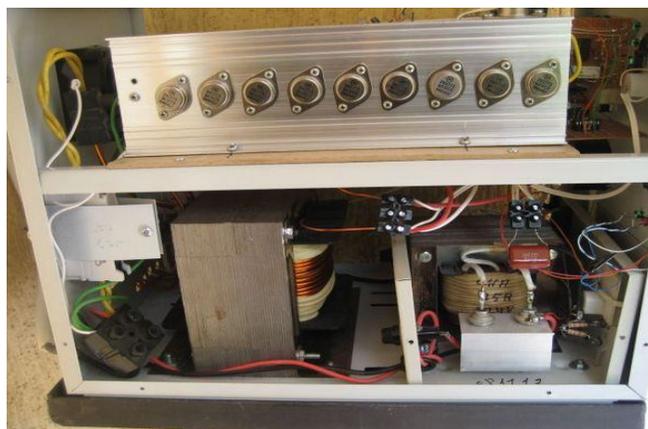


Fig. 5: 600W Inverter DC to AC

### 2.6 Measuring instruments

The measuring instruments used in this project are: –

- AC Voltmeter

- DC Voltmeter
- DC ampere meter



Fig. 6: Measuring Instruments

### III. APPLICATIONS:

The free energy generator finds a no. of applications in the real world. Many such applications are listed below:

- *For Charging Batteries*  
This free energy can be used to charge batteries of high voltage & low current, which are used for other applications.
- *For Light up bulbs and CFLs*  
The Free energy generator can be used to power up led's & bulbs in home and commercial areas. There are many applications of the free energy generator which are yet to discover.

### IV. FUTURE WORK AND CONCLUSIONS

In this paper, by integrating the basics of a generator (alternator) and a motor, I successfully have a newer concept of free energy generator which runs on almost less input & gives a valuable amount of electric energy output which can be used to for many purposes. The paper revolves around the construction, working & applications of free energy generator & its future enhancements. This design may prove to be a pioneer in the field of research of free energy. Now it is possible to get free electricity from stuffs from our home. This concept of free energy is can be made using car alternator & simple motors. This know how using alternator has been with us ever since we started generating electricity using conventional sources of energy.

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### REFERENCES

- [1] Qianqian Yang, DenizGýndýz, Electronic ISSN: 2154-0225, DOI: 10.1109/ISWCS.2015.7454346, "Variable-power scheduling for perpetual target coverage in energy harvesting wireless sensor networks".
- [2] ShahramMohrehkesh, Michele C. Weigle, Electronic ISBN: 978-1-4799-1353-4, DOI: 10.1109/GLOCOM.2013.6831128, "Optimizing communication energy consumption in perpetual wireless nanosensor networks".
- [3] Josep Miquel Jornet, Ian F. Akyildiz, INSPEC Accession Number: 12711828, DOI: 10.1109/TNANO.2012.2186313, "Joint Energy Harvesting and Communication Analysis for Perpetual Wireless Nanosensor Networks in the Terahertz Band".
- [4] Ren-Shiou Liu, Kai-Wei Fan, Zizhan Zheng, Prasun Sinha, INSPEC Accession Number: 12206002, DOI: 10.1109/TNET.2010.2091280, "Perpetual and Fair Data Collection for Environmental Energy Harvesting Sensor Networks".

- [5] Suzhi Bi, Rui Rui, Print ISSN: 0733-8716, DOI: 10.1109/JSAC.2016.2611983, "Distributed Charging Control in Broadband Wireless Power Transfer Networks".
- [6] Cong Wang, Yuanyuan Yang, Ji Li, INSPEC Accession Number: 13671884, DOI: 10.1109/WCNC.2013.6554696, "Stochastic mobile energy replenishment and adaptive sensor activation for perpetual wireless rechargeable sensor networks".
- [7] Jacob Sorber, Aruna Balasubramanian, Mark D. Corner, Joshua R. Ennen, Carl Qualls, Print ISSN: 1536-1233, Page(s): 804 – 816, DOI: 10.1109/TMC.2012.52, "Tula: Balancing Energy for Sensing and Communication in a Perpetual Mobile System".
- [8] Fig. "https://[www.google.co.in/search?newwindow=1&hl=en&authuser=0&biw=1366&bih=589&site=imghp&tbn=isch&sa=1&q=videocon+washing+machine+motor&oq=videocon+washing+machine+motor&gs\\_l=img.3.0i24k112.320067.337504.0.338198.34.18.2.14.14.0.220.2596.0j14j1.15.0...0...1c.1.64.img..3.31.2700...0j0i67k1j0i30k1j0i8i30k1.qXFBNZdlmVg#imgrc=zi3\\_QOfxttJhTM%3A](http://www.google.co.in/search?newwindow=1&hl=en&authuser=0&biw=1366&bih=589&site=imghp&tbn=isch&sa=1&q=videocon+washing+machine+motor&oq=videocon+washing+machine+motor&gs_l=img.3.0i24k112.320067.337504.0.338198.34.18.2.14.14.0.220.2596.0j14j1.15.0...0...1c.1.64.img..3.31.2700...0j0i67k1j0i30k1j0i8i30k1.qXFBNZdlmVg#imgrc=zi3_QOfxttJhTM%3A)"
- [9]\_Fig.2\_"https://www.google.co.in/search?newwindow=1&hl=en&authuser=0&biw=1366&bih=589&site=imghp&tbn=isch&sa=1&q=maruti+alternator&oq=maruti+alternator&gs\_l=img.3.0i7i30k115j0i24k112.24792.25529.0.26690.4.4.0.0.0.201.692.0j3j1.4.0...0...1c.1.64.img..0.4.686.7VobdK9acpE#imgrc=mcXH\_nFYUeZ\_hM%3A"
- [10]\_Fig.3\_"https://www.google.co.in/search?newwindow=1&hl=en&authuser=0&biw=1366&bih=589&site=imghp&tbn=isch&sa=1&q=storex+battery&oq=storex+ba&gs\_l=img.1.1.0i8i30k1j0i24k1.162195.171148.0.173837.9.9.0.0.0.194.1511.0j9.9.0...0...1c.1.64.img..0.9.1503...0j0i67k1j0i30k1j0i5i30k1.cRDP\_Ubgf-s#imgrc=Xhg8WbJPGKDrM%3A"
- [11]\_Fig.4\_"https://www.google.co.in/search?newwindow=1&hl=en&authuser=0&biw=1366&bih=589&site=imghp&tbn=isch&sa=1&q=red+black+wires+of+car+with+terminal+head&oq=red+black+wires+of+car+with+terminal+head&gs\_l=img.3...7569.11243.0.11813.7.7.0.0.0.176.1117.0j7.7.0...0...1c.1.64.img..0.0.0.Z0OA3kyCTC0#imgrc=IFLu8xJcwJ7oM%3A"
- [12]\_Fig.5\_"https://www.google.co.in/search?newwindow=1&hl=en&authuser=0&biw=1366&bih=589&site=imghp&tbn=isch&sa=1&q=open+inverter+dc+to+ac&oq=open+inverter+dc+to+ac&gs\_l=img.3...2495.6256.0.6824.9.9.0.0.0.154.1183.0j8.8.0...0...1c.1.64.img..1.0.0.FCOUQLiECts#imgrc=0VCW2FWsaMZ74M%3A"
- [13]\_Fig.6\_"https://www.google.co.in/search?newwindow=1&hl=en&authuser=0&biw=1366&bih=589&site=imghp&tbn=isch&q=analog+voltage+meter&sa=X&ved=0ahUKEwjvnLrAsOLPAhUHp18KHddRCIUQhyYIHA#imgrc=U5nKMEDJYxS7dM%3A"
- [14] Farid Touati, Alessio Galli, Damiano Crescini, Paolo Crescini, Adel Ben Mnaouer, Electronic ISBN: 978-1-4799-6114-6, Print ISSN: 1091-5281, INSPEC Accession Number: 15291337, DOI: 10.1109/I2MTC.2015.7151277, "Feasibility of air quality monitoring systems based on environmental energy harvesting"
- [15] Hirokazu Kamoda, Shoichi Kitazawa, Naoya Kukutsu, Kiyoshi Kobayashi, INSPEC Accession Number: 15489023, DOI: 10.1109/TAP.2015.2459132, "Loop Antenna Over Artificial Magnetic Conductor Surface and Its Application to Dual-Band RF Energy Harvesting".