

GREEN COMPUTING – NEED OF THE HOUR -REVIEW

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***Abstract:** Today, Information Technology plays vital role, as now a days IT everywhere , and day by day the percentage of usage too increases, so automatically consumption of energy also increases which effects with respect to carbon. IT industry itself consuming 3%, but it increases every year as today's Era is of Information Technology. So Green Computing is the solution to use the computer peripherals in efficient way. Since saving energy is one of the aspect of Green Computing. This paper talks about how to enable energy saving usage in Information Technology with respect to Information Technology and Future trends in Information Technology. Saving energy and consuming it in best manner is need of an hour and this paper will lighten the important aspect of the same using best usage of the existing system with optimum usage of physical resources.*

***Keywords:** Green Computing, Information Technology, E-waste recycling, Energy saving, Green Computing, Green IT.*

INTRODUCTION

To reduce the environmental impact of industrial perspective Green Technology come into picture, as daily basis population also increases which will also impact on usage so Green Computing is all about usage of computer and utilization of computer in proper way. Old Saying Save energy save money now recently the phrase changes to save energy save environment along with money, as environmental impact is also to be consider. Green computing deals with overall performance to save our earth .In that regards many programs are utilize to promotional activity in Green Computing , as it is need of the hour since it causes the global warming which poses the threats for our future so to avoid the un-circumstance need to think about it and Green Computing is the Solution . We living in the modern world here demands goes on increases day by day and per demands resources are less in number, and its our duty we need to managed it with respect to our future generation.

In Modern world , we use the modern Technology so computer come in to picture but along with it E-waste also come into picture –This is major problem we face today in modern world, Tons and millions of dump collected daily basis on junkyard. Also, it produces some unbearable toxics that can lead to various unknown deadly diseases. In order to recycle e-waste, we should shift towards Green technology and make use of environment-friendly products.

Resources which we are using to increasing demand is less , as a Individual need to plan it smartly or else in near future we need to stop manufacturing as resources are no more exist.

Electrical energy again depends on natural resources and usage is goes on increases as per need of Modern era, for small ATM room also now-a-days need to fitted with Air Conditioned and that may cause problems so people should understand the importance of solar energy, bio gas and wind energy otherwise electrical energy will become costlier in coming years. So to save our Future Needs each and every individual should think of Green Computing – since its need of the Hour.

REVIEW OF LITERATURE

Green Computing not only thinks in Environmental perspective but also one has to think in Business perspective too, Each and Every Individual need to think on it now .Different authors point of different idea regarding Green Computing , In his article Tom Worthington(2011) mention that to create positive environment Green Computing is essential factor and one should use it as maximum as they can.

Author Frederic Bordage (2011) mention in his article that growing usage of electrical and electronic goods are dangerous to health as per needs goes on increases, so to avoid the usage one has to start using green Computing technology.

San Murugesan(May 2011) in his paper said environmental change and Climate heats up is due to cause of Information Technology as to become productive state one start utilizing the Computers, as the need of usage increases more and more IT professional using the technology and problem was they themselves don't know about it.Each stage from Computer Manufacturing till disposal of computer challenges the environment , so author highlighted that Computer can be use but with Innovative way.

RESEARCH METHODOLOGY

Goal of Green Computing is to save energy and Save environment and how to promote Eco-Friendly environment. The data center can be upgraded with power efficient supply and can apply power management process which should automatically turn off after certain period of inactive. Efficient usage of computer is also important aspect to create eco-friendly environment. As the usage of computer increases its affecting the environment as 15 computer can generate carbon emission as mid size car each year. So to avoid such stuff Virtualization can be utilized to the best extends to save from the problem.

Virtualization - Physical resources can be split into a number of logical slices called Virtual Machines (VMs). With Virtualization, Hardware utilization reduces which cause in less consumption in cooling and reduce energy.

Cloud Computing services are the second alternative to Green Computing. Cloud computing services, relating to location and infrastructure can be purchase by 3rd party which help economically.

So it is good practice to use Cloud computing and virtualization which helps the eco friendly environment.

Virtualization – benefits with respect to Green Computing

- ✓ Dynamically Balanced workload
- ✓ Resource allocation monitor properly
- ✓ Server utilization rates are increasing

Cloud Computing – benefits with respect to Green Computing

- ✓ Data Center efficiency
- ✓ Saving Green
- ✓ Dematerialization

CONCLUSION

Green Computing is the proper solution of Global warming which might create a huge impact on today's modern world. So need to utilize our requirements in innovative way with virtualization

and Cloud way. By adopting green computing one can proudly say Protect environment while reducing energy and paper cost. Use mobiles for computing purpose.

FINDING

- Purchase LCD monitors then CRT less energy and problematic for eyes
- Cell phones are better than Computers
- Optimum usage of devices using innovative way
- Computers also now-a-days which we are using only consume 15 to 20% rest all for emission of carbon dioxide by wasting in ideling of machines

REFERENCES

- [1] Green Computing: Need of the Hour Swasti Saxena Computer Science and Engineering Department, SRM University, Kattan kulathur, Chennai. Tamil Nadu, India International Journal of Current Engineering and Technology E-ISSN 2277 – 4106, P-ISSN 2347 – 5161
- [2] Green Computing “Future of Computers” Gaurav Jindal, International Journal of Emerging Research in Management &Technology ISSN: 2278-9359
- [3] Green Cloud computing and Environmental Sustainability Saurabh Kumar Garg and Rajkumar Buyya
- [4] [4]An Emerging Technology: Green Computing Rina Mishra¹, Sonali Jain², Nirupama Kurmi³
- [5] International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056
- [6] Volume: 02 Issue: 02 | May-2015
- [7] [5]Green Computing Biswajit Saha International Journal of Computer Trends and Technology (IJCTT) – volume 14 number 2 – Aug 2014
- [8] Paige Laura Epler IT 103, section 012 8 October 2010Research Paper:
- [9] Green Computing – History, Methodologies, Benefits and Barriers
- [10] http://shodh.inflibnet.ac.in:8080/jspui/bitstream/123456789/424/3/03_literature%20review.pdf