## Measures in place for energy efficiency in Computing Systems

Certain precautions are already in place such as that of Energy Star. Energy Star was introduced in 1992 by the United States Environmental Protection Agency (EPA) with the aim to raise awareness regarding energy saving capabilities as well as more efficient computer systems (Intel, 2007, p. 5). Currently, the Energy Star program is in its 4th Version many laptops and PCs make use of this program this can be seen by a little certification sticker embedded on a PC or a laptop saying Energy Star, the program states that when a computer is idle its overall usage of energy is reduced by 45% (Intel, 2007, p. 5).

With initiatives such as Energy Star already in place the question is if it’s really effective in terms of what the future holds for technology? And whether energy usage can be reduced dramatically.

## The Future for Computing

With the looming threat of Global Warming and the way we are progressing in terms of technology with its increasing amount of CO2 (Carbon Dioxide) being emitted via increased energy use certain precautions need to be made so that a sustainable future can be achieved. For computing to become sustainable and eco-friendly the only time to act upon this is now. A study conducted by Lakshmi et al suggested five main steps to try to achieve green/sustainable computing, these steps are listed below:

1. Develop a sustainable green computing plan
2. Recycle
3. Make environmentally sound purchase decisions
4. Reduce overall consumption of paper
5. Conserve energy when on your computer and also lighting

(Lakshmi et al, 2013, p. 3)

These steps mentioned by Lakshmi et al suggest that the way forward is to follow certain steps which has a possibility of having an impact upon how someone uses a computer and how much energy that computer may consume but this is not a very effective way of dealing with a major issue of the 21st century. Many computer manufacturing companies have progressed in the last 10 years from transitioning from the high electricity usage old CRT (Cathode Ray Tube) monitors to more energy efficient LED (Light Emitting Diode) monitors (Webber et al, 2006, p. 5). This progression made by the computer manufacturing companies is needed once again this time to reduce the overall usage of energy in the most drastic way but doesn’t have the implication of creating the ‘multiplier effect’.

## Conclusion

In terms of Sustainable Computing there isn’t a certainty as to how people will go about achieving that status of sustainability in computing. However specific measures can be placed in computer systems to help to do so there isn’t a guarantee as such but the reduction of things like energy usage can help to achieve sustainability for the future. As the