

## TRENDnet Green Initiatives

#### **Our Commitment**

TRENDnet is committed to creating environmentally sound networking hardware solutions and promoting policies and practices that respect the natural environment. This means not only creating more energy efficient products, using recycled packaging content and reducing heavy metals from our networking hardware products, but also promoting an internal culture of environmental awareness and everyday green practices.









energy STAR<sup>3</sup> qualified adapte for a better environment







### **GREEN**net Power Saving Technology

Environmental responsibility is a prominent concern for TRENDnet. Economic expansion, technological advances and population growth are all contributing factors to the worldwide increase in energy consumption and to our global carbon footprint. According to the U.S. Government's Energy Information Administration, worldwide energy consumption is projected to increase by 50 percent from 2005 to 2030 with world net electricity consumption estimated to double from 17.3 trillion kilowatthours in 2005 to 33.3 trillion kilowatthours in 2030. A number of independent studies have linked increased power consumption to our overall negative impact on the environment.

TRENDnet is determined to help produce more energy efficient products that contribute to the reduction of our carbon footprint. With this goal in mind, TRENDnet created GREENnet switch-based technology. Switches, the backbone networking products that allow us to connect and communicate in this digital age, consume significant power as an aggregate.

GREENnet technology is designed to reduce switch-based power consumption by up to 70% by providing electrical power on demand. Traditional switches operate at full power, 24-hours a day, regardless of switch loading. TRENDnet GREENnet switches and routers incorporates the following three primary features to reduce power consumption:

#### 1. Link Down Detect

A TRENDnet GREENnet switch can detect if an Ethernet port is not in use. Power consumption for an unused port is then lowered by reducing the frequency for which the respective port status is confirmed. A port may not be in use either when no device is connected to the port or when the device that is connected to the port is powered down or in standby mode. Regular switches do not have this capability and therefore consume more power while performing the same functions.

#### 2. Cable Length Detect

Less power is required to send data over shorter cable lengths. A TRENDnet GREENnet switch automatically detects the length of the cable that connects the switch to the given networked device and adjusts the power supply accordingly. This technology functions automatically and requires no management.

GREENnet 10/100Mbps Switch Ports

- 1-20 meters (1 65 ft) = Reduced Power
- 21+ meters (66+ ft) = Full Power

#### GREENnet Gigabit Switch Ports

- 1-10 meters (1-32 ft) = Significantly Reduced Power
- 11-60 meters (32 197 ft) = Reduced Power
- 61+ meters (198+ ft) = Full Power

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# TRENDnet Green Initiatives

#### **Smart Packaging**

Every year millions of tons of waste are added to landfills around the globe. A significant portion of this waste can be attributed to consumer product packaging. At TRENDnet we have pride in designing smart packaging that protects a given product in the smallest possible package and that sources up to 80% recycled product packaging materials.



#### **Energy Saving Tips**

Listed are a few energy saving tips and tricks that can help reduce our carbon footprint.

- Use Energy Star Certified electronics in your home and office and reduce power consumption by up to 30%.
- 2. Make your network "Green" by using TRENDNnet's GREENnet power saving switches and routers to reduce power consumption by up to 70%.

#### 3. Standby Mode

A TRENDnet GREENnet switch reduces the amount of power consumed by operating in standby mode when it is not being used.

Visit www.trendnet.com to see a full list of GREENnet switches and routers.

## **Energy Star Certification**

Networking hardware products are gaining a larger presence in our daily lives. With this expansion comes the responsibility to create environmentally friendly products that will reduce energy consumption and promote a healthier environment.

Energy Star is a joint program with the United States Environmental Protection Agency and the Department of Energy (DOE). Energy Star sets strict electrical consumption thresholds for a variety of products with the goal of reducing energy consumption and greenhouse gas emissions. In 2007, it is estimated that Energy Star Certified products helped Americans save USD 16 billion on their utility bills.

In 2008, TRENDnet partnered with Energy Star and introduced over 60 Energy Star Certified products including wireless routers, wireless access points, desktop switches, fiber networking solutions, wired and wireless print servers and leading Internet security cameras. All TRENDnet Energy Star Certified products use high-efficiency external power adapters. The energy efficient adapters reduce energy consumption by an average of 30% as compared to uncertified products. TRENDnet has defined a policy to ensure that applicable new products, launched by TRENDnet, use Energy Star Certified external power adapters.





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## Energy Saving Tips (continued)

- 3. There is a common misconception that screen savers reduce monitor electricity consumption—they do not. Automatic switching to sleep mode or manually turning monitors off is always the best energy saving strategy.
- Ensure minimal lighting is left on during off-hours. You may consider installing light timers, photo cells or occupancy sensors.
- Instruct employees to turn off computers or place them in standby mode before leaving.
- 6. Participate in company wide recycling programs for paper, plastics, batteries, print cartridges, neon lighting and food waste.
- 7. Reduce printing and paper consumption by using soft copy online manuals.
- 8. Provide employees with reusable coffee mugs rather than disposable paper or Styrofoam cups.
- 9. Encourage employees to carpool or use public transit.
- 10. Get involved—coordinate company participation in local "green" community activities.

### **Environmental Regulations Compliance**

TRENDnet is committed to reducing our environmental footprint. TRENDnet products meet or exceed global environmental regulations including RoHS, California Energy Commission Efficiency Program (CEC) and WEEE among others.

#### Restriction of Hazardous Substances Directive — RoHS

The RoHS directive is a European Union-based initiative that restricts the use of heavy metals and other toxic substances, such as lead and chromium, in electronic equipment. RoHS has had a significant and lasting impact on reducing toxins introduced into the environment. All TRENDnet products sold in Europe and other countries are RoHS compliant.

#### California Energy Commission — CEC

TRENDnet meets the California Energy Commission's (CEC) Energy Efficiency Program requirements by using external power adapters that meet the designated efficiency level during Active and No-Load modes of operation. Currently all TRENDnet North American adapters meet CEC efficiency standards.

#### Waste Electrical and Electronic Equipment — WEEE

Working alongside RoHS, the WEEE directive gives manufacturers the responsibility of recycling end-of-life electronic equipment. TRENDnet is an active participant in the WEEE program theat keeps harmful substances out of landfills in participating countries.