



SAMSUNG

TURN ON TOMORROW

Promoting Greener Printing with Samsung

Samsung's environmental credentials and philosophy



www.samsung.com/uk/printer

Introduction

Key to the development of a robust and inclusive eco management philosophy is the ability to evaluate and improve our eco-friendliness at every step. The benefit to our customers is the confidence that our products meet with the standards that every aspect of Samsung printer design, manufacturing and recycling process has been linked to our quality certification programme.

Environmental factors are an integral part of our product quality activities. Our commitment to achieving recognised standards sends a clear and unequivocal message to our customers and stakeholders-we strive to abide by our eco-friendly manufacturing processes every step of the way.

Samsung has developed a continuous improvement programme to help customers in their fight for climate change. In fact, we're the industry leader in adding new eco friendly design features and manufacturing processes to our products. From energy efficient design to user-friendly products and recycling, we take responsibility for every step of the journey. We first introduced Life Cycle Assessment (LCA) into the design process for our laser printers in 1999. LCA enables us to consider the environmental impact of the product at every stage of development, usage, transport and eventual recycling. Our Life Cycle Assessment reassures our customers that we have planned an environmentally conscious journey for our printers from the very first stage in the design process to the end of its life.

We hope you endorse our actions, because only together we can improve / streamline communications and reduce the impact technology has on our planet.

Be greener...

How you can reduce your carbon footprint and become greener

1. Replace old products with Energy Star products

ENERGY STAR products are more energy efficient by reducing energy consumption during printing and using power save during idle time.

2. Consider a Multifunctional Printer

These save energy consumption each year versus two single function devices.

3. Increase recycling efforts

By participating in a return and recycling programme.

Do not throw away empty cartridges.

Samsung provides customers with prepaid postage to participate S.T.A.R.

(Samsung Take back And Recycling programme) at www.samsung.com/printer/star

4. Reduce waste paper and environmental impact

Print both sides of prints and copies.

Most of Samsung Printers have Duplex printer as a built-in function.

5. Purchase eco friendly products

Most Samsung printers are certified by world renowned green certification.

Green Business

4 – 5

✦ Green business printing is the only way to grow:

Our philosophy and strategies.

Green Company

6 – 7

✦ A leading eco-friendly company:

Our energy saving and green products awards.

Green Design

8 – 9

✦ Design, production and the environment:

Samsung Eco-partner programme;
Samsung Life Cycle Assessment (LCA);
Samsung Eco Design System (EDS);
Global standard.

Green Features

10 – 15

✦ The eco-features of Samsung's print products:

Toner save mode;
Energy saving sleep mode;
Duplex printing;
Compact footprint;
Instant fusing system;
Network scanning solution;
Multi-up printing.

Green Actions

18 – 19

✦ Certified programme to recycle your products:

The Samsung Takeback and Recycle Programme – S.T.A.R.;
Toner cartridge recycling facilities.

Green Products

12 – 13

✦ The eco-benefits of samsung printers

Eco-labelling of our products;
Regulations on elimination of hazardous substances;
Constructing labs for analysing environmental impact;
Blue Angel & Energy Star.

Greener business printing is the only way to grow.

Our philosophy and strategies

Today, you would probably have to be living on a different planet not to accept the need for concerted effort to help prevent climate change. Our strategies for a greener future come from the very heart of our business, and are designed to express the value we place on the environment and the safety, health and quality of life of the people with whom we share it.

Samsung Electronics believes that to survive and enjoy continued mutual prosperity with our stakeholders, it is essential that we contribute positively to the health of the planet and to the human societies we inhabit. Our solution is simple; we have created a totally 'green' culture for our entire print business:

Green management

Samsung recognises that environmental awareness is central to sustainable corporate development. Our management team have created an advanced environment, health and safety system designed to cultivate the development of greener print products, processes and workplaces and to positively influence local communities.

Green products

It is no longer enough just to think simply in terms of reduced energy consumption when considering environmental impact. Using our own Life Cycle Assessment (LCA) and specialised eco-design system, Samsung considers the entire procedure from raw material extraction and printer usage through to end-of-life disposal, to create more environmentally friendly products.

Green processes

Samsung investigates every stage of the production process, striving to develop greener, more eco-friendly technologies and facilities. We ensure that every opportunity to minimise environmental impact is explored, from better management of hazardous substances to maximize energy efficiency.

Green workplaces

We are totally committed to safe, pollution-free, environmentally aware workplaces. From fire-prevention and health and safety training, to ongoing pollution monitoring and prevention, we do everything in our power to ensure our people and our customers enjoy greener, hazard-free workplaces. Our philosophy and strategies for a greener future.

Our energy saving and green product awards

Samsung has gained world wide recognition as one of the leading companies taking responsibility in preserving the environment.

2008

- Standby power efficient corporation, *the Consumers Korea*
- National Environment Management Award, Samsung printer & MFP, *Ministry of Environment Rep. of Korea*
- 'Energy Winner Award' CLP-310 Series, CLX-3170 Series standby power efficient, *the Consumers Korea*
- Korea Green Management Excellence Awards; Best Environmentally-Friendly Corporations



2007

- 'Energy Winner Award', excellent standby power efficient products, *the Consumers Korea*
- 'Energy Winner Award', excellent corporation for Green Product of standby power efficient, *the Consumers Korea*
- Korea Green Management Excellence Awards; No.1 Green Products for colour laser MFP, *the Consumers Korea*

2006

- Korea Green Management Excellence Awards; No.1 green products for toner cartridges

A leading eco- friendly company.





Design, production and the environment.

Samsung is committed to providing safe, zero-waste products that contribute to the creation of safe workplaces and the health and well-being of workforces.

Samsung Eco-partner programme

Samsung launched its Eco-partner programme in 2004 to help our partners set up environmental management system that would assist in the management of hazardous substances in parts and raw materials. We offer examination services as well as training and guidance to our eco-partners, who can gain certification to demonstrate that they have adequate procedures and systems in place to control raw materials and parts.

The eco-benefit to our customers

Our Eco-partner programme reassures our customers that the parts and raw materials that go into our market-leading products conform to strict environmental quality management systems.

Samsung Life Cycle Assessment (LCA)

We first introduced Life Cycle Assessment (LCA) into the design process for our laser printers in 1999. LCA enables us to consider the environmental impact of the product at every stage of development, usage, transport and eventual recycling.

The eco-benefit to our customers

Our Life Cycle Assessment (LCA) reassures our customers that we have planned an environmentally conscious journey for our printers from the very first stage in the design process to the end of its life.

Samsung Eco Design System (EDS)

We created the Eco Design System (EDS) in 2004 to efficiently evaluate and improve our products' environmental quality. Under the system, targets for each category are set from the initial product development stage. They are followed up by evaluations that enable corrections to be made as necessary. As well as raising the environmental quality of a product, the Eco Design System reveals the environmental features of a product to stakeholders in an easy to follow format. The system is linked to our quality certification system, meaning that environmental factors are an integral part of product quality activities.

The eco-benefit to our customers

Our customers can confidently use our products with the reassurance that every aspect of their Samsung printer's design has been assessed and evaluated for its eco-friendliness.

Global standard

Samsung's commitment to achieving the appropriate internationally recognized standards sends a clear, unequivocal message to our customers and stakeholders; we strive to abide by our eco-friendly manufacturing processes, every step of the way. We addressed all of the key issues of quality, the environment and Health and Safety in developing our comprehensive environment and safety management System.

ISO 9001

The globally recognized standard for quality management. By implementing our quality management system (ISO 9001) we have improved efficiency and productivity, resulting in less waste and improved quality and service for our customers.

ISO 14001

Monitoring and minimising our effect on the environment. In achieving ISO 14001, we have adopted a systematic method of monitoring the eco-effects of our business activities on the environment. We have learn how to use energy more efficiently and discovered how to minimise waste and dispose of it more effectively.

OHSAS 18001

Occupational Health and Safety Management System. We have voluntarily adopted the OHSAS 18001 standard, which has helped us to structure an effective Occupational Health and Safety Management System.

The eco-benefit to our customers

In achieving the internationally recognized standards of ISO 9001, 14001 and 18001, Samsung demonstrates total commitment to quality, environmental awareness and Health and Safety in all of the manufacturing processes behind our eco-friendly printer products.

**Achieving
safe, eco-
conscious
quality**

**reducing
the impact
on our
environment**

**Evaluating
& improving
eco-
friendliness**

**Creating a
healthy, safe
working
environment**

The eco-features of Samsung's print products.

We've packed our printers full of features specifically designed to help you save paper, toner, space and ultimately money. These all combine to create a printer that helps you to help the environment, every step of the way.

Toner save mode



Use less consumables at the press of a button

Toner Save Mode allows you to save up to 40% on toner and significantly reduce your printing costs, while still producing high quality prints. It also means less frequent toner changes. Printing options let you save paper by printing 2-up, 4-up, even up to 16-up on one page. High-capacity 1500-page yield toner cartridge can meet even large business printing needs. The One-Touch Toner Save Button boosts a standard 10,000 sheet toner yield by an extra 3,000 pages. Toner Save is simple, reduces printing costs, and saves on toner changes and maintenance.

Standard printing

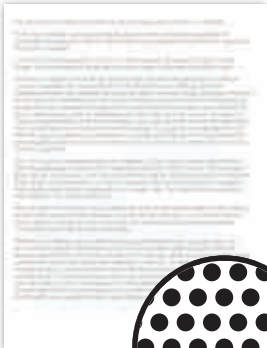


Ink coverage

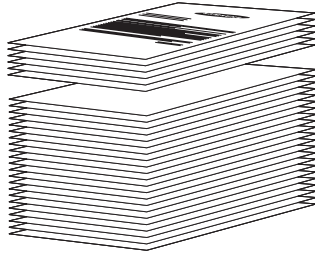


Normal Toner Carrier

Toner Save printing



Ink coverage



Toner Save Carrier

How you save

- Save 30% Toner on Samsung Mono Printers and MFPs
- Up to 30% Toner Save on selected colour printers and MFPs
- Save 40% Toner on Samsung Fax Machines

The eco-benefit to our customers

Our customers can save, toner, paper and therefore money, every time they print, extending the lifetime of each toner cartridge.

Energy saving sleep mode



Reducing stand-by energy consumption

Samsung Electronics introduced 'e-standby' mode for its laser printers in 2006. 'E-standby' mode optimises energy consumption by reducing energy need to less than 8wh for colour laser printers and 3wh for mono laser printers.

Colour Laser Printer

7W x 7.8hr x 270 days x 5 year =
a reduction of 73,710WH

equivalent to 36.46kg of CO₂

Mono Laser Printer

3W x 7.8hr x 270 days x 5 year =
a reduction of 31,590WH

equivalent to 15.63kg of CO₂

The eco-benefit to our customers

Our customers have a simple method of cutting their energy consumption and saving money whenever their Samsung printer is not actually in use.

Voluntary energy mark labelling of our products

- From the beginning of the product planning stage, we seek to comply with relevant energy efficiency standards including US Energy Star, China Energy Mark and Korea Energy Mark.
- Samsung Electronics has been actively striving to acquire voluntary energy-saving marks from programmes such as the US Energy Star and domestic 'e-standby'. In addition to high ratings in various energy-efficiency rating systems, Samsung Electronics has been actively striving to acquire voluntary energy saving marks from programmes such as the US Energy Star and domestic e-Standby. We aim to improve energy efficiency and reduce the effects of product use on the environment, and in particular, combat the problem of global warming.

	Energy Star	China Energy Mark	Korea Energy Mark
MFP	100%	100%	100%
Printer	100%	100%	100%
Total	100%	100%	100%
<div><div></div><div></div><div></div></div>			
From 2007, all models received Energy Star, China Energy Mark and Korea Energy Mark.			

The eco-benefit to our customers

Our customers have the reassurance of knowing that their Samsung products are helping them to reduce their carbon footprint. At the same time they will know that these products are helping to cut down their energy consumption and reduce their energy costs.

www.samsung.com/uk/printer

Low energy consumption

Duplex printing



Use half the paper with double-sided printing

Many of Samsung printers now come with a standard DADF (Duplex Automatic Document Feeder). It allows you to create professional duplex (double sided) documents in 4 copy formats including 1:1, 1:2, 2:1, 2:2 with simple one-touch buttons and can also be used effortlessly in combination with the Toner Save feature.

The eco-benefit to our customers

The saving on paper or additional equipment costs are noticed instantly and proves a valuable way of simply reducing costs, paper usage and time.

Compact footprint



Reduced size, weight and materials

- By focusing on weight and size from the development stage, we are able to develop smaller and lighter products such as the famous "World's Smallest Colour Laser Printer" – the CLP-300 – with a reduced product weight of 58% and package weight of 23%.
- All of our products comply with EU WEEE Directive 2003 that aims to reduce the waste arising from electrical and electronic equipment. By always endeavouring to use plastic parts in our products, Samsung is able to work to ISO 11469 / ISO 1043 standards.
- And finally, by reusing resources, 15% of the plastic parts created during the manufacturing process are recycled. There are 3,500 parts assembled in a laser printer alone.

The eco-benefit to our customers

By achieving the above goal, Samsung is able to design easy-to-recycle products as well as increasing resource efficiency, which helps our customers comply with their own corporate social responsibility commitments.

Instant fusing system (IFS)



Use less power when fusing toner to paper

Samsung's Instant Fusing technology shortens the warm up period of the machine, as unlike traditional fusing technology, it uses a thin flexible sleeve (not a thick roller) and a lamp (not a slow heating element) to fuse the toner quickly. This results in faster printing and lower power consumption, saving energy and money.

The eco-benefit to our customers

Through considerable investments in R&D our customers can benefit from low power, high quality, energy efficient output without compromise.

Network scanning solutions



Electronically share information more efficiently

How do you email a hard copy? With a Samsung MFP. Our powerful laser multifunction products are even more powerful as part of a network. With our quick and easy Scan-To-Email feature, you just scan your single- or double-sided document, select a recipient from the address book and send it on its way, all right from your Samsung MFP. Scan-To-File functionality lets you scan a document directly to any computer on the network.

The eco-benefit to our customers

Innovative MFP scanning technology eliminates the need for printed distribution. Giving faster access to a network of users at the touch of a button.

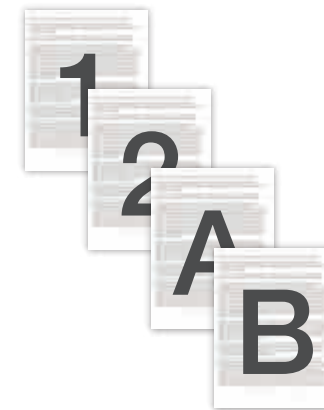
Multi-up printing



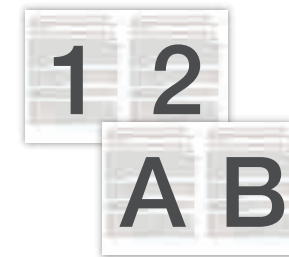
Print your various documents more efficiently

Multi up printing / copying is a feature that allows you to compose multiple documents into one single page. The main benefit of N-up is to cut paper costs. For example, you can cut down your paper cost by 50% with 2-up printing / copying, and 75% with 4-up printing / copying etc. This feature is also useful for producing handouts and presentation notes.

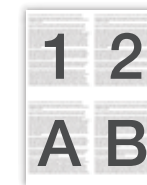
Original document



2 up printing



4 up printing



The eco-benefit to our customers

Use technology to establish a more efficient way of proofing printed output. Use less paper, power and resources to still achieve high quality paper originals.



To reduce the number of waste toner cartridges buried in landfills or incinerated by offering environmentally-friendly cartridge retrieval, recycling and disposal programmes and facilities.

S.T.A.R.

Samsung Takeback and Recycle Programme

The Company first launched the Samsung Take back and Recycle Programme (S.T.A.R.) in 2004 to retrieve used toner cartridges in Korea. In March 2006, it was introduced to 16 European countries and then the USA and Canada in 2007. The S.T.A.R. programme is completely voluntary and offered free of charge. It is already in operation for B2B and B2C products, and it is planned in the future to include bulk collections from businesses, and to expand the programme in Asia. Samsung take back responsibility for disposal and recycling from their customers. All toner cartridges collected by Samsung Electronics Printing Division go through 100% material recycle process.



Toner cartridge recycling facilities

For the first time in Korea, Samsung Electronics constructed a material recycle type facility for spent toner cartridges at its Asan Recycling Centre. Every year, the facility recycles 500,000 units of waste toner cartridges in an environmentally-friendly manner. The Company also installed facilities to collect and contain dust to prevent pollution of the worksite and external scattering of waste toner powder to improve the work environment and ensure the safety of employees.

The eco-benefit to our customers

The collected and recycled cartridges equal 663,503 kg of recycled materials*. These recycled cartridges greatly reduce global warming carbon dioxide gas. This is equivalent to reducing carbon dioxide gas 994 ton and growing 320,725 trees.

*The above result is accumulated from 2004 in Korea and from 2006 in Europe as of Sep. 2008



Taking responsibility for our actions.

We strive to develop compact and light weight products that not only use minimal resources but also deliver high performance with user-friendly features. We are committed to ensuring that any chemicals we do use are used carefully and with consideration for our customers and the environment.

Eco-Labeling of our products

It is important for our customers to be able to instantly recognize our 'green' products. Samsung Printers have acquired the greatest number of Blue Angel Certifications – the first and most well known eco-label worldwide.

We have also achieved Korea Eco-label and China Eco-label certifications confirming that our products meet their resources and pollution prevention standards.

Regulations on elimination of hazardous substances

With environmental issues as a top priority, Samsung Electronics Printing Division voluntarily carries out all manufacturing processing of consumables in a safe and eco-friendly manner, in accordance with international certification standards. To help safeguard our customers and the environment, Samsung printer supplies comply with RoHs regulations concerning the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Constructing labs for analysing environmental impact

In 2005, Samsung Electronics constructed three world-class laboratories featuring 16 different types of analysis equipment (23 in total) to analyse substances, which may pose a risk to the environment and the human body. The equipment can analyse inorganic and organic substances and volatile organic compounds (VOCs).

The eco-benefit to our customers

These measures ensure that our customers and their people will not be subjected to hazardous substances when using our products and that hazardous substances will not be released into the environment when disposing of them.

Blue Angel



The Blue Angel is the first and most well-known eco-label worldwide. The Blue Angel is awarded to companies as a reward for their commitment to environmental protection. It is used to professionally promote eco-friendly products in the market. The Blue Angel is an ecological beacon showing consumers, ecologically superior products and promotes environmentally conscious consumption.

Energy Star



ENERGY STAR is a worldwide award programme that offers businesses and consumers energy-efficient solutions, making it easy to save money while protecting the environment for future generations to come.

Eliminating hazardous substances



TURN ON TOMORROW

Samsung Electronics (UK) Ltd

Registered Office:
Samsung House, 1000 Hillswood Drive,
Chertsey, Surrey KT16 0PS

Registered number: 3329545

www.samsung.com/uk/printer

In line with Samsung's commitment to continuous improvement this guide is subject to change without notice. E&OE.