

Environmental Responsibility

SPH is committed to being a good corporate citizen that cares for the environment in which it operates in, and actively seeks to promote sustainable growth while achieving business excellence.

SPH's business operations comply with applicable environmental, legal, health and safety requirements. It works closely with the Workplace Safety and Health Council, Singapore Civil Defence Force, Public Utilities Board (PUB), National Environment Agency (NEA), Building and Construction Authority, Energy Market Authority and other relevant authorities to ensure that it adopts the best practices for environment sustainability.

SPH is also constantly looking for ways to reduce the negative impact on the environment by lowering its carbon emissions and improving energy efficiency in its daily operations. A Green Steering Committee is established to review environmental objectives and shape the green culture in the Group.



Energy

SPH's printing plant at Print Centre has set up energy conservation measures to meet the requirements of the new NEA Energy Act - to reduce energy consumption by five per cent over the next five years. This is based on 2013 total energy consumption as a baseline. New energy efficiency works were also carried out, which reduced the plant's energy consumption by 13 per cent. The energy efficiency works, scheduled to be completed in December 2015, will yield total energy savings of 18 per cent. This is well above the requirements under the NEA Energy Act.

These measures include –

- Replacement of existing lighting to LED system
- Operating with fewer chillers
- Optimising the compressed air system to minimise air leakages from occurring

SPH Production has also submitted its second Energy Annual Report to NEA as required by the New Energy Act.

Mr Wong Tat Choon, SPH's Assistant Vice-President of Production Division who won the Outstanding Energy Manager of the Year (SME Category) at the Energy Efficiency National Partnership (EENP) Awards last year, was invited to share the plant's energy-saving initiatives with EENP partners at the 3rd edition of the "Share and Learn" Session organised by NEA on 24 July 2015.

Moving forward, the Production Division will continue to explore future energy conservation options using renewable energy sources.

At News Centre and Media Centre, SPH implemented environmentally-friendly practices to conserve energy. These were based on recommendations from energy audits that were earlier conducted.

- Replacement of old chillers with more efficient variable speed drive (VSD) chillers
- Replacement of old air handling units (AHU) to improve energy efficiency

- Installation of motion sensors at low-usage areas to reduce energy consumption
- Replacement of high consumption light fittings with energy efficient ones such as LED and induction light fittings

Property officers monitor room temperature settings and operating hours of air-conditioning units for optimal operating efficiency. Security officers conduct daily checks on rooms and offices to ensure lights have been turned off after office hours.

Paragon is fitting its basement carpark with carbon monoxide sensors to control ventilation fan speed, thereby enhancing the air quality for its shoppers. The targeted completion for the installation works is March 2016. By August 2016, the lightings at common corridors and back-of-house areas will be installed with motion sensors to control dimming.

All lightings at The Clementi Mall's common areas have been replaced with LED lights to achieve better energy efficiency.

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The Information Technology Division periodically upgrades the corporate networks, servers and storage systems across the Group, and uses newer generation computer systems that are more energy efficient. The SPH Data Centre uses energy efficient air-conditioners and ozone-friendly refrigerants. Only Energy Star compliant PCs and notebooks are purchased for use by staff. All these initiatives have contributed to a drop in energy costs.

Water

In June 2015, Production Division appointed its first Water Manager and submitted its Water Efficiency Management Plan (WEMP) to the PUB. At Print Centre, Production Division stepped up monitoring efforts of its water usage. It converted all existing bulk water meters with Automatic-Meter-Reading (AMR) capability. These AMR meters are capable of feeding usage information via SMS to a centralised server, thus facilitating the monitoring of abnormal water usage.

Across all three SPH centres, property officers conduct regular maintenance checks on the water supply installations such as cooling towers and water tanks for faulty pipe fittings, equipment or pumps. Water efficient fittings and PUB-recommended flow rates for flushing systems have been installed to reduce water consumption.

Paragon is installing a private water meter at its cooling tower to monitor water consumption for the air conditioning system, scheduled for completion in December 2015.

CASE STUDY

SPH USES NEWSPRINT AND PAPER FROM SUSTAINABLE SOURCES

With the recent haze situation caused by forest fires in Indonesia, SPH has assured the public that it does not purchase any of its newsprint supplies from the companies which are under probe for links to the forest fires in Indonesia. SPH purchases its newsprint supplies for its newspapers from diversified sources in Europe, North America and the Asia Pacific. 80 per cent of the newsprint used by SPH is derived from recycled paper, with the remaining 20 per cent is from virgin pulp obtained from certified sustainable sources. None of the virgin pulp is sourced from Indonesia.

The certifications include Forest Stewardship Council (FSC), Programme for the Endorsement of Forest Certification (PEFC), ISO 14001, Certification by the South Korean Board of National Technology and Quality (GR) and EU Ecolabel.

Besides SPH's newsprint, office paper supplies also come from certified vendors approved by Green Label Singapore, FSC and PEFC (see table below).



SN	Description	Brand	Supplier	Source of Supply	Certification
1	A4 Photocopy Paper, 80gsm	Fuji Xerox	Fuji Xerox	Fuji Xerox	FSC
2	A4 Photocopy Paper, 70gsm	Zap copy	Balley	PT Riau Andalan Pulp & Paper	PEFC*
3	A3 Photocopy Paper, 80gsm	PaperOne	Balley	April Fine Paper Trading Pte Ltd	Green Label Singapore
4	A1 Engineering Paper	Dataroll	Bits & Bytes	PT Riau Andalan Pulp & Paper	PEFC*
5	A4 Coloured Photocopy Paper, 80gsm	Sinar	Toprint	PT Indah Kiat Pulp & Paper Tbk	PEFC*
6	Computer Forms	Golden Form	Toprint	PT Pindo Deli Pulp & Paper Mills	PEFC*

* PEFC - Certification by PEFC Council (Switzerland)

Other Green Efforts

SPH adheres to environmental recommendations made by the relevant authorities and regulatory bodies.

- a) All refrigerators in the pantry rooms are energy-efficient models that carry the NEA energy labels
- b) Use of LCD TVs with NEA energy labels to save energy
- c) All photocopiers are energy-efficient models with Energy Star labels
- d) Use of environmentally-friendly fertilisers, pest sprays and soil treatment methods for landscaping at all three SPH premises
- e) Lush plants grown on News Centre's Roof Top Garden to reduce heat and save air-conditioning costs
- f) Auto dispensers for hand towels installed in all toilets help to reduce wastage and save costs
- g) Auto soap foam dispensers installed in all toilets help to reduce wastage and save water

- h) Installation of landscape irrigation systems at the roof top gardens of News Centre and Media Centre. This resulted in cost savings from reduced water consumption, fewer incidents of dried-up plants and relieving gardeners of watering duties so that they can spend more time on landscape maintenance works
- i) Use of bio-degradable solutions for cleaning of external building facades

Reuse and Recycle

SPH adopts a group-wide "Reuse and Recycle" philosophy, where staff are reminded to use resources efficiently, save energy, reduce waste and practise recycling.

- a) Ongoing collection of furniture still in good condition for reuse in other divisions and subsidiaries
- b) Ongoing collection and sale of disposed items such as PCs, furniture and electrical items
- c) Ongoing collection and sale of empty drink cans

- d) Ongoing collection and sale of used toner and fax cartridges
- e) Ongoing collection and sale of printed waste, office scrap and used hand towels
- f) Ongoing collection and sale of old carton boxes
- g) All office waste and newspapers are sorted at the refuse centres at all three locations. Those that have no recyclable value will be disposed into the rubbish compactor. Those with recyclable value will be placed at the refuse centre for packing, bundling and weighing before collection by the scrap contractor
- h) SPH's fleet of Canon Managed Print Service (MPS) devices are RGS Certified and recognised by Singapore Environment Council (SEC). They are environmentally-friendly models which use toner cartridges that can be recycled at all three SPH centres. They have print-on-demand feature and double-sided printing as default setting, which help to reduce paper consumption.

