

# Alternatives to ODS

As ODS are being phased-out, new non-ozone depleting or ozone friendly substances are being introduced as alternatives.

The Ozone Layer would recover if no further ozone depleting substances are released to the atmosphere. All hands-on users of ODS are encouraged to switch to more ozone friendly alternative substances which are available and also adopt good handling practices to avoid venting or release of these substances into the atmosphere.

'Every Action Counts'

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# Towards An Ozone Friendly Swaziland



### What is the Ozone Layer?

The *ozone layer* is a protective layer of ozone molecules that filters out the harmful ultraviolet– B (UV-B) radiation from the sun that otherwise would reach the earth's surface. This layer contains 90 percent of the ozone gas ( $O_3$ ) and is found between 15 and 35 km above the surface of the earth. Without the *ozone layer*, human health, ecosystems and life on earth are threatened.

# What is Ozone Layer Depletion?

Ozone layer depletion is the thinning of the ozone layer caused by man-made chemicals known as Ozone Depleting Substances (ODS) widely used in refrigeration, foam insulation production, industrial cleaning processes, fire safety and agricultural fumigation. The thinning poses a significant danger to the global environment and human health as it allows increased levels of ultraviolet (UV) radiation to reach the earth's surface.

## **Global Response to O3 Depletion**

The discovery of an ozone hole in 1985 by the British Antarctic Survey team marked the first evidence of stratospheric ozone depletion. The International attention was drawn to the urgent need for appropriate measures.

The Vienna Convention on Protection of the Ozone Layer was then signed in 1985. This Convention acts as a framework for international efforts to protect the ozone layer. However, the Convention did not include legally binding obligations for the reduction of ODS. Hence in 1987 the Montreal Protocol on Substances that Deplete the Ozone Layer was signed. The Protocol aims to reduce and eventually eliminate emissions of man-made ozone depleting substances and includes legal instruments to prevent the ozone layer depletion.

## What is Swaziland doing?

As a party to both the Convention and the Protocol, Swaziland has been actively involved in implementing activities to phase out the import and use of ODS in the country. Such activities include awareness raising on the protection of the Ozone Layer, training of technicians on good refrigeration practices and training of Customs and other enforcement officials on monitoring of ODS imports and strengthening colleges with equipment for training technicians. The country has been in compliance with its phase-out obligations under the Pro-

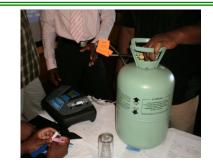
tocol.



#### Refrigeration technicians being trained

### The ODS Regulations and Monitoring (2003)

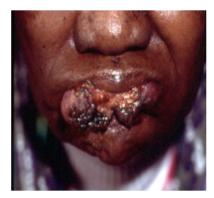
To effectively control the import of ODS, these ODS regulations were promulgated in 2003. In terms of Section 6 of the Ozone Depleting Substances Regulations, 2003, any person intending to import, export or store these substances MUST apply to the Swaziland Environment Authority for a permit. Provided the Authority is satisfied with the applicant, a license may be granted to import or export. The license is valid for a year and is renewable. For effective monitoring of ODS import, Customs officers have been designated as inspectors to monitor and combat illegal trade in



Customs Officers testing a refrigerant canister

### **Impacts of Ozone Depletion**

The thinning of the ozone layer allows more UV radiation to reach the earth's surface exposing life on earth to these dangerous rays of the sun. Overexposure to UV radiation is known to be a contributing factor to skin cancer.



A person suffering from skin cancer

Increases in UV radiation also cause other health concerns, including eye damage (eye cataracts), suppression of the immune system and premature skin aging. It can also seriously affect plant growth and productivity, with implications for food security.