

## RECP Experiences at Sadolin Paints (U) Ltd

The efficient and environmentally sound use of materials, energy and water - coupled with the minimization of waste and emissions - makes good business sense. Resource Efficient and Cleaner Production (RECP) is a way to achieve this in a holistic and systematic manner. RECP covers the application of preventive management strategies that increase the productive use of natural resources, minimize generation of waste and emissions, and foster safe and responsible production. Benefits are eminent in many enterprises, regardless of sector, location or size, as demonstrated by the experiences of Sadolin Paints (U) Ltd.

### Achievements at a Glance

Since Resource Efficiency and Cleaner Production implementation in 2011 in Sadolin Paints (U) Ltd, the company has achieved a total saving of USD 101,052.00 for a total investment of USD 233,677.30 and BODs and CODs have reduced from 7.510tons/yr and 24.595tons/yr to 0.069tons/yr and 0.15tons/yr respectively. During RECP implementation, Sadolin Paints (U) Ltd; established a well trained RECP Team (18 members) to control its energy consumption and the energy productivity has improved by 50% and increased awareness on the effective use of resources including water and materials and as a result, material and water productivity has increased by 1% and 13% respectively. RECP has also enabled the company to simultaneously decrease waste quantities by 25% and reduce the amount of greenhouse gas emissions by 6%. The company emerged as the 2<sup>nd</sup> runners-up Raw materials management in the Regional RECP Award 2014 and an overall winner of materials Management award in the National RECP Award 2013



Production floor before and after installation of translucent sheets under RECP Implementation

### Overview

Sadolin Paints (U) Limited is the leading manufacturer of quality paints in Uganda established in 1963, and owned by a group of Kenyan investors. Sadolin Paints (U) Ltd has traditionally concentrated on premium quality decorative products. It also manufactures medium quality decorative finishes, varnishes, and industrial paints, automotive refinish paints and road marking paints. Sadolin Paints (U) Ltd produces about twenty two million litres annually with a team of about 320 employees. With an aim

of improving productivity and reducing operating costs through improved efficiency and addressing the issues of ISO 14001 and ISO 18001 prior to certification, the company top management decided to implement Resource Efficiency and Cleaner Production in the entire factory.

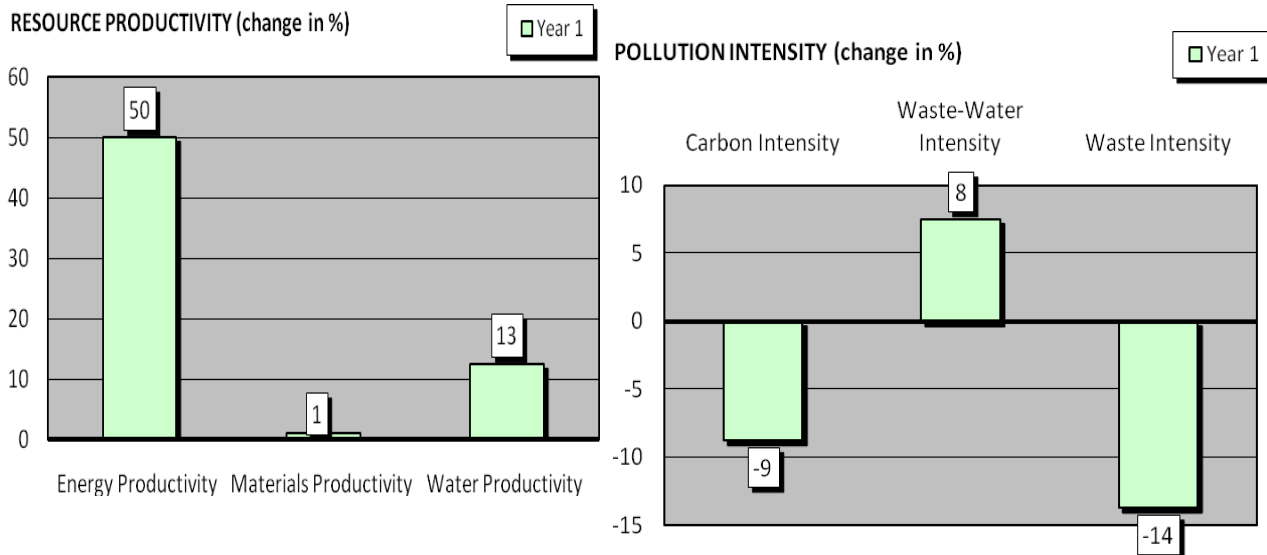
## Benefits

Resource Efficiency and Cleaner Production programme has helped Sadolin Paints (U) Ltd to control its energy consumption (i.e. energy costs reduction), conserve water, improve on storage/ handling of raw materials so as to prevent losses and accidents, understand and know that pollution is equivalent to profit and quality reductions and further understand the need to conserve the environment. Sadolin Paints (U) Ltd has greatly improved its energy use by 22.43%, one of the major inputs in paint production

Absolute Indicator	Change (%)	Relative Indicator	Change (%)
Resource Use		Resource Productivity	
Energy Use	-22	Energy Productivity	50
Materials Use	15	Materials Productivity	1
Water Use	3	Water Productivity	13
Pollution generated		Pollution Intensity	
Air Emissions (global warming, CO2 eq.)	6	Carbon Intensity	-9
Waste-Water	25	Waste-Water Intensity	8
Waste	0	Waste Intensity	-14
Product Output	16		

Note: The absolute indicators provide a measurement of how much resource use/pollution output has changed in absolute terms e.g. units of energy used or tons of waste generated. A negative percentage indicates a decrease and a positive percentage indicates an increase. The relative indicators provide a measurement of changes in resource use/pollution in relation to production output. Resource productivity provides a measurement of how much product output can be produced per unit of resource use, from a sustainability perspective, productivity should increase. Pollution intensity provides a measurement of how much pollution is generated per unit of production output, from a sustainability perspective, intensity should decrease.

## RECP Profile



Note: The RECP profile provides a visual overview of resource productivity and pollution intensity shown as change in % compared to the baseline values. Environmental performance is improved when resource productivity increases and when pollution intensity decreases.

## Success Areas;

### Resource Efficient and Cleaner Production (RECP)

**Resource Efficient and Cleaner Production (RECP)** entails the continuous application of preventive environmental strategies to processes, products and services to increase efficiency and reduce risks to humans and the environment.

RECP addresses three sustainability dimensions individually and synergistically:

- *Production efficiency*
  - > Through improved productive use of natural resources by enterprises
- *Environmental management*
  - > Through minimization of the impact on nature by enterprises
- *Human development*
  - > Through reduction of risks to people and communities from enterprises and supporting their development



# RECP Experiences



Table 2: Some of the Opportunities implemented

Principal Options Implemented			Benefits	
	Economic Investments (USD/Yr)	Economic savings (USD/Yr)	Resource Use	Environmental Impact
	Investment [\$]		Reductions in energy use, water use and/or materials use (per annum)	Reductions in waste water, air emissions and/or waste generation (per annum)
<b>Water Management</b>				
1. Recycling and awareness to workers	3.11	324.76	0.132 m <sup>3</sup> / ton of paint	Reduced water and soil pollution
<b>Wastewater Management</b>				
1. Installation of a high pressure cleaner	1,487.04	313.50	288 m <sup>3</sup>	Reduced water and soil pollution
<b>Materials Management</b>				
1. Reduction in printing papers	0.00	4,355.56	840 Reams	Reduced waste generation
<b>Energy Management</b>				
1. Replaced ordinary bulbs with energy saving bulbs 2. Cleaned/ Increased number of translucent sheets/ 3. Corrected capacitor bank	1,481.48	95,140.51	591.04 MJ/ ton of paint	Reduce air emissions



## RECP Experiences



### Approach Taken;

Following the RECP training workshop in 2011, company top management agreed to implement RECP at Sadolin Paints Ltd. This decision was sparked off by the considerable cost saving benefits that could be realised, anticipated improved efficiency of production and that cleaner production implementation is a great input towards certification in ISO 14001 and/or ISO 18001. A CP team was formed at Sadolin Paints Ltd and this team was taken through a series of trainings by UCPC on RECP. In order to identify and quantify opportunities for improvement, the UCPC team and the CP team for Sadolin Paints Ltd conducted an in-depth RECP assessment in the entire factory. UCPC presented the findings of the assessment to the top management and CP team for implementation. In order to facilitate smooth implementation of the identified RECP options, UCPC further organised an awareness raising seminar for the shop floor workers. UCPC team has always continued providing technical assistance to Sadolin Paints Ltd in addition to involving the company in workshops and seminars for more knowledge acquisition.

### Business case

As a result of RECP implementation, staff members have been motivated to carry on their activities with an aim of reducing costs and increasing efficiency and productivity. Every eye is looking for opportunity for continual improvement in the areas of health, safety and environment besides production increase, better product quality, turn over increase and new markets and job creation. Therefore motivated staff resulted in positive attitude towards work and improved productivity.



## RECP Experiences



Testimony Box
National Cleaner Production Centre (NCPC)
UCPC was established in October 2001 as part of the UNIDO-UNEP Cleaner Production Programme. UCPC is part of a family of over 50 National Cleaner Production Centres (NCPCs) worldwide and operates under the auspices of Trade, Industry and Cooperates. In 2010, the Centre in partnership with Lake Victoria Basin Commission embarked on promoting RECP as a tool for Sustainable Consumption and Production in enterprises within the Lake Victoria Basin and has worked with over 140 enterprises.
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English Abstract (where applicable)
N/A

### ABOUT RECP EXPERIENCES

Through the joint Resource Efficient and Cleaner Production (RECP) Programme, the United Nations Industrial Development Organization (UNIDO) and the United Nations Environment Programme (UNEP) cooperate to improve the resource productivity and environmental performance of businesses and other organizations in developing and transition countries. The Programme is implemented in partnership with the Global Network for Resource Efficient and Cleaner Production (RECPnet). This series of enterprise success stories documents the resource productivity, environmental and other benefits achieved by enterprises in developing and transition countries through the implementation of RECP methods and practices.

These successes were achieved with the assistance of the National Cleaner Production Centres, which are part of RECPnet established with support of the UNIDO and UNEP. The success stories employ the indicator set described in *Enterprise Level Indicators for Resource Productivity and Pollution Intensity*, UNIDO/UNEP, 2010. The primer with accompanying calculator tool and further case studies are available at [www.recpnet.org](http://www.recpnet.org), as well as on [www.unido.org/cp](http://www.unido.org/cp) and [www.unep.fr/scp/cp](http://www.unep.fr/scp/cp)