



# Building for the future

A United Nations showcase in Nairobi



Published February 2011

© 2011 United Nations Environment Programme

Director of Publication: Satinder Bindra

Writer and Project Coordinator: Susanne Morrell

Design and Layout: Jinita Shah/UNON

Produced by: UNEP Division of Communications and Public Information

Printed by: UNON, Publishing Services Section, Nairobi, ISO 14001:2004 – certified.

Principal photography: Neil Thomas

Additional photography: Bo Sorensen and Josephat Kariuki

Photos © UNEP and UNON

This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder provided acknowledgement of the source is made. UNEP would appreciate receiving a copy of any publication that uses this publication as a source. No use of this publication may be made for resale or for any other commercial purpose whatsoever without prior permission in writing from UNEP.

United Nations Environment Programme

P.O. Box 30552, Nairobi 00100, Kenya

Tel: +254-(0)20-762 1234

Fax: +254-(0)20-762 3927

Web: [www.unep.org](http://www.unep.org)

# Building for the future

A United Nations showcase in Nairobi





# table of contents

- foreword ..... 5
- introduction ..... 8
- environmental features at a glance..... 10
- architecture ..... 12
- energy neutrality ..... 14
- solar power..... 16
- landscaping ..... 18
- natural ventilation..... 20
- lighting..... 22
- water..... 24
- green IT ..... 26
  
- annex 1 lessons learned..... 28
- annex 2 further resources ..... 32
- annex 3 sustainable communities and green buildings ..... 34
- annex 4 green buildings in the sun ..... 36

**“ In combating climate change the United Nations should lead by example.”**

**Ban Ki-moon**  
**United Nations Secretary-General**



# foreword

The new office facility in Nairobi, which houses the headquarters of both the United Nations Environment Programme (UNEP) and the United Nations Human Settlements Programme (UN-HABITAT), may well be a first in sub-Saharan Africa.

With 6,000 square metres of solar panels, energy saving lighting, natural ventilation systems and other green features, the office is designed to generate as much electricity as its 1,200 occupants consume.

The logic is simple and compelling: the building sector is the single largest contributor to global greenhouse gas emissions with one third of global energy use taking place in offices and homes – a figure that is set to double by 2030 unless urgent action is taken.

So the design and construction of new buildings – and the refitting of existing ones – represents one of the key, low cost ways of combating climate change while reducing electricity bills and dependence on fossil fuels.

Along with green transportation, buildings are thus a central part of a transition to a Green Economy and a sustainable 21st century.

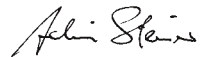
Our new office building is the result of a committed partnership between the United Nations Office at Nairobi, UN-HABITAT, UNEP, local architects and contractors, and international technology firms.

It is a practical and impressive expression of the United Nations desire to green its operations as part of the Sustainable United Nations initiative.

And as a smart, green building in Africa, the benefits of its 21st century technology for now and the future are a cause for some celebration.

This is a working building but it is also in many ways a research facility and a sustainable building showcase.

We invite other United Nations duty stations, and architects and planners from Kenya, across the continent and beyond, to come, learn and become part of a community that is helping sustainable buildings to play their role in a greener future.



Achim Steiner  
Director-General United Nations Office at Nairobi  
Executive Director United Nations Environment Programme  
February 2011



预览已结束，完整报告链接和二维码如下：

[https://www.yunbaogao.cn/report/index/report?reportId=5\\_9853](https://www.yunbaogao.cn/report/index/report?reportId=5_9853)