
**Graphic technology — Quantification
and communication for calculating
the carbon footprint of print media
products**

*Technologie graphique — Quantification et communication relatives
au calcul de l’empreinte carbone des produits imprimés*





COPYRIGHT PROTECTED DOCUMENT

© ISO 2013

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

| | |
|---|-----------|
| Foreword | iv |
| Introduction | v |
| 1 Scope | 1 |
| 2 Normative references | 1 |
| 3 Terms and definitions | 1 |
| 3.1 Terms relating to carbon footprint..... | 1 |
| 3.2 Terms relating to greenhouse gases..... | 2 |
| 3.3 Terms relating to life cycle assessment..... | 3 |
| 3.4 Terms relating to organisations and consumers..... | 4 |
| 3.5 Terms relating to printed media product and process — Prepress..... | 4 |
| 3.6 Terms relating to printed media product and process — Press..... | 5 |
| 3.7 Terms relating to printed media product and process — Postpress..... | 6 |
| 3.8 Terms relating to data and data quality..... | 7 |
| 4 Principles for carbon footprint quantification | 8 |
| 4.1 General requirements..... | 8 |
| 4.2 Life cycle perspective..... | 8 |
| 4.3 Relative approach and functional unit..... | 8 |
| 4.4 Relevance..... | 8 |
| 4.5 Completeness..... | 8 |
| 4.6 Consistency..... | 9 |
| 4.7 Accuracy..... | 9 |
| 4.8 Transparency..... | 9 |
| 4.9 Avoidance of double counting..... | 9 |
| 4.10 Implementation criteria..... | 9 |
| 5 Methodology | 9 |
| 5.1 General requirements..... | 9 |
| 5.2 Goal and scope..... | 10 |
| 5.3 System boundary definitions..... | 11 |
| 5.4 Time boundary for data..... | 12 |
| 5.5 Carbon footprint quantification of life-cycle stages..... | 12 |
| 6 Reporting | 17 |
| 6.1 General..... | 17 |
| 6.2 Documentation requirements..... | 17 |
| 6.3 Interpretation of the carbon footprint of a product..... | 18 |
| 7 Communication requirements | 18 |
| 7.1 General..... | 18 |
| 7.2 Interpretation and comparison..... | 19 |
| 7.3 Product definitions and product category rules (PCRs)..... | 19 |
| Annex A (informative) General requirements and guidelines for CFP communication options — Greenhouse gases | 20 |
| Annex B (informative) Inventory analysis of input criteria used to define the product profile | 23 |
| Annex C (informative) Operations and materials in processes and data collection items within the system boundary | 26 |
| Annex D (informative) Intergraf recommendations on CO₂ emissions calculation in the printing industry | 30 |
| Annex E (normative) Guidelines for comparisons of the carbon footprints of print media | 34 |
| Annex F (informative) Calculation samples by Europe, Germany and Thailand | 35 |
| Bibliography | 41 |