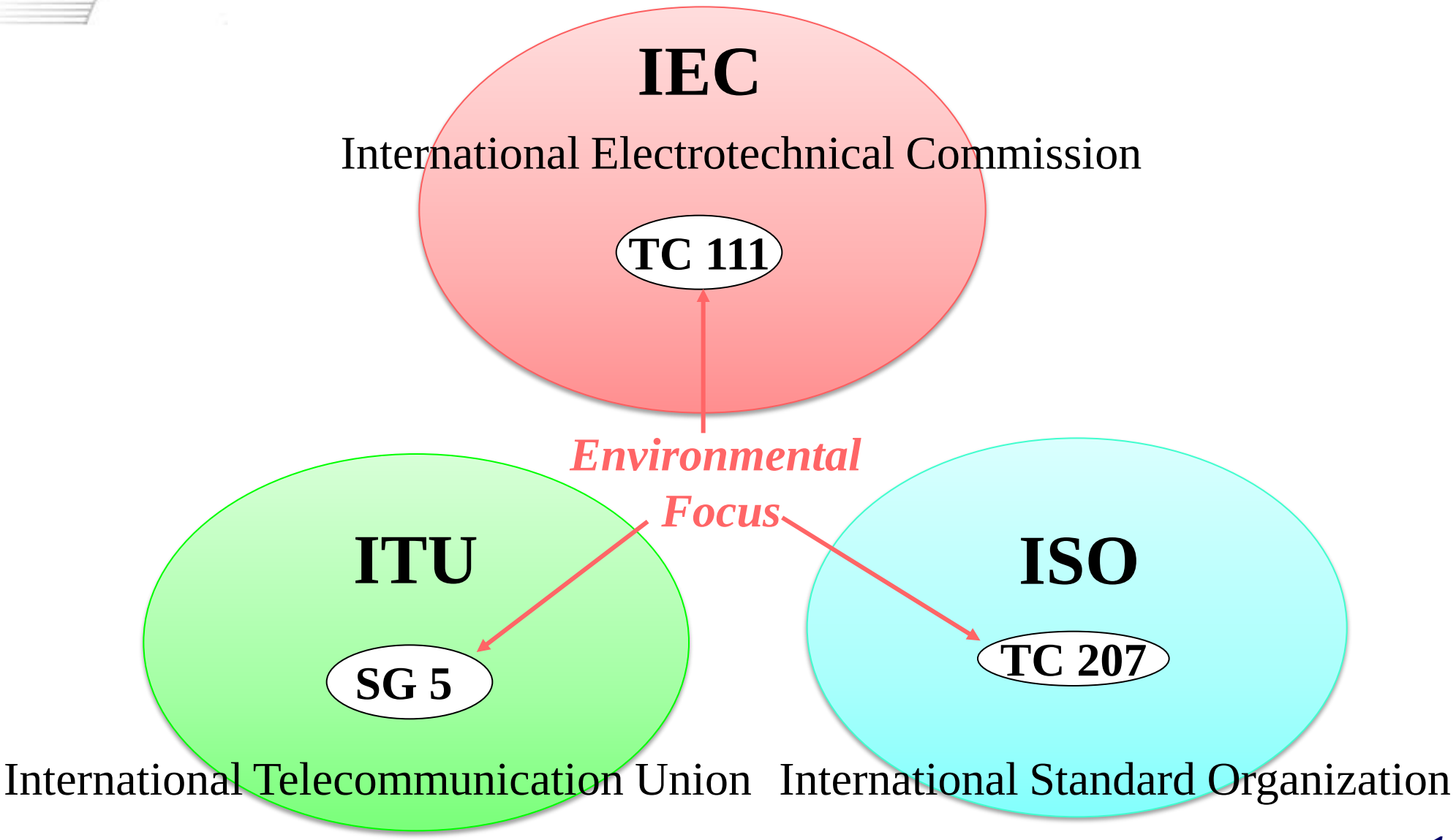
TC111 Role and Activities in Environmental Standardization

November 2013

Tree Major Standardisation Bodies and Environmental TCs



Outline of IEC TC 111

- Established: October, 2004
- Title: Environmental Standardization for Electrical and Electronic Products and Systems
- Officers
  - Chairman: Yoshiaki Ichikawa (Japan)
  - Secretary: Andrea Legnani (Italy)
  - Technical Officer: Matei Cocimarov (IEC)

- Last plenary meeting: 2012-10-19/20, Fortaleza/Brazil
- Next plenary meeting: 2013-11-28/29, Shenzhen/China

Focus is on Environmental Standards that span the electrotechnical industry

Scope of IEC TC111

Standardization of environmental aspects concerning:

- To prepare the necessary guidelines, *basic and horizontal* standards, including technical reports, in the environmental area, in close cooperation with product committees of IEC, which remain autonomous in dealing with the environmental aspects relevant to their products;
- *To liaise with product committees* in the elaboration of environmental requirements of product standards in order to foster common technical approaches and solutions for similar problems and thus *assure consistency in IEC standards*;
- *To liaise with ACEA and ISO/TC 207*;
- To monitor closely the corresponding regional standardization *activities worldwide* in order to *become a focal point for discussions concerning standardization*;
- EMC and EMF aspects are excluded from the scope.

IEC TC111 Meetings

May 2005 Milan

Oct 2005 Cape Town

Jun 2006 Redmond

Mar 2007 Tokyo

Oct 2007 Paris

Oct 2008 Jeju

Oct 2009 Tel Aviv

Oct 2010 Seattle

Oct 2011 Melbourne

Oct 2012 Fortaleza

Membership of IEC TC111

- Members (34)
  - P-members: SE, TH, AU, BE, CZ, CN, DE, ES, DK, GB, FR, FI, IT, KR, IL, IN, BR, PK, EG, SG, US, NO, MX, MY, NL, JP, CA (27)
  - O-Members: SI, RO, PL, AT, ZA, CH, SK (7)
  - Outside IEC liaisons: ISO/TC207, ISO/TC61 (Plastics), ECMA, ISO/TC268/SC1 (Smart Community Infra.) ITU-T SG5 (with WG4)
  - Internal liaisons: TC3/SC3D, SC17B, SC22H, TC47, TC59, SC62A, TC85, SC86A, TC91, TC96, TC100, TC107, TC108, TC110, TC113,

Structure of IEC TC 111

WG1: Material Declaration — IEC 62474 Ed.1.0

VT 62474: DB for Material Declaration

MT 62430: Environmentally Conscious Design — IEC 62430 Ed.1.0

PT 62635/62650: Recyclability — IEC TR 62635 Ed.1.0

PT 62824: Material Efficiency Guidance for ECD

WG3: Test Procedures for Regulated Hazardous Substances — IEC 62321-1...5 Ed1.0

WG4: Green House Gases — IEC TR 62725 Ed.1.0

PT 62476: Guidance for Evaluation of Product with Respect to Substance Use Restrictions — IEC TR 62476 Ed.1.0

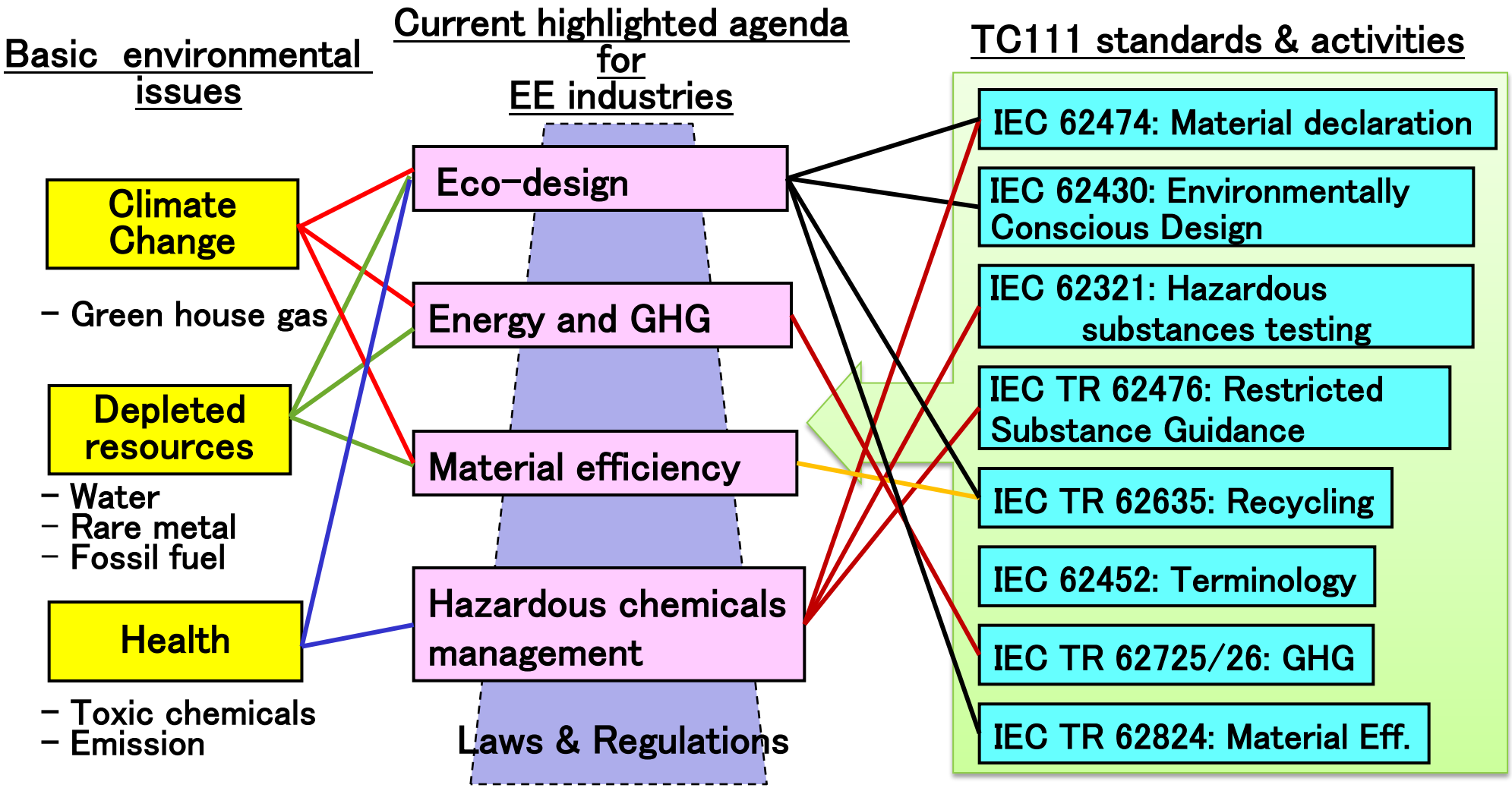
PT 62542:Terminology — IEC 62542 Ed.1.0

AHG 9: Marketing

AHG10: Advisory for SBP

Disbanded after publication

Relationships of Environmental Issues and IEC TC111 Projects



WG1: Material Declaration – IEC 62474 –

- Title:
  Material Declaration for Products of and for the Electrotechnical Industry
- Convenor: Robert Friedman (USA)
- Objective: To describe the form and procedure relating to the declarations of materials in products, for input into environmentally conscious design and other business needs.
- Progress:
  - 1st CD (2008.4)
  - 2nd CD(2009.5)
  - CDV (2010.7) Approved (2011.1)
  - Database Project Approved by SMB (2011.2)
  - VT 62474 established (2011.3) ⇨ Maintaining list of declarable substance
  - FDIS (2011.12)
  - Published (2012.3)
  - Guidance document for use of IEC 62474 is in development

VT 62474
Material Declaration for Products of and for the Electrotechnical Industry DB

- Web URL (access for free of charge)
  http://std.iec.ch/iec62474/iec62474.nsf/

International Electrotechnical Commission

IEC 62474 - Material Declaration for Products of and for the Electrotechnical Industry

Home
Introduction
News

Declarable substance groups and declarable substances

Reference substances

Material classes

XML schema for materials declaration

Declarable substances Export all

Lead/Lead Compounds

Reportable applications	Reporting treshold	Reporting requirement	
All, except for batteries, cables and children's articles/toys	0.1 mass% of total Pb in homogenous material	Mandatory	Details
Consumer products designed or intended primarily for children 12 years of age or younger	0.03 mass%	Mandatory	Details
Paint and similar surface coatings of toys and other articles intended for use by children	0.009 mass% of surface coating material	Mandatory	Details
Cables/cords with thermoset or thermoplastic coatings	0.03 mass% of surface coating material	Mandatory	Details
Batteries	0.004 mass% of battery	Mandatory	Details

MT 62430: Environmentally Conscious Design

- Title: Environmentally conscious design for electrical and electronic products
- Convenor: Shu Yamada (Japan)

- Objective:
  - Joint ISO/IEC standard for ECD being pursued (together with ISO TC207)
  - Additional guidance areas for ECD to be considered
  - Consider to then transfer IEC 62430 into a series of standards
- Progress
  - IEC 62430 Ed.1.0 (2009.06)
  - DC (2012.12)
  - 1st MT meeting Geneva 2013.06
  - 2nd MT meeting Shenzhen 2013.11

WG3: Test Methods of Hazardous Substances – IEC 62321 series –

- Title: Determination of Certain Substances in Electrotechnical Products

- Convenors:
  Joachim Zietlow (Germany)
  Scott MacLeod (USA)

- Objective:
  - Split IEC 62321 Ed.1.0 & improve test methods into a family of standards according to substances
  - Revise/Maintain IEC 62321, including possible new methods and try to bring informative annexes to normative stage
  - Inclusion of new substances (if the related NPs will be approved)

- Progress
  - IEC 62321-1 Ed.1.0 (2013.05)
  - IEC 62321-2/-3-1/-3-2/-4/-5 Ed.1.0 (2013.06)
  - Further parts and related intl. interlaboratory studies (IIS) under development, INF guide

WG 3 Activity and Timeline

- **IEC 62321 - Track A (Part 1-5)**
  - IS Published in May / June 2013
- **IEC 62321 - Track B (Part 6 / 7-1)**
  - Part 6 CDV Unanimously Approved September 2013, FDIS Targeted for November
  - Part 7-1 IIS 4B Report Circulated July 2013, CDV Targeted for 11/2013 and FDIS for 8/2014
- **IEC 62321 - Track C (Part 7-2)**
  - IIS 4C Report Targeted for 12/2013, CDV Targeted for 5/2014, FDIS Targeted for 12/2014
- **IEC 62321 - Track D (Part 8, Phthalates)**
  - CD Circulated August 2013, IIS 4D Targeted for 5/2014, CDV Targeted for 8/2014
- **INF Guide for Substance Selection**
  - DC (111/315) Comments Received August 2013, INF Targeted for 1/2014

PT 62542: Glossary of Terms

- Title: Environmental Standardization of Electrical & Electronic Products & Systems - Glossary of Terms
- Convenors:
  - Richard LaLumondier (USA) [resigned 2012-10-09]
  - Jean-Luc Detrez (BE) and Andreas Schneider (DE) [former subteam leaders]
- Objective: To develop an IS which specifies Environmental Terms, and Definitions, used in IEC TC 111 standards and serves as a glossary of terminology for the environmental aspects in IEC
- Progress
  - 1st CD (2008.10)
  - 2nd CD(2009.8)
  - CDV (2010.2) : Not approved
  - 3rd CD (2010.7)
  - 2nd CDV (2012.5): Approved
  - FDIS (2013.03): 100% Approval
  - IS (2013.06)
  - Next: Integration into IEV

WG4: GHG
– IEC TR 62725 / 62726–

- Title:
  TR 62725 Quantification methodology of greenhouse gas emissions for electrical and electronic products and systems
  TR 62726 Quantification Methodology of greenhouse gas emission reductions for electrical and electronic products and systems from the project baseline
- Convenor: Kiyoshi Saito (Japan)
- Objective: To give guidance to those in electrical and electronics industries on quantification of GHG emission across the product lifecycle and its "enabling effect" in reducing it.

- Progress
  - TR 62725 DTR (approved 2012.9)
  - TR 62725 Publication (2013.03)
  - TR 62726 DC2 (2013.06)

PT 62824: Guidance on material efficiency in ECD (TR)

- Title: Guidance on consideration and evaluation on material efficiency of electrical and electronic products in ECD
- Convenor: ZHANG Liang (CHINA)
- Objective: To provide guidance on principles and evaluation of material efficiency, usable as a supplementary document of IEC 62430. Facilitate the improvement of material efficiency during the EE product life cycles.
- Progress
  - 1st PT meeting in Fortaleza, 2012-10-17/18
  - DC (2013.10)
  - DTR (2014.03)

Other Groups and Activities

- AHG 9 – Marketing Ideas and Opportunities

- AHG 10 – Maintenance of Strategic Business Plan (SBP)
  - Methodology to assess ideas for inclusion on a strategic roadmap
  - Focus strategic roadmap on areas of greatest industry need across electrical and electronics industry.

Thank you for your attention

Any questions?

Finished WGs/PTs and their publications

Environmentally Conscious Design for Electrical and Electronic Products and Systems

- Publication: IEC 62430 Edition 1.0 (2009-02)
- Abstract: specifies requirements and procedures to integrate environmental aspects into design and development processes of electrical and electronic products, including combination of products, and the materials and components of which they are composed. It has the status of a horizontal standard in accordance with IEC Guide 108.

IEC 62430

Edition 1.0 2009-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

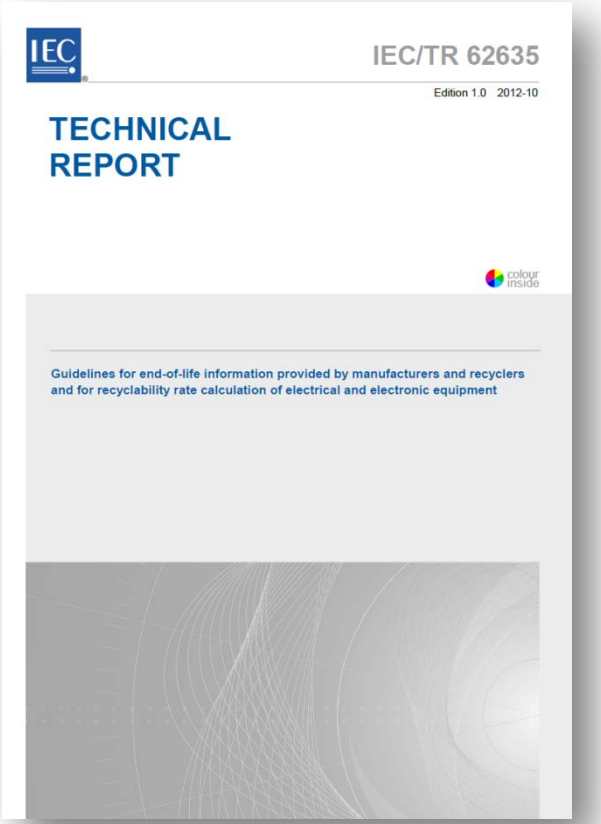
Environmentally conscious design for electrical and electronic products

Guidance for Evaluation of Products With Respect to Substance-use Restrictions in Electrical and Electronic Products

- Publication: IEC 62476 Edition 1.0 (2010-02)
- Abstract: IEC/TR 62476:2010(E) provides a framework for the use of internationally accepted standards, tools and practices to evaluate electrical and electronic products with respect to restricted substances. It can also be applied to declarable substances which are not restricted in electrical and electronic products. It provides guidance on how technical documentation and relevant evaluation and control methods should be selected and applied for restricted or declarable substances of any producer's product.

Guidelines for end-of-life information provided by manufacturers and recyclers and for recyclability rate calculation of electrical and electronic equipment

- Publication: IEC 62635 Edition 1.0 (2012-10)
- Abstract: IEC/TR 62635:2012(E) provides a methodology for information exchange involving EEE manufacturers and recyclers, and for calculating the recyclability and recoverability rates to provide information to recyclers to enable appropriate and optimized EoL treatment operations, provide sufficient information to characterize activities at EoL treatment facilities in order to enable manufacturers to implement effective ECD, evaluate the recyclability and recoverability rates based on product attributes and reflecting real end-of-life practices.

Guidelines for end-of-life information provided by manufacturers and recyclers and for recyclability rate calculation of electrical and electronic equipment

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