

Sustainable Competence
in Advancing Healthcare





EDD-CF-2009-11-17-Doc02

COCIR Self Regulatory Initiative (SRI) under EuP Directive

EuP Consultation Forum Meeting
17th November 2009

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Part 1 - Generalities

Structure

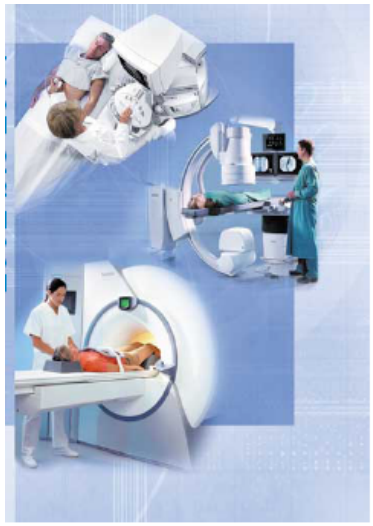
- Introduction to COCIR
- COCIR leadership in environmental matters
- EuP Initiative
- What has been done
- Concept of Self Regulative Initiative (SRI)
  - Scope
  - Participants
  - Method of the concept
  - Compliance with Annex VIII of EuP Directive
  - Conclusion
- Next Steps
- Q&A







What is COCIR?



COCIR is representing the Industry Voice in Medical Imaging, Electromedical and Healthcare IT

Our Industry is leading in innovative healthcare technologies and provides solutions for the complete care cycle



COCIR Members (1 of 2)

COCIR Company members:



COCIR Members (2 of 2)

National Trade Association members:



BELGIUM



FINLAND



FRANCE



GERMANY



GERMANY



ITALY



THE NETHERLANDS



SPAIN



SWEDEN



TURKEY



UNITED KINGDOM



HUNGARY

COCIR Profile

- 3 Industry Sectors:
  - Medical Imaging
  - Electromedical
  - Healthcare IT

- 5 core competencies:
  - Market Statistics (Medical Imaging and Healthcare IT Intelligence Centre)
  - eHealth
  - Contribution to sustainable healthcare with Institutions and other stakeholders (Europe)
  - Regulatory Activities and Standardisation (EU and Global)
  - Environment (EU and Global)
    - Hosting EuP Steering Committee

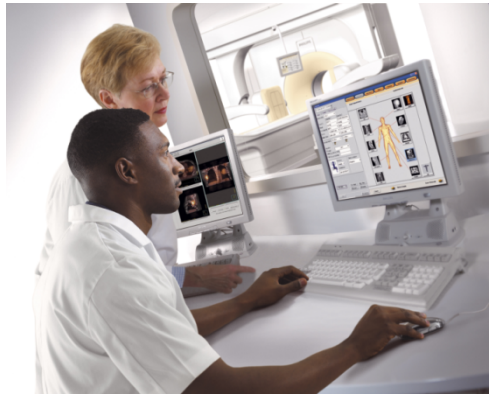
Healthcare: need for sustainability and innovation

- Our products are:
  - Saving lives and contributing to quality of life of citizens globally
  - Covering the complete care cycle
  - Capital investment goods
  - High technology and highly innovative
  - Safety conscious and highly regulated
  - Sustainability



- Benefits for citizens and patients:
  - Better management of chronic diseases
  - More efficient data exchange & work flow
  - Prevention
  - Early diagnostic
  - Therapy
  - Quality of care





Industry Needs

Demand and necessity of:

- Raw materials
- Partly hazardous materials, e.g. for personal protection, patient safety (e.g. optimized radiation dose) or product reliability/ optimal performance
- Energy
- Freedom in innovation
- Quality of information (e.g. images)



Consequence is:

- Necessity of risk/ benefit analysis
- Transparency and structured approaches as information baseline
- Existing good track record in environmental protection

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COCIR Leadership in Environmental Matters

- 2000: Applying Integrated Product Policy (IPP) in business and design – Thinking in life cycles
- 2000-2007: Development of a global benchmark – the product standard IEC 60601-1-9, Requirements for environmentally conscious design
- 2006: Furthermore on IPP, Customer information, e.g. EPDs from Hamburg project
- 2007: Refurbished equipment – GRP concept (version 1)
- 2008: Hazardous Substances Management – amongst others REACH compliance, RoHS substances, ...
  - Guide for manufacturers
  - BOMcheck Initiative (involvement of supply chain)
- 2009: 1st COCIR Industry Standard on GRP together with version 2 of GRP

2000-2007: IEC 60601-1-9, a Helping Tool for SRI

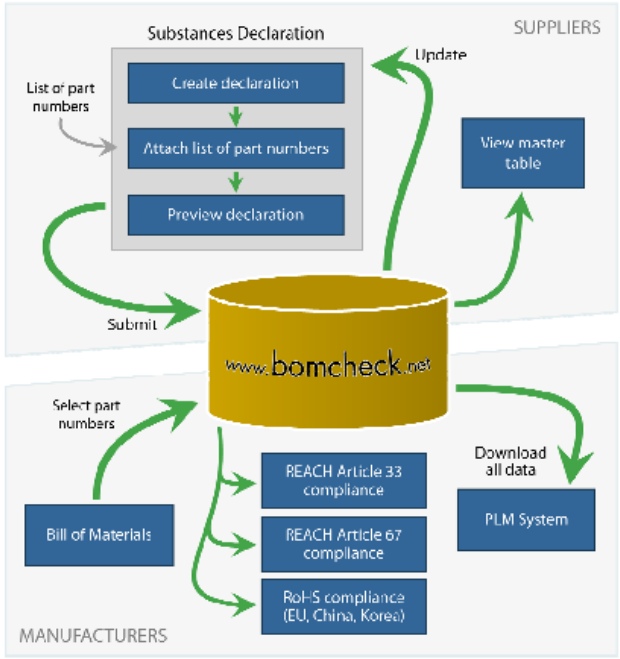
IEC 60601-1-9 (First edition 2007-07)
"Requirements for environmentally conscious design (ECD) to become harmonized standard"

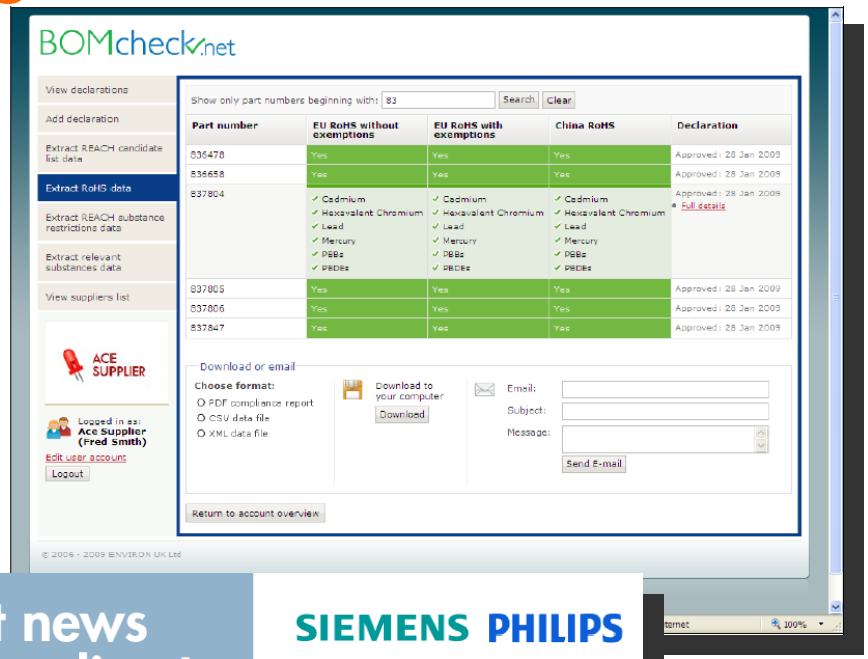
- Assess all environmental aspects (EuP relevant)
- Involve the supply chain (EuP relevant)
- Identify significant environmental aspects (EuP relevant)
- Reduce environmental impacts (EuP relevant)
- Provide environmental information (EuP relevant)
- Packaging (EuP relevant)
- Normal use (EuP relevant)
- End-of-Life (EuP relevant)
- Annex with guidance and examples

2008: Hazardous Substances Management

BOMcheck.net

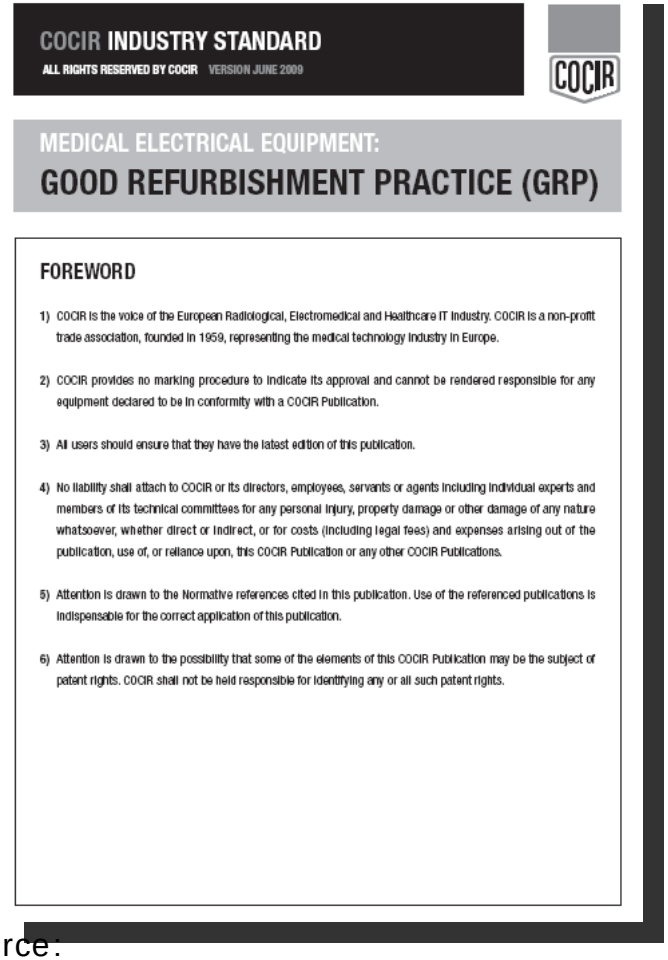
Business benefits to suppliers







2009: Refurbished Equipment GRP Concept



COCIR INDUSTRY STANDARD

ALL RIGHTS RESERVED BY COCIR VERSION JUNE 2009

MEDICAL ELECTRICAL EQUIPMENT:

GOOD REFURBISHMENT PRACTICE (GRP)

FOREWORD

1) COCIR is the voice of the European Radiological, Electromedical and Healthcare IT Industry. COCIR is a non-profit trade association, founded in 1959, representing the medical technology industry in Europe.

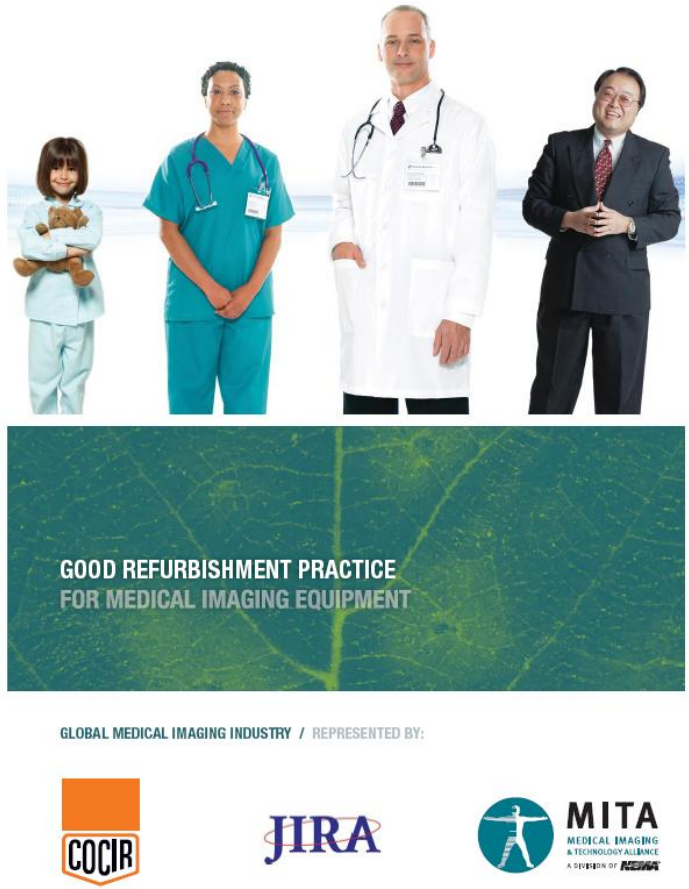
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http://www.cocir.org/uploads/documents/-560-cocir_industry_standard1806.pdf

Structure

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Actions on SRI done so far

- December 2007: Start of development of the general SRI Concept
- May 2008: First announcement about SRI at CF meeting
- During 2008: Development of the detail SRI Concept
- January 2009: Commitment on participation from 11 companies (equals 100% COCIR members on electrical medical equipment)
- March 2009: Creation of EuP Steering Committee
- May 2009: First product group (ultrasound) investigated
- November 2009: Presentation on methodology and preliminary achievements to the Consultation Forum (gathering new input for improvements)

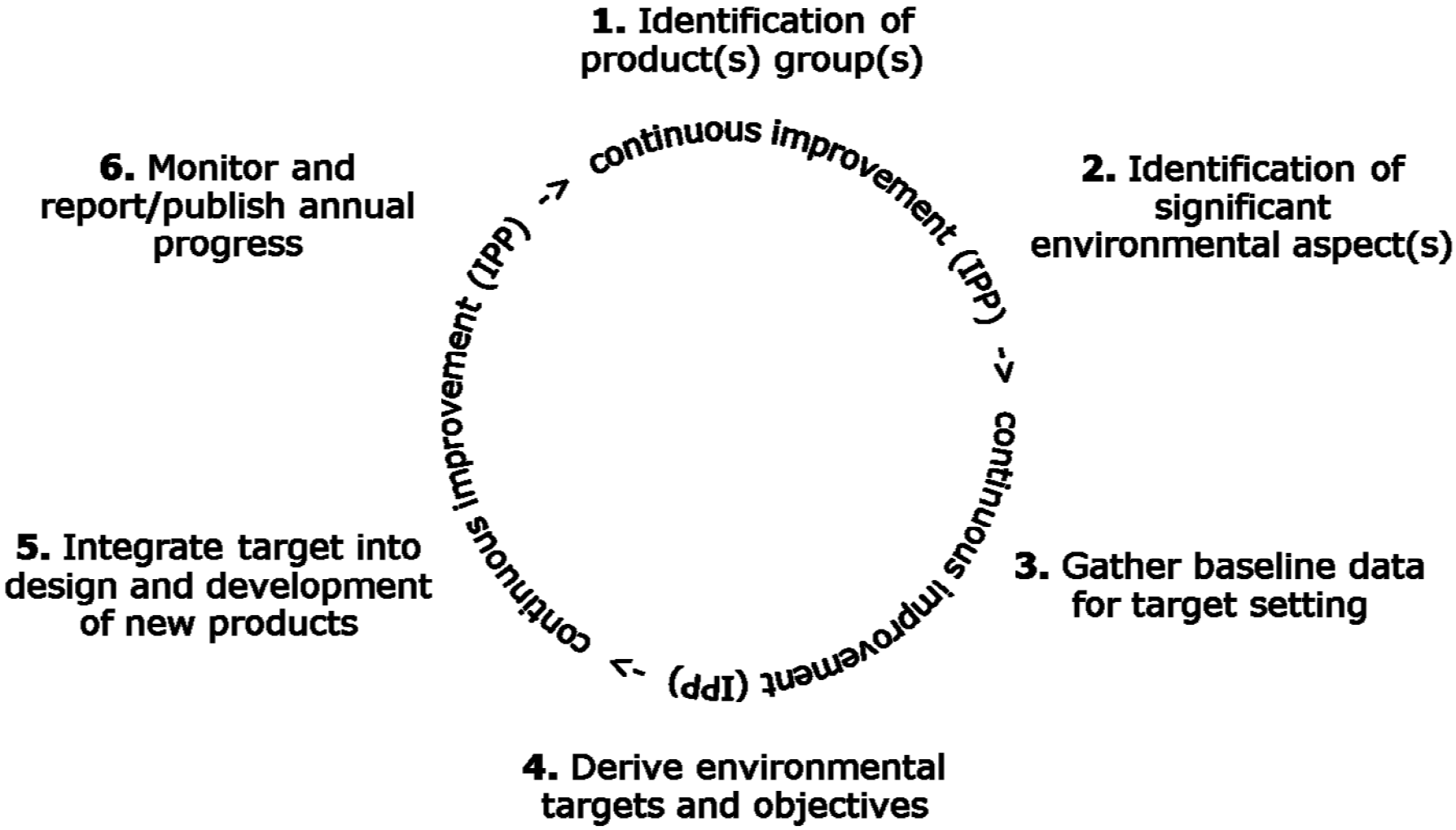
Scope of the SRI Concept

- Medical Imaging Products:
  - Ultrasound (already investigated)
  - X-ray
  - Computed Tomography
  - Magnetic Resonance
  - Nuclear Medicine

Current Representativity

		2008 Market Value	Estimated EU Market Coverage	Participating companies	Other targeted companies
Computer Tomography (CT)		630 M€	100 %	GEHC, Philips, Siemens, Toshiba	None
Ultrasound		839M€	80 %	Aloka, GEHC, Medison, Philips, Siemens, Toshiba	Esaote Medical, Sonosite, Mindray, Ultrasonix, Zonare
X-ray	Cardio (45%)	381 M€	100 %	GEHC, Philips, Siemens, Toshiba	None
	Others (55%)	490 M€	82 %	GEHC, Philips, Siemens, Toshiba, Agfa, Shimadzu, Canon	Approx. 50 companies incl. Hologic, Konica, Mindray
Magnetic Resonance Imaging (MRI)		769 M€	100%	GEHC, Philips, Siemens, Toshiba	None
Nuclear Medicine (SPECT, PET)		224 M€	100%	GEHC, Philips, Siemens	None

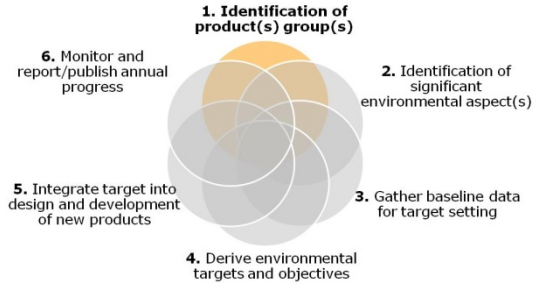
The SRI Concept per Product



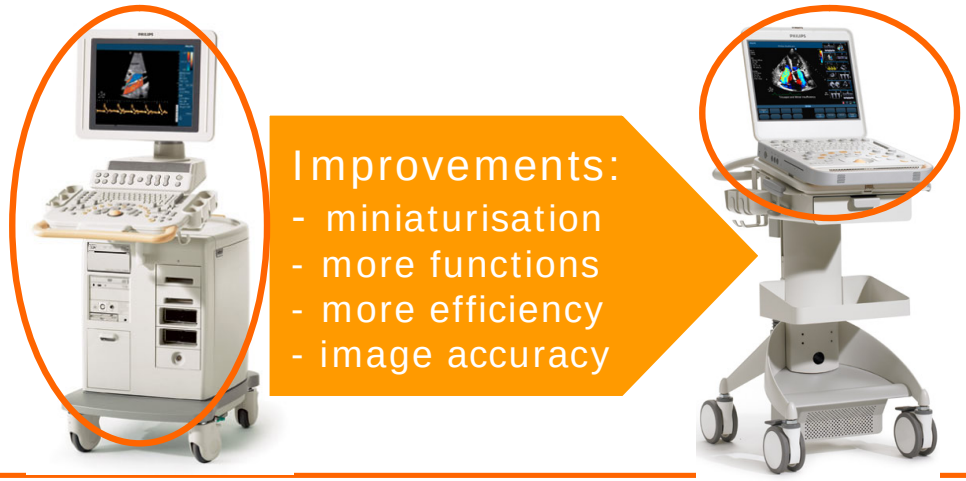
Overview and Timescale on the SRI Concept

	2009	2010	2011	2012	2013	2014	2015	2016	20xx
Period 1									
1. Screening to determine which modality should be addressed next	Ultrasound was selected	Select second modality	Select third modality	Select Fourth modality					
2. Identify the most significant environmental aspect	Ultrasound	Second modality	Third modality	Fourth modality	Fifth modality				
3. Gather baseline data for target setting.	Ultrasound	Second modality	Third modality	Fourth modality	Fifth modality				
4. Set target and objectives for most significant environmental aspect	Ultrasound	Second modality	Third modality	Fourth modality	Fifth modality				
5. Integrate target into design and development of new products		Ultrasound	Second modality	Third modality	Fourth modality	Fifth modality			
6. Monitor and report every year progress		Ultrasound	Ultrasound and 2nd modality	Ultrasound and moda-lity 2 and 3	Ultrasound and moda-lity 2-4	All modalities	All moda-lities	All moda-lities	All moda-lities
Period 2									
2. Identify the most significant environmental aspect				Ultrasound	Second modality	Third modality	Fourth moda-lity	Fifth moda-lity	
3. Gather baseline data for target setting.				Ultrasound	Second modality	Third modality	Fourth moda-lity	Fifth moda-lity	
4. Set target and objectives for most significant environmental aspect				Ultrasound	Second modality	Third modality	Fourth moda-lity	Fifth moda-lity	
5. Integrate target into design and development of new products					Ultrasound	Second modality	Third moda-lity	Fourth moda-lity	
Periods 3-x									
Steps 2-5 for periods 3-x									

Example Ultrasound

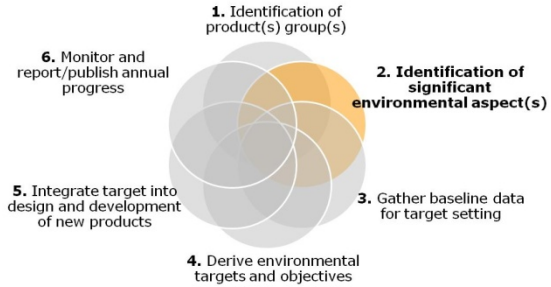


- Coverage of largest number of COCIR member companies
- Highest market value 2008
- Ultrasound equipment is less complex compared to others and supports learning curve perfectly
- Efficiency improvement is already done and well understandable and communicable

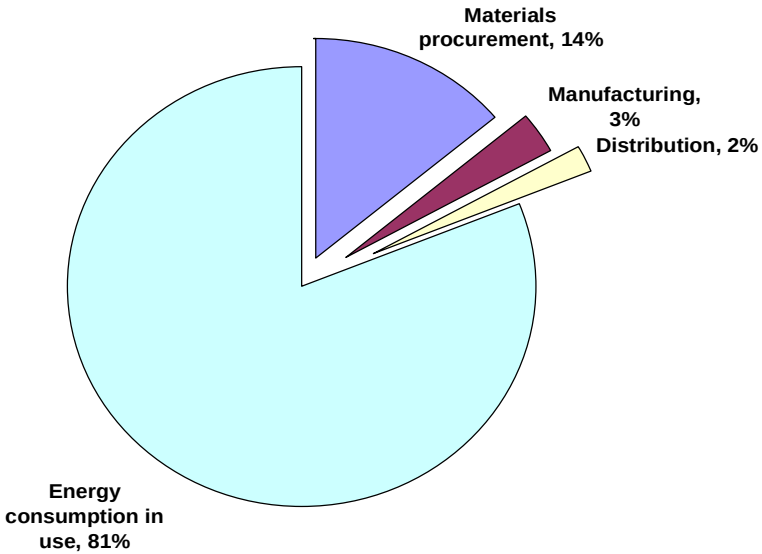


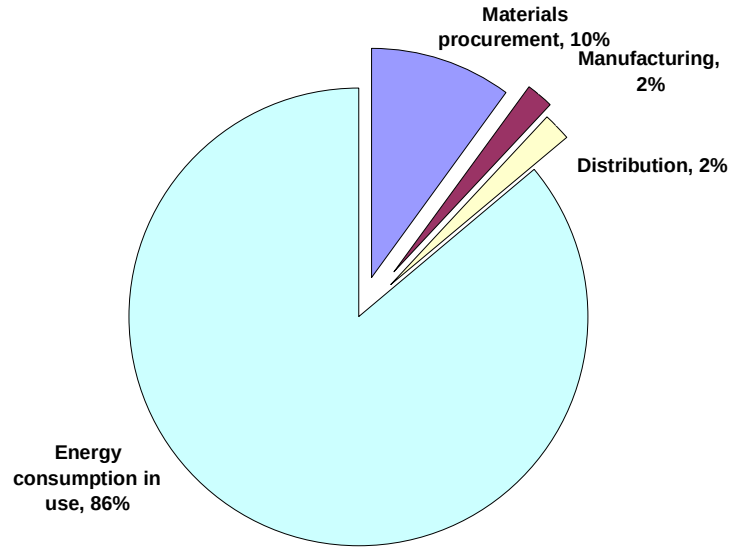


Use Phase Relevance



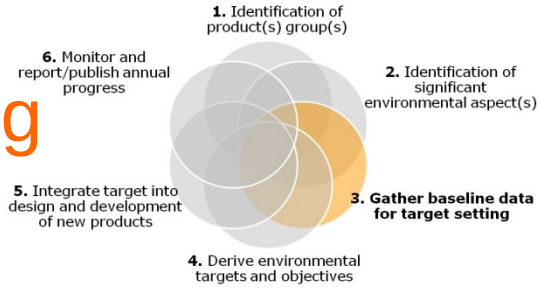
- Most significant environmental aspect is energy consumption in use phase (LCA result)
- Hazardous materials or End of Life is not critical
- Directives apply: RoHS, WEEE, REACH, packaging directive





LCA results: Ultrasound product 1 Ultrasound product 2

Three Steps for Gathering Baseline Data

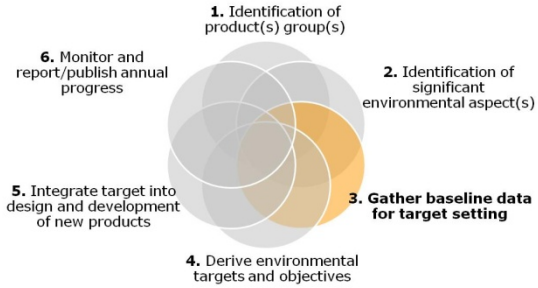


- Agreement and standardized approach
  - for data collection
  - for comparability
  - for completeness
  - for transparency
  - for a meaningful and feasible reference (functional unit)

- Gather data
  - for significant environmental aspects
  - old and new product sales

- Identify and review technology trends

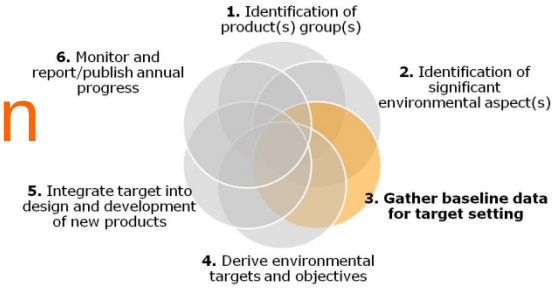
Data Collection from COCIR members



	Total annual sales	Total annual sales as a percentage of 2005 annual sales	Total annual energy consumption in kWh for new products	Total annual energy consumption for new products as a percentage of 2005 annual energy consumption	Average annual energy consumption for new products in kWh	Average annual energy consumption for new products compared to 2005
2005	14,475	100%	13,628,343 kWh/year	100%	942 kWh/unit/year	100%
2006	17,088	118%	14,864,054 kWh/year	109%	870 kWh/unit/year	92%
2007	19,604	135%	15,121,116 kWh/year	111%	771 kWh/unit/year	82%
2008	20,791	144%	15,851,000	116%	762 kWh/unit/year	81%
2009	20,800	144%	15,851,000	116%	762 kWh/unit/year	81%
2010	20,800	144%	15,851,000	116%	762 kWh/unit/year	81%

Historical data é
Prediction ê

References and Definition of Functional Unit



Current situation:

- Energy consumption is based on:

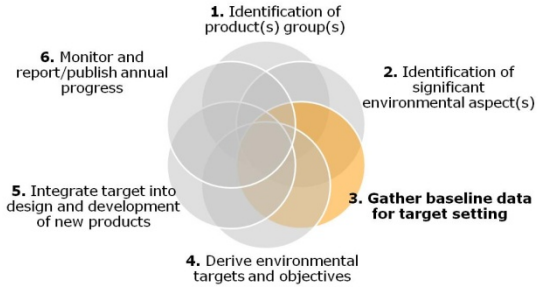
  power consumption of single ultrasound product per time

- Power is measured per unit
- Time depends on a use scenario, i.e. typical hospital
  - 6 hours operation per day
  - 6 hours standby per day
  - 5 days usage per week, for 52 weeks per year

Challenge:

- Power consumption per unit hides facts as:
  - More functions per unit
  - Better images/ better diagnosis (quality)
  - Faster throughput of patients/ more diagnoses per day (time)

Proposals for More Transparency



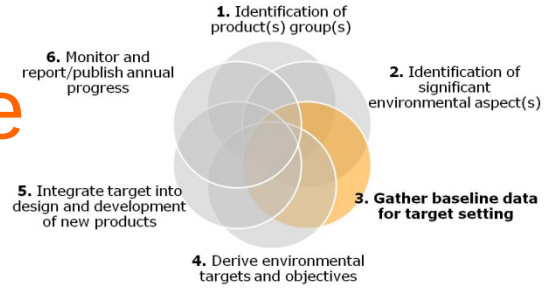
Energy efficiency depends on:

- Functions
- Quality
- Time

Proposals/ options (need for further developed):

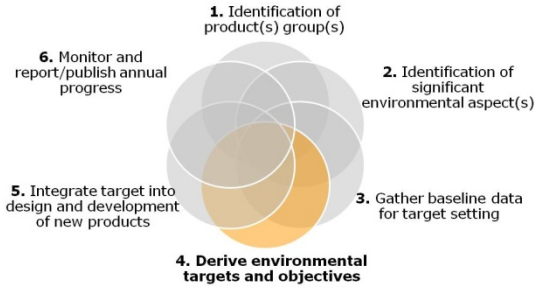
- Energy efficiency per
  - standard examination
    challenge: loss of additional functions
  - examinations per day
    challenge: depending on work conditions
  - individual function (modular)
    challenge: needs dividing of possibly integrated functions
  - individual use mode
    challenge: difficult to define time per mode per day
  - market value
    challenge: not necessarily reflects product quality sufficiently; market and cost aspects overlay environmental improvements

Technologies are Base for Target Setting



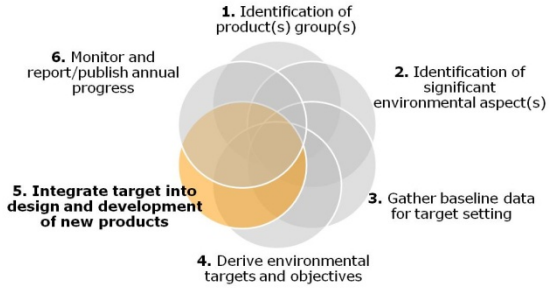
- Increased market share of laptop products and handheld products
  - Mobile/ remote products means less energy
  - Smaller, better, easier products means higher market penetration
- Increased computing power
  - Standard PC applied in products means using all benefits in regard of computing power and energy consumption
- Signal multiplexing technology
  - More information channels in same time
- 3D/4D image analysis packages
  - Better quality, more information, more energy in total but less energy per single function
- New analogue front end (AFE) chips reduce energy consumption per channel
  - Better, more efficient IT means less energy

Targets beyond Business As Usual



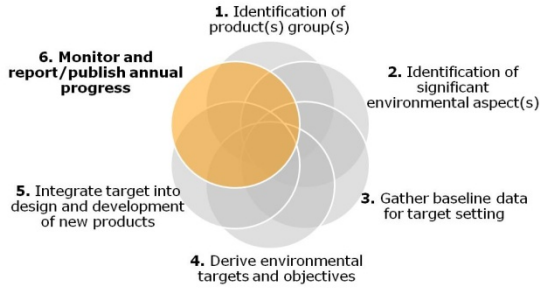
- Quantification of business as usual (BAU) on base of data collection
- Prediction of future sales and future energy consumption on base of member inquiry (part of data collection)
- Reflection of known technical developments and application on top of the BAU
- Deriving targets beyond BAU via COCIR Environmental Focus Group; Target is trade off between:
  - Collected company expectations
  - BAU prediction
  - Considered existing technologies and level of their application to all products sold in future
  - Reduction potentials beyond BAU

Transfer to New Designs



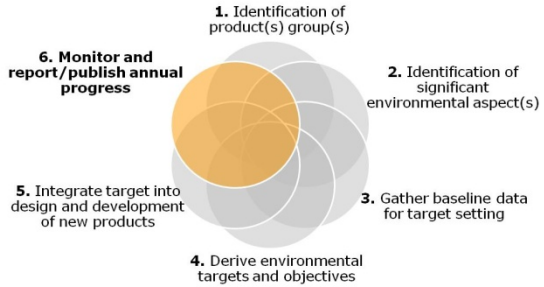
- Realisation of improvements
- Structured and communicated procedure of SRI
  - creates awareness and
  - ensures success of meeting the targets
- The standard 60601-1-9 supports business procedures within the companies
- Monitoring on yearly base ensures control mechanism

Transparency in Communication



- Collection of data is existing and is integrated action
  - Sales data are extracted from financial management systems
  - Externally audited to comply with financial regulations
  - Power consumption measurements are required by IEC 60601
  - Typically externally audited (Quality Management System to maintain certification to ISO 13485)
- Data collection sheet is already developed
- Easy to insert data (ensures commitment from companies)
- Yearly collection establishes routine; it's not only target oriented it will/has become day to day (year to year) business

COCIR strongly supports Open and Active Involvement of Stakeholders

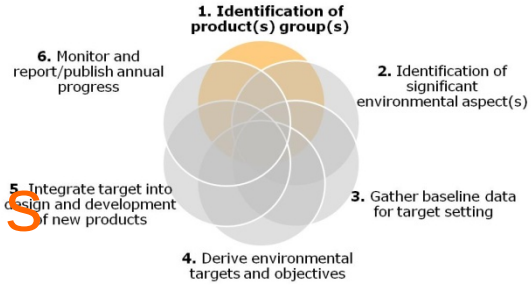


- Purpose:
  - To develop a atmosphere of openness, transparency and trust for this COCIR SRI
  - Establish a regular platform to align expectations, discuss chances challenges and risks

- Annually workshop:
  - Initiated by SRI members
  - SRI will present status, highlights and challenges
  - Open for all interested stakeholders
  - Interactive process
  - To address relevant aspects and improvements to the COCIR EuP SC

- Timing:
  - Annually during the phase (2) - identification of the most significant product aspects

Iteration to all Image Diagnosis Products



- Yearly extension of the SRI by a new product/ product group
- Suggested/ intended products
  - Ultrasound (already investigated)
  - X-ray
  - Computed Tomography
  - Magnetic Resonance
  - Nuclear Medicine
- These 5 product groups cover entire COCIR market
- Multiplication of targets from each product group leads to increased environmental reduction on yearly base
- First improved effect beyond BAU by 2012

Conclusion and Benefits

SRI is

- Precedence case of applying international ecodesign standard for a proactive role with international effect (more than EU focused)

SRI ensures

- Freedom in innovation and product development
- Saving of environmental impacts
- Aimed consideration of product individual hot spots
- Effecting the entire market beneficial
- Avoiding too generic inflexible rules

SRI effects

- Less environmental impact earlier than by supposed implementing measures (first effect expected 2012)
- Increased awareness of environmental aspects by structured and communicated approach

Next Steps

- Q1/2010: definition of next product group
- Q2/2010: first monitoring
- Q2/2010: reporting on ultrasound
- In 2010: developing efficiency targets
- In 2010: Ongoing adaption and maintenance of documentation
- Q2/Q3: initiative for first annually stakeholder meeting
- Q2/Q3: workshop to inform interested parties
- ...

COCIR self regulatory initiative …







Part 2 – Annex VIII

Coverage of Annex VIII of EuP

1: Openness to participation	• Other associations and companies invited to participate
2: Added Value	• Targets go beyond BAU
3: Representativeness	• COCIR covers 80%- 100% depending on product group
4: Quantified and staged objectives	• LCA based • Physical units (mass or energy)
5: Involvement of Civil Society	• Public process with active involvement • Press release • Web side
6: Monitoring and Reporting	• Yearly base inline with data collection
7: Cost-effectiveness of administering SRI	• Most linked to existing business procedures
8: Sustainability	• Ensured via continuous improvement • IEC 60601-1-9
9: Incentive compatibility	• No obstacles known

Coverage of Annex VIII of EuP

1: Openness to participation | Other associations and companies invited to participate

- Membership of COCIR is open to any company in the Radiological and Imaging, Electromedical and Healthcare IT Industry. Companies who do not wish to become members of COCIR can still participate in this EuP Self-Regulatory Initiative. In this case, COCIR will charge the company a fee to reflect the reasonable costs for the company to participate in the Initiative.
- A number of the companies listed in section 2 are third country operators with headquarters located outside the EU, for example, Fujifilm (Japan), GEHC (US), Hitachi (Japan) and Toshiba (Japan). All of these companies are actively involved in the preparatory and implementation phases of this self-regulatory initiative. For example, representatives from these companies attend the Steering Committee meetings held at COCIR offices in Brussels and actively contribute towards the development of the methodology and approach.

Coverage of Annex VIII of EuP

2: Added Value

• Targets go beyond business as usual

- The trend figures predict that under current EcoDesign efforts the average energy consumption for new products would stay the same in 2008, 2009 and 2010 at 762 kWh per year.
- The Self-Regulatory Initiative has set a target to additionally reduce the average energy consumption of new ultrasound products placed on the market by 6% between 2010 and 2012. Using 2005 as a baseline, this is equivalent to reducing the average energy consumption of new ultrasound products placed on the market in 2012 by 25% compared to 2005. This target is based on total energy consumption of new products only.
- The target to reduce average energy consumption of new ultrasound products placed on the market by 6% between 2010 and 2012 translates to a reduction in average energy consumption from 762 kWh per year down to 706 kWh per year in 2010. Based on predicted EU annual sales in 2012 by COCIR companies of 20,800 units, this is equivalent to a total annual energy saving of 1,165,000 kWhrs. This is equivalent to 624,000 kg of CO_2 per year.
- COCIR companies plan to achieve this target by setting the following objectives:
- Increased focus on EcoDesign in the product design and development process.

Coverage of Annex VIII of EuP

3: Representativeness

- COCIR covers 80% - 100% depending on product group

- Participating companies involved in this Initiative represent at least 80% of units sold in the EU for the medical imaging equipment sector.
- This meets the requirement for the Initiative to represent “a large majority of the relevant economic sector”.

Coverage of Annex VIII of EuP

4: Quantified and staged objectives

- LCA based
- Physical units (mass or energy)

- The trend figures predict that under current EcoDesign efforts the average energy consumption for new products would stay the same in 2008, 2009 and 2010 at 762 kWh per year.
- The Self-Regulatory Initiative has set a target to additionally reduce the average energy consumption of new ultrasound products placed on the market by 6% between 2010 and 2012. Using 2005 as a baseline, this is equivalent to reducing the average energy consumption of new ultrasound products placed on the market in 2012 by 25% compared to 2005.
- Based on predicted EU annual sales in 2012 by COCIR companies of 20,800 units, this is equivalent to a total annual energy saving of 1,165,000 kWhrs. This is equivalent to 624,000 kg of CO_2 per year.

Coverage of Annex VIII of EuP

5: Involvement of Civil Society

- Public process with active involvement
- Press release
- Web side

- COCIR will publish the industries Self-Regulatory Initiative document on its website (www.cocir.org). COCIR will also publish the annual performance reporting tables each year on its website.
- The EuP Steering Group welcomes comments from the EuP Consultation Forum as this includes wide representation from Member States, industry, environmental NGOs and consumer associations. In addition to comments during the meeting, COCIR would also welcome any follow-up comments after the meeting by e-mail to secretariat@cocir.org.

Coverage of Annex VIII of EuP

6: Monitoring and Reporting

• Yearly base inline with data collection

- The EuP Steering Committee will use the Excel spreadsheet tool contained in Appendix 8 to gather confidential sales data and power consumption data from companies for each model of ultrasound equipment they put on the EU market in 2009, 2010, 2011 and 2012.
- These confidential data provided by participants are already externally audited and so these data do not require additional auditing for this self-regulatory initiative.
- COCIR's role is to consolidate these confidential Excel spreadsheets from each company into a single master Excel spreadsheet for analysis.
- COCIR will analyze the consolidated master Excel spreadsheet to calculate the total annual sales and total annual energy consumption of new ultrasound products that participants put on the market in EU Member States in 2009, 2010, 2011 and 2012. These data will be used to calculate the average annual energy consumption for new products put on the market in each of these years. The EuP Steering Committee will use these data to assess whether participants are achieving the targets.

Coverage of Annex VIII of EuP

7: Cost-effectiveness of administering SRI

• Most linked to existing business procedures

- This requirement is directed to the European Commission and Members States to ensure that the costs and administrative burden that medical imaging equipment manufacturers incurs through the Self-Regulatory Initiative is not disproportionate compared to other policy instruments.

Coverage of Annex VIII of EuP

8: Sustainability	• Ensured via continuous improvement • IEC 60601-1-9

- The EuP Steering Committee shall ensure that the environmental design targets which are set under the Initiative are environmentally sound with regard to other environmental aspects of medical devices. The EuP Steering Committee has verified that the target to reduce average energy consumption of new ultrasound products placed on the market by 6% between 2010 and 2012 will not result in an increase in other environmental aspects of ultrasound products.
- Section 4.2 highlights the significant new developments in ultrasound imaging technology which have been achieved in recent years. As a result, ultrasound equipment has become an even more powerful tool for healthcare professionals, to enable better and earlier diagnosis of patient symptoms and therefore more successful patient treatment and outcomes.
- The EuP Steering Committee will continue to monitor the development of new imaging technology and whether this is essential to delivering improved consumers' health and quality of life.

Coverage of Annex VIII of EuP

9: Incentive compatibility

• No obstacles known

- The European Commission has issued a Communication on 16 July 2008– COM(2008) 400- entitled: Public procurement for a better environment. A building block of the 'Action Plan on Sustainable Consumption and Production and Sustainable Industrial Policy (SCP/SIP)' aiming at improving the energy and environmental performances of products.
- The Communication, also commonly known as Green Public Procurement (GPP) is an initiative addressing all key industries including "Equipment used in the health sector" and should serve as policy instrument for member states guiding their procurement decisions addressing current energy and health concerns. Although the Communication does not in particular cover energy consumption, it states that "the "core" GPP criteria would be set at the level of the energy efficiency requirements". For the time being, the GPP and developed Training Toolkit with 3 modules are expected to have no effect on the COCIR EuP self-regulatory initiative. Inasmuch as the EuP Steering Committee hopes that the GPP criteria will reflect the findings and proposal of the EuP self-regulatory initiative. The EuP Steering Committee is not aware of any other factors or incentives that could affect the Self-Regulatory Initiative.

Coverage of Annex VIII of EuP

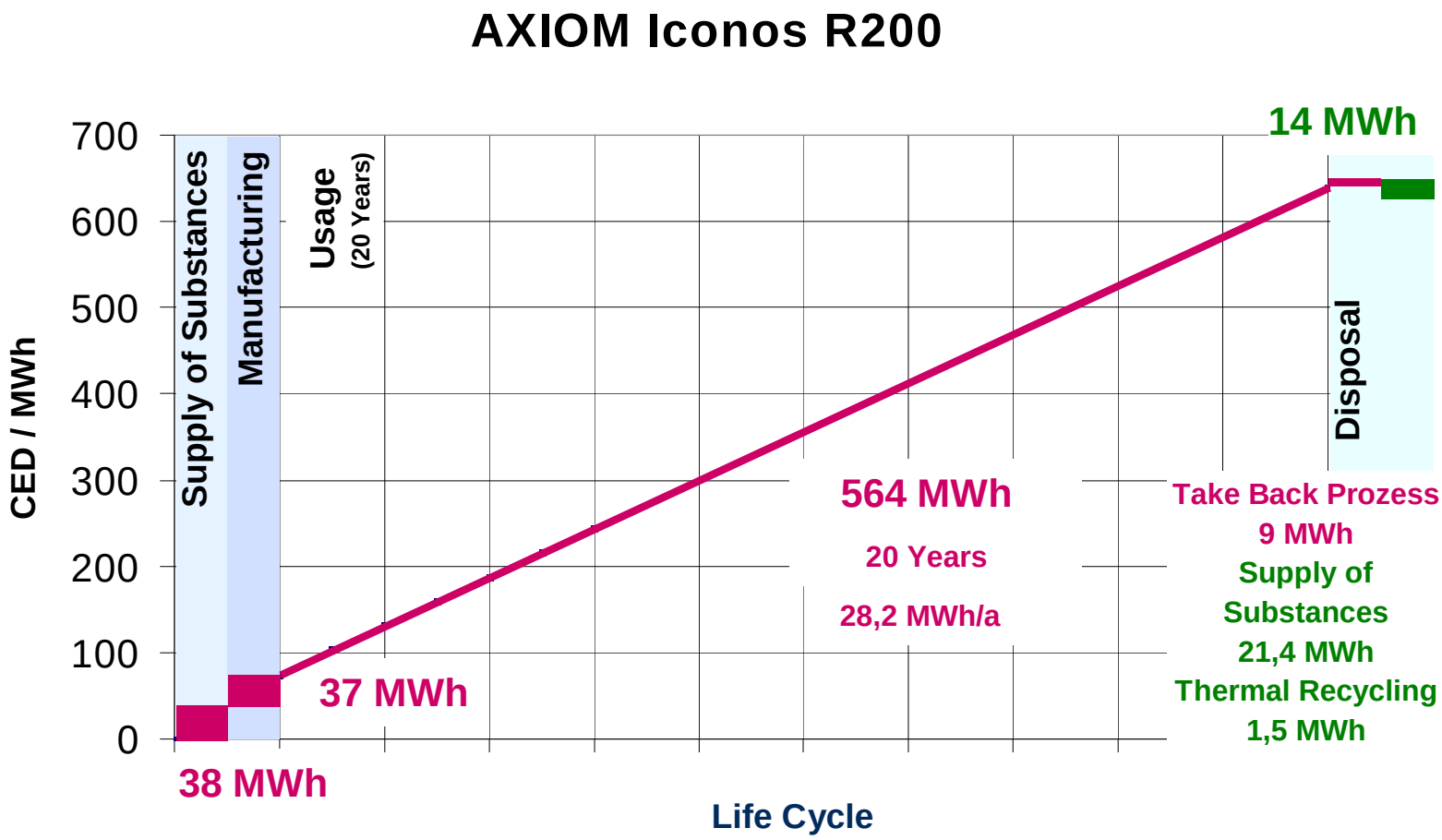
1: Openness to participation	• Other associations and companies invited to participate
2: Added Value	• Targets go beyond BAU
3: Representativeness	• COCIR covers 80%- 100% depending on product group
4: Quantified and staged objectives	• LCA based • Physical units (mass or energy)
5: Involvement of Civil Society	• Public process with active involvement • Press release • Web side
6: Monitoring and Reporting	• Yearly base inline with data collection
7: Cost-effectiveness of administering SRI	• Most linked to existing business procedures
8: Sustainability	• Ensured via continuous improvement • IEC 60601-1-9
9: Incentive compatibility	• No obstacles known



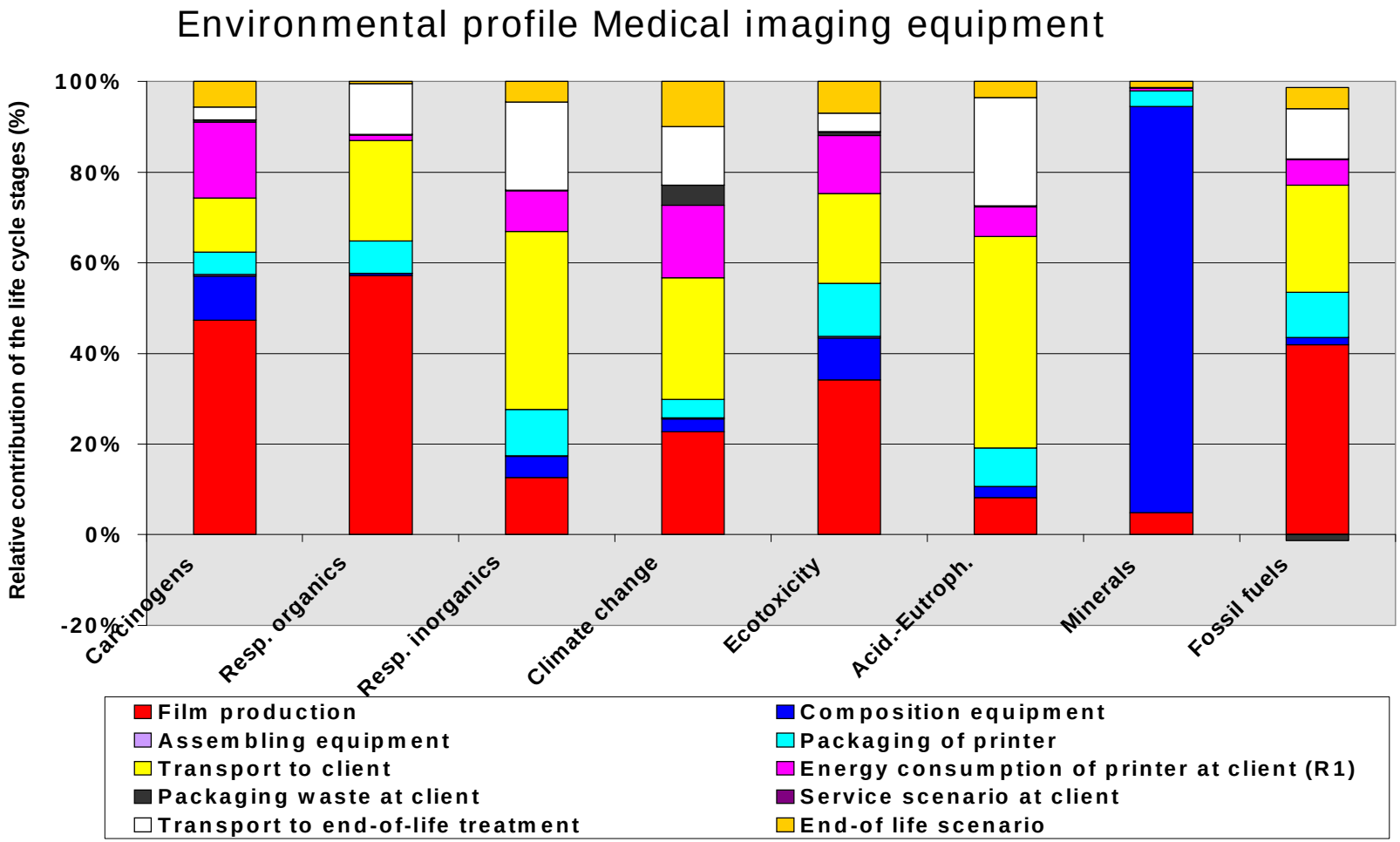


Examples

Ecodesign Example 1:
Cumulative Energy Demand (CED)



Ecodesign Example 2:
Full LCA Results according to ISO14040ff



Ecodesign Example 3:
Company program, tools and targets

EcoVision Program with

- Ecodesign procedure based on IEC60601-1-9 considering whole life cycle
- Green product sales target of 30% in 2012
- Specific green focal areas for improvement:



- Achieved improvements for Medical Devices ranging from 10-60% on all green focal areas and LCA

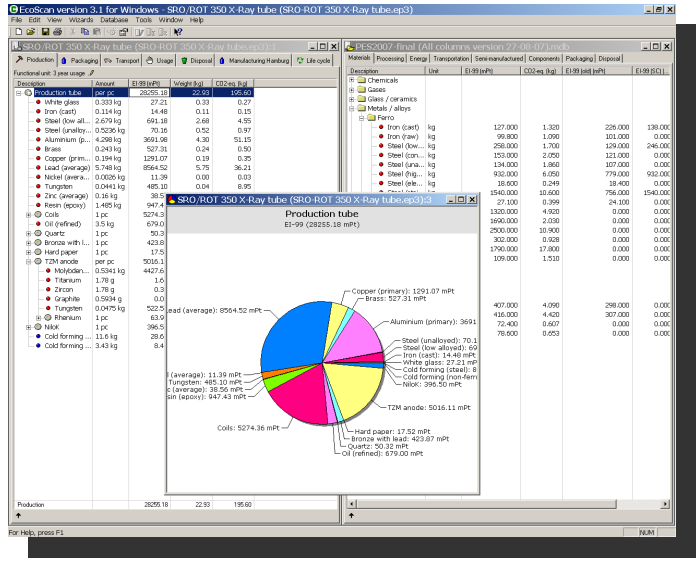
Source:

http://www.healthcare.philips.com/main/about/Sustainability/GreenProducts/2008.wpd

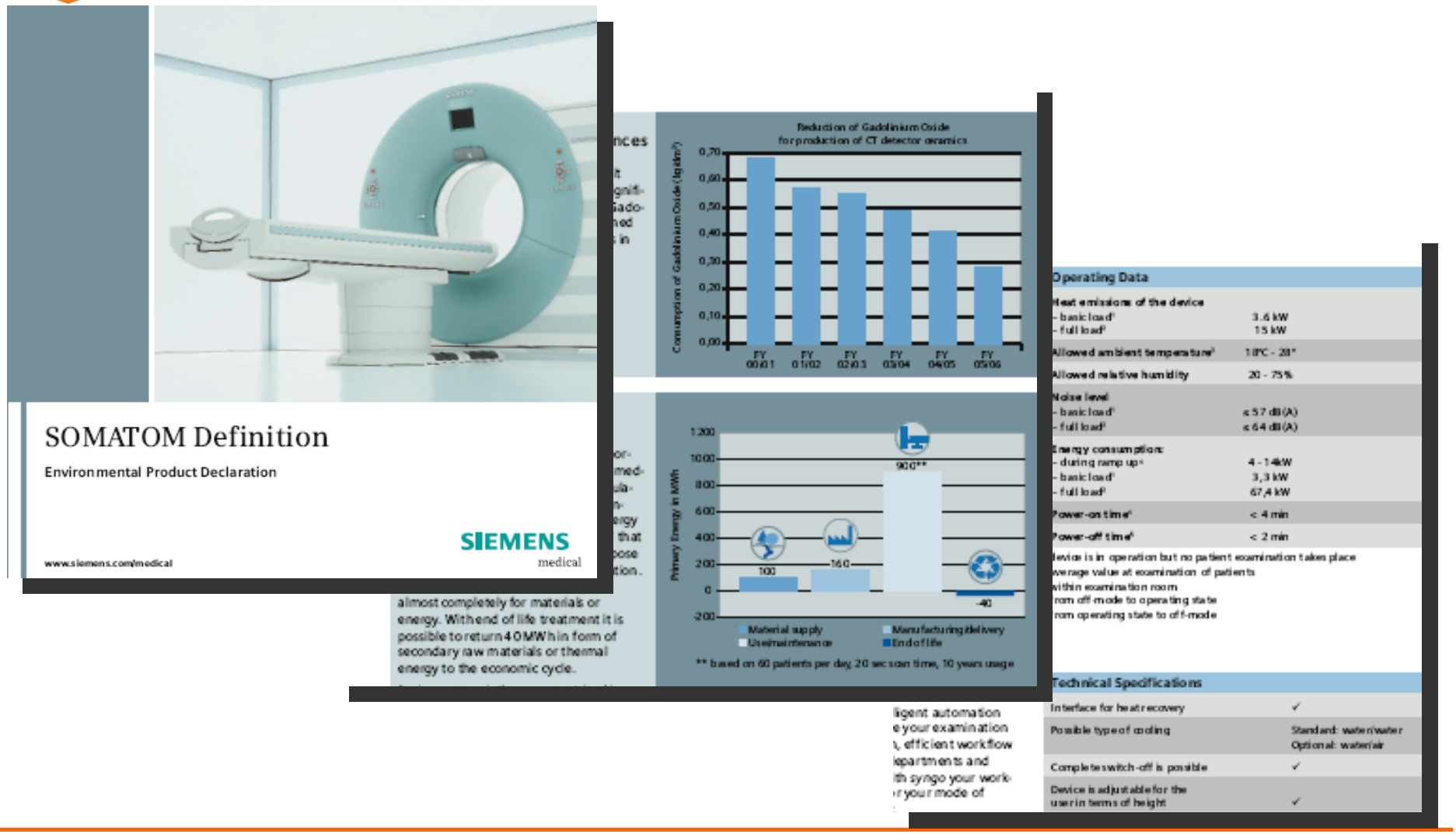
Green Product Logo

asimpleswitch.com

Results by simple LCA tool EcoScan for X-Ray tube



Environmental Product Declaration (EPD), Example 1



Environmental Product Declaration (EPD), Example 2

Operating data		
Heat emissions of the (medical) device		
- basic load	432 kJ	
- full load	1123 kJ	
Permissible ambient temperature	15° C - 30° C	
Maximum permissible humidity	15 % - 80 % rel. Humidity	
Noise level/noise emissions:		
- standby mode	45 dB(A)	According to ISO 7779
- full load	65 dB(A)	
Energy consumption :		
- stand-by mode	0,12 kWh	review by manufacturers, where kWh as a unit
- when booting up	0,31 kWh	
- real/apparent power	kW	
- full load	0,31 kWh	
- reference examination	kWh	text reference about the type of reference examination
Energy input for cooling	kWh	*not applicable*
Time to reach operating state	3 min sartup-time	from off mode until reaching the operating state
Time to reach off mode	3 min down-time	from operation state until reaching the off mode
technical specifications / data		
Interface for heat recovery	*not applicable*	available / not available





Source: http://www.ipp-medizintechnik.hamburg.de/en/index.php?NID=33

End of Life Information for Treatment Facilities, Examples

Product name:	**iU22 Medical Diagnostic Ultrasound Equipment**	
Identification code(s)	**8500-0064-02**	
Total weight (in Kg)	**160 Kg**	
Producer/ Manufacturer	Name company:	Phillips Ultrasound
	Address:	22100 Bothell Everett Highway
	Zip code:	98041-3003
	Country:	USA

Recycle Info	Items:	Location
Special attention	Gas Spring under pressure. See Figure 1 [1]	

Fluids / Gases	Items:	Location
	Oil and Nitrogen Gas: (2X) in Gas Spring Tubes in Control Panel Articulation Assy Do not drain oil with device under pressure.	Figure 1 [1]
	Oil and Nitrogen Gas: in Gas Spring Tube in Arm Articulation Assy Do not drain oil with device under pressure.	Figure 1 [2]

Batteries	Type:	Location
	Li Battery: (2X) on CPU PCB	Figure 1 [3]
	Battery Lead Acid (Pb): in Power Supply Assy	Figure 1 [4]
To be Removed		

Hazardous	Substances:	Location
	Lead (Pb) - contains lead in PCB's, solder, wiring, and cables	N/A
	Mercury (Hg) – Video monitor lamps	Figure 2 [5]
	Mercury (Hg) – Touch screen lamps	Figure 2 [6]
To be Removed	Note: Transducers (Probes) contain lead (Pb) on Flex circuits / PCB's in the connector and probe areas	N/A

Title: iU22 Recycling Passport
Recycling Passport Number: 8500-0064-00050 Rev: B

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Locations as mentioned in the Passport (Pictures information)

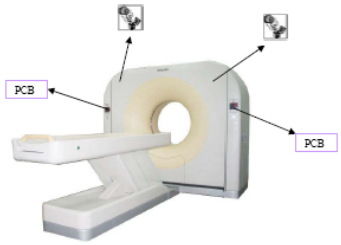


Figure 1 CT system

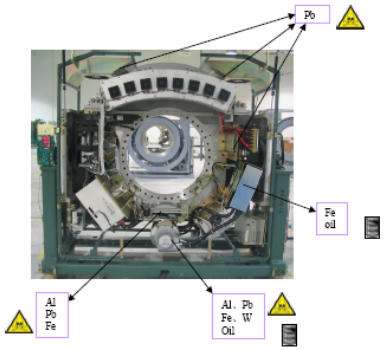


Figure 2 Gantry front view (without cover)

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DX-S Recycling Passport AGFA



1. Manufacturer

Name of Company:	Agfa-Gevaert Group
Address:	Septestraat 27
City:	Mortsel
Zip Code:	B - 2640
Country:	Belgium

2. Equipment Information

Brand name:	DX-S
Product type:	Medical CR Digitizer
Model number:	5160 / 100
Equipment net weight:	108 kg
Gross weight (with packaging)	kg
Equipment dimension:	0,85 m x 0,79 m x 0,33 m
Reference to public available information:	www.agfa.com

Safety-Marks and other Marks on the Product Label

cULus, CCC, CE, FCC

Restricted Substances

The products, parts and materials thereof, including but not limited to the peripherals, accessories and/or packaging materials, do not contain or make use of any of the restricted substances (as specified in the Agfa list of Restricted Substances) above the legal threshold limits.

examples of substances:

lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE), polychlorinated biphenyl's (PCB). Ozone depleting substances of the Montreal Protocol. ...

(For more detailed information about the Agfa-Gevaert list "Restricted Substances" please contact your local Agfa service organization)

Batteries

Battery	YES ☐ NO ☐		
Amount:	0	System of Battery:	na.
Type of Battery:	na.	Weight of Battery [g]:	
Form of Battery:	na.		

Power Consumption

Operational mode:	1000 Watts	Stand-by-mode:	110 Watts	Off-mode:	5 Watts

Noise Emissions (only for related equipment)

Declared sound power level operational:	— bel
Sound pressure level operational mode:	< 65 dB(A)
Sound pressure level stand-by mode:	< 45 dB(A)

Chemical Emissions (only for related equipment)

Disposal of used Electrical & Electronic Equipment

(Applicable in the European Union and other European countries with separate collection system)

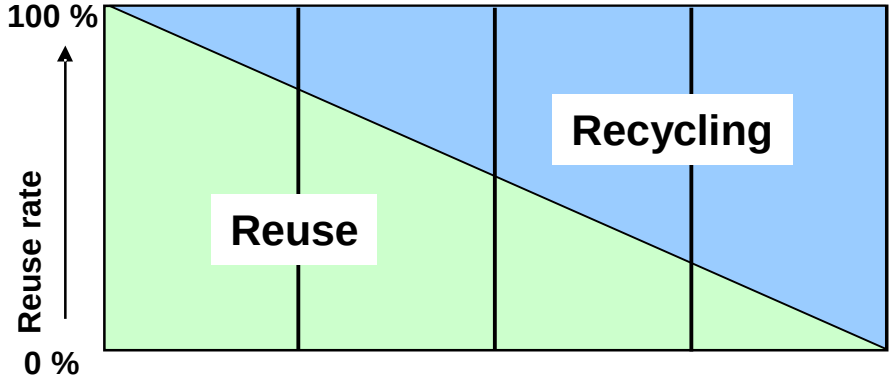
This symbol on the product, or in the manual and in the warranty, and/or on its packaging indicates that this product shall not be treated as household waste.

For more detailed information about take-back and recycling of this product, please contact your local Agfa service organization. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources.

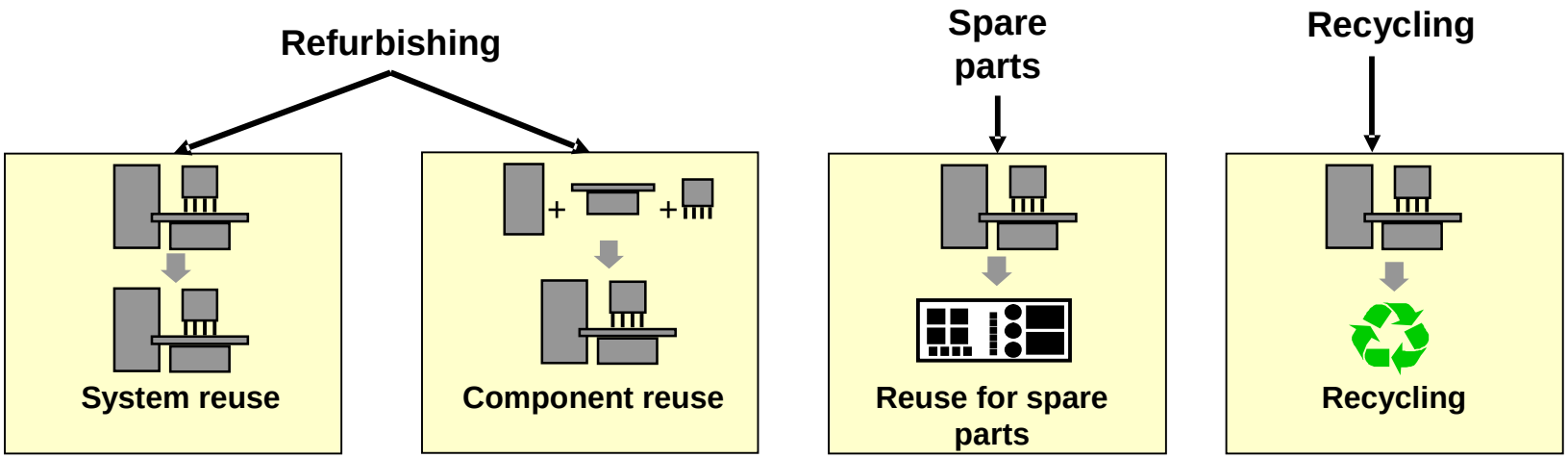
If your equipment contains easy removable batteries or accumulators please dispose these separately according to your

Example End of Life Strategy: 4 Ways to Reduce Aspects









IPP Project, supported by Bavarian State Ministry of the Environment, Public Health and Consumer Protection, Munich, Germany