

Reducing B2B WEEE Costs by Eco-Design



Dr Aidan Turnbull
Head of Eco-Design
ENVIRON UK Ltd

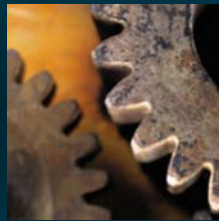
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Programme

- Skills and experience
- Pressures on B2B producers
- Key business decisions
- B2B WEEE Case Study: ABB Instrumentation Products
- Services available from ENVIRON

Skills and Experience



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About ENVIRON

- Global HSE and Life Sciences consultancy
- 650 staff world-wide
- 45 Offices in 12 countries
 - 20 Offices throughout US
 - 10 Offices throughout UK
 - Germany, France, Italy, Netherlands, Finland, Poland
 - Australia, China, Malaysia, Singapore



About ENVIRON

- Air Quality Management
- Compliance Assistance
- Corporate Responsibility
- Eco-design
- Engineering Design & Construction Management
- Environmental Due Diligence
- Environmental Impact Assessment & Planning
- Environment, Health & Safety Management
- Greenhouse Gas Management
- Litigation Support
- Risk Assessment & Risk Management
- Site Characterization & Remediation
- Solid & Hazardous Waste Management
- Water Management Services



Selected WEEE/RoHS projects

Cooper Menvier	WEEE and RoHS compliance strategy and implementation training
ABB Instrumentation Products	WEEE compliance strategy and implementation training
Smiths Aerospace	RoHS compliance strategy and implementation training
NICE CTI	WEEE compliance assessment and eco-design review
Emerson	Corporate accounting guidelines
Liebert Hiross	WEEE compliance strategy
Smiths Medical, Smiths Detection, Kelvin Hughes, Smiths Aerospace	Eco-design Guide, implementation training and case studies

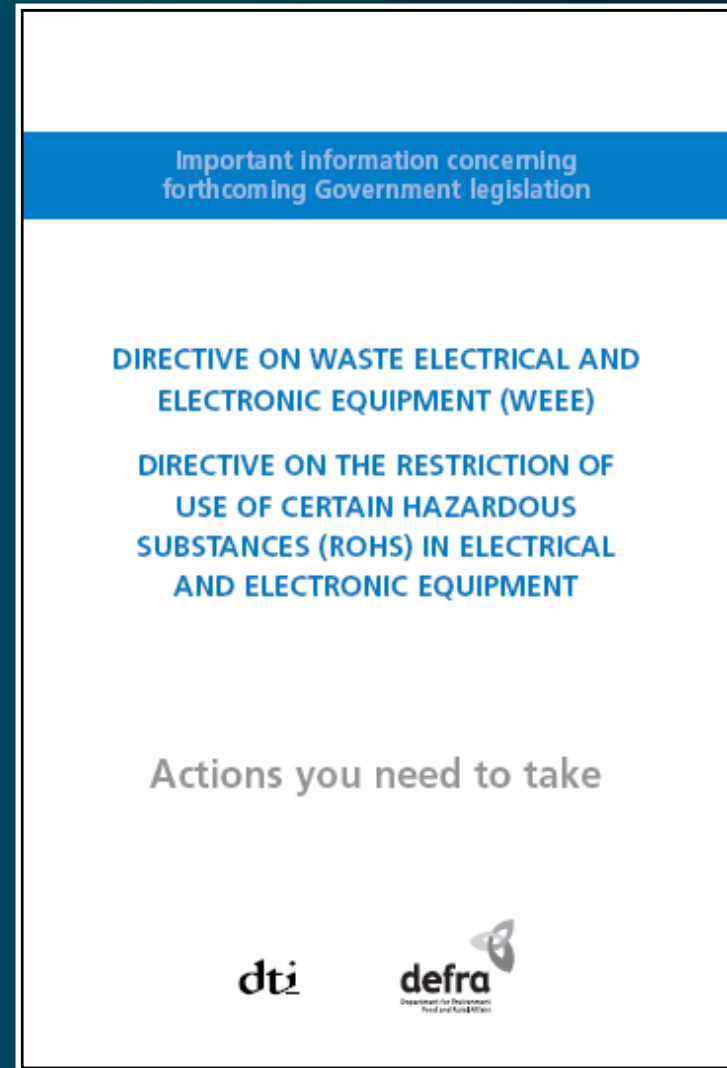
BioTrace Ltd, Lion Laboratories, Fulleon Ltd, Thermo Electron



ENVIRON wrote DTI/DEFRA Guidelines for WEEE and ROHS

- Overview for CEOs
 - DTI Minister foreword from Stephen Timms MP
- Implications for Marketing Directors, Finance Directors and Technical Directors

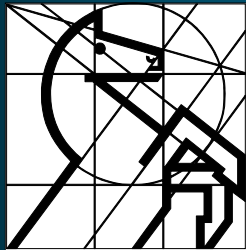
**NOW TWO YEARS
OUT OF DATE!**





ENVIRON wrote DTI/DEFRA Detailed Guidelines for Designers

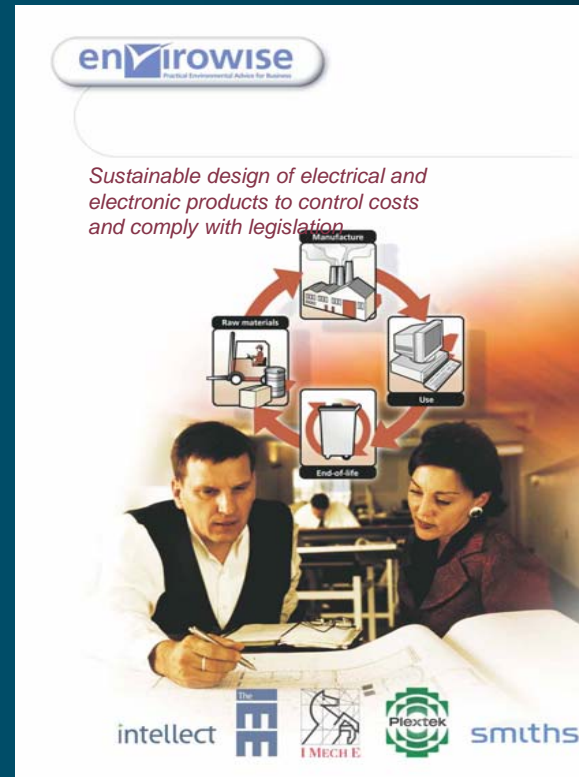
smiths



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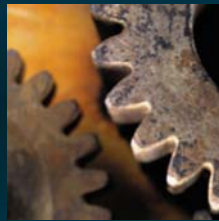
intellect



NOW TWO YEARS OUT OF DATE!

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Pressures on B2B Producers



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Pressures on B2B Producers

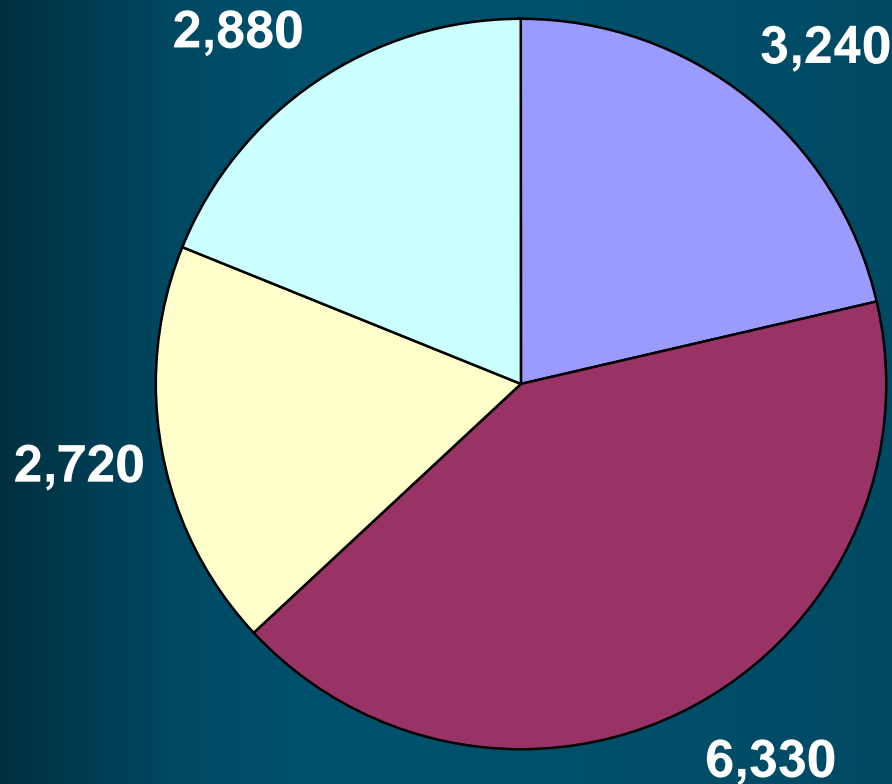
- DTI consultation papers focus on household WEEE
 - 'National Clearing House' being set up to deal with household WEEE
- DTI has confirmed that B2B WEEE must also be covered by 'appropriate contractual arrangements'
 - Little guidance on practical compliance approaches
 - Key decisions on treatment (e.g. PCBs) still to be finalised
 - **National Clearing House will not accept B2B WEEE!**



UK Producers affected by WEEE/RoHS

>60% of producers are B2B WEEE

Majority are SMES



IT, telecommunications and consumer equipment

Electrical and electronic tools (large scale stationary industrial tools are exempt)

Monitoring and control instruments

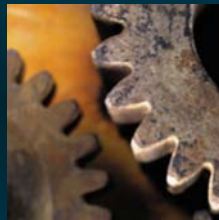
Household appliances, toys, leisure, sports and medical equipment



Pressures on B2B Producers

- Article 9. B2B 'Appropriate contractual arrangements' *can* pass legal responsibilities to customers
- Customer would be responsible for
 - Sending WEEE to approved treatment facility
 - Arranging for recovery and recycling targets to be met
 - Reporting compliance data to Environment Agency
- Environment Agency has confirmed that some WEEE will be classed as Hazardous Waste in 2005
 - B2B customers would need to register as Hazardous Waste Producers
- **Very few B2B producers are planning to pass full costs of WEEE compliance to customers!**

Key B2B Business Decisions



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Key B2B Business Decisions

- How much cost to pass back to customer?
 - At point of sale?
 - At end of life?
 - Through distributors?
- Biggest difference is collection arrangements
 - B2B WEEE cannot be disposed of at local authority recycling centres
 - B2B customers won't take WEEE 'back to the retailer'
- B2B producers need to arrange collection from customer
 - Can arrange transport directly to specialist recycler
 - **Eco-design improvements to make product easier to recycle will generate direct cost savings for producer**

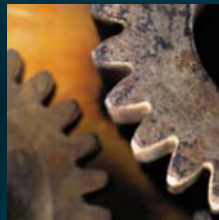


Key Business Decisions

Early indication of collection and recycling costs is essential

- Establish pricing policies with customers
- Select optimum collection and recycling arrangements
- Select B2B WEEE compliance scheme
 - Manage recycling contracts
 - Data collection and reporting to the Environment Agency
 - Valpak scheme designed for B2B producers
- Consider eco-design changes to reduce recycling costs and gain marketing advantages

B2B Case Study: ABB Instrumentation Products



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Opportunity cost of design decisions

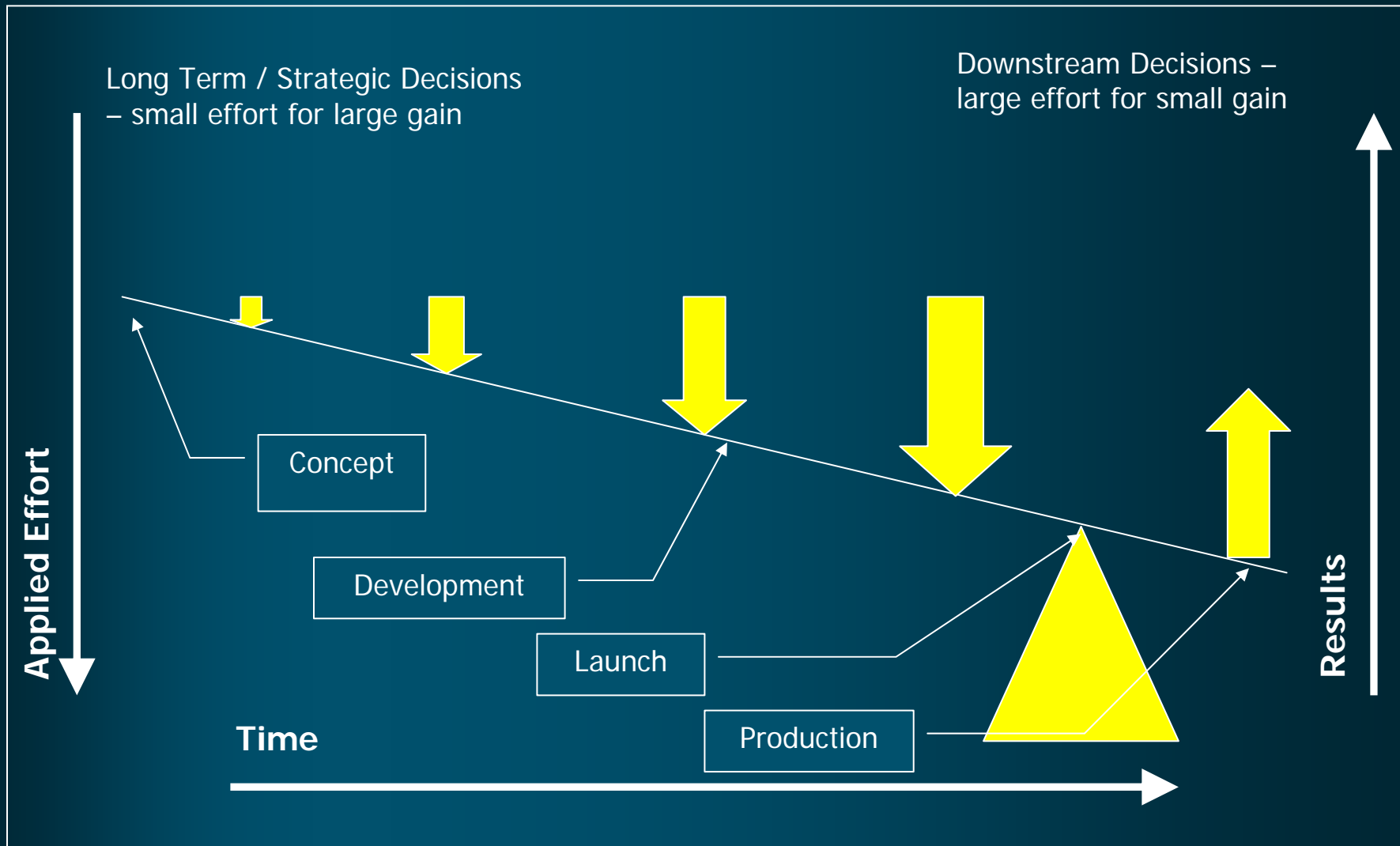




ABB Limited

- Leader in power and automation technologies
- ABB Ltd
 - Operates in 100 countries
 - Employs 120,000 people
- Already operates a scheme to remove and recover up to 90% of weight of old variable speed drives when selling new units
- Commissioned ENVIRON for WEEE compliance strategy and implementation training for Instrumentation Products

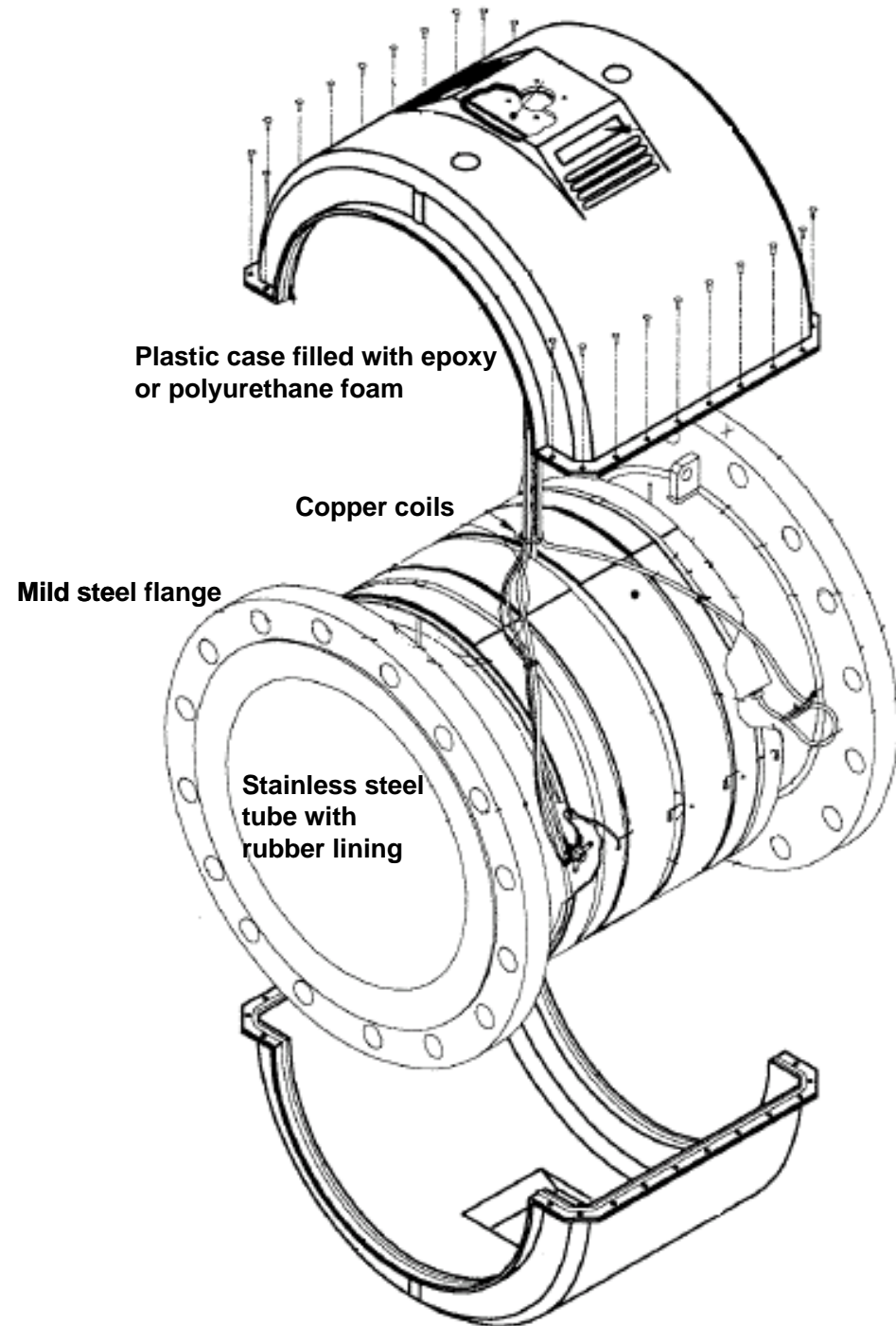


Reducing WEEE compliance costs for ABB Instrumentation Products

- Project Team at ABB: structured workshop approach
 - Design and development
 - Sales and marketing
 - Management accounts
 - Production
 - Purchasing
 - QA and HSE
- ENVIRON WEEE compliance tools and procedures
- Case Study in IEM Magazine

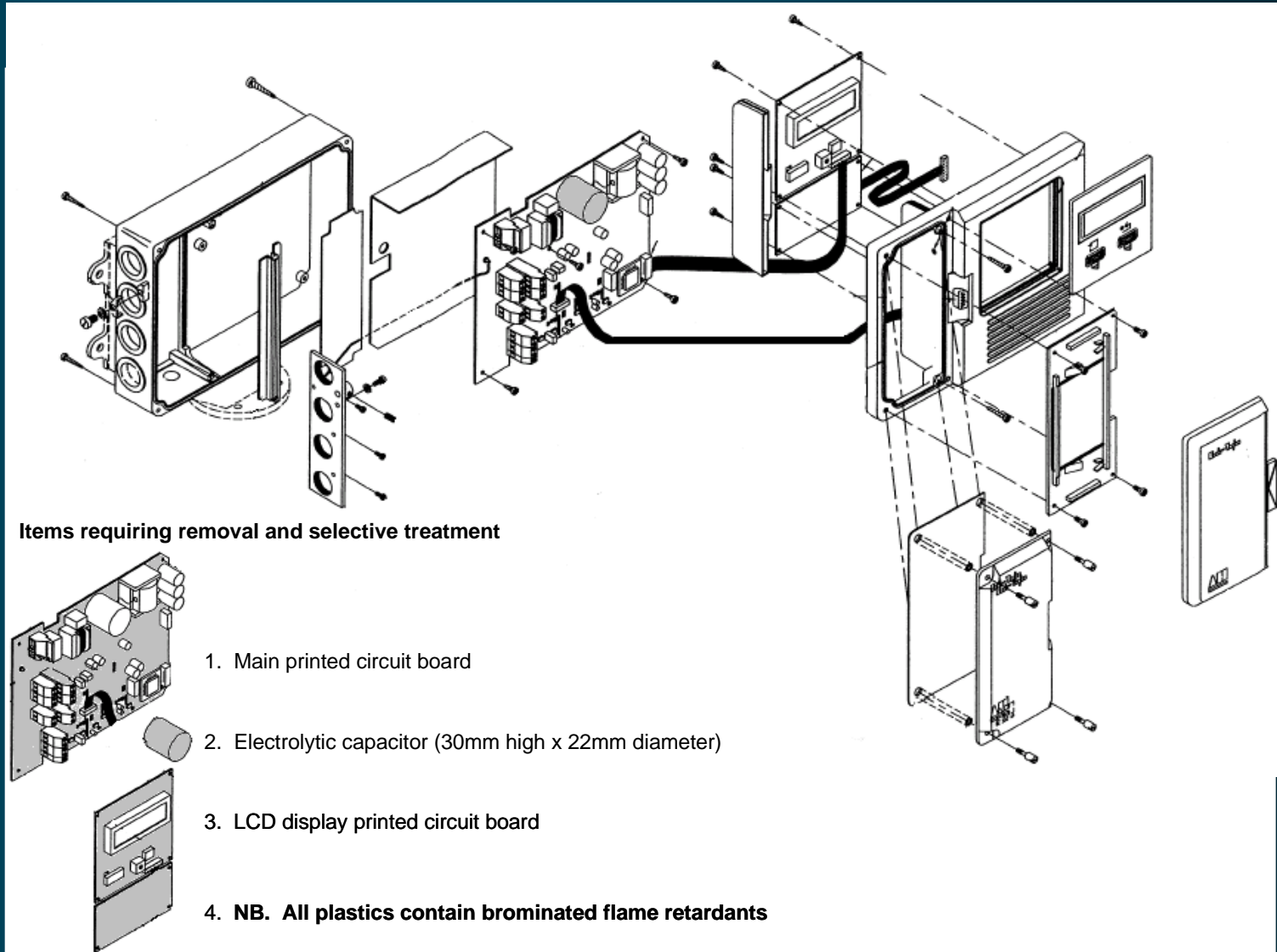


Flow sensor





Instrument control unit





Minimising WEEE compliance costs for ABB Instrumentation Products

1. Confirm scope of products covered by WEEE/RoHS and develop case for exclusions
2. Model recycling liability
 - Annual sales volume
 - Lifetime of product
3. Assess potential for reuse, upgrade, repair
4. Calculate actual recycling costs and savings
5. Recommend eco-design improvements
6. Recommend pricing strategy
 - Historic WEEE
 - New WEEE



Control unit design recommendations

High priority

- Reduce number and types of screws
- Avoid large electrolytic capacitors

Medium priority

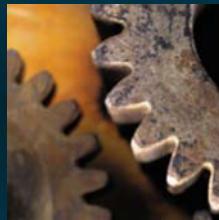
- Alternative RF shielding
- Design 'break-away' sections
- Eliminate metal screw retainers
- Avoid labels and colour contaminants



Reduced WEEE compliance costs

- Two new product ranges will go into production in Jan 2005
 - Recycling costs significantly reduced
 - Some manufacturing cost savings
- Optimise collection arrangements
- Minimise WEEE compliance costs
- Maintain competitive advantage
- Meet corporate sustainability commitments

Services available from ENVIRON



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Services available from ENVIRON

1. Professional assessment of whether your products fall under WEEE and RoHS and confirmation letter
2. On-site product design review and report to assess WEEE and RoHS compliance issues for your product/product range
3. One-day WEEE and RoHS training course tailored to your products
4. WEEE, RoHS and Eco-Design intranet toolkit
5. Three-day WEEE, RoHS and Eco-design training course
6. Tailored consulting packages to meet your needs



Eco-Design Successes

Examples of eco-design cost savings

- Detection device cost savings of £100,000 per year
- US medical device cost savings of \$130 per unit
- Alarm product cost savings of £93,000 per year

Feedback from training courses

“Very interesting and useful. This has been one of the best run exercises I have taken part in.”

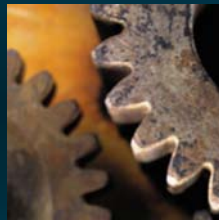
Control instrument company

“Excellent content and very useful materials.”

Aerospace company

Any questions?

www.B2BWEEE.com



Dr Aidan Turnbull
Head of Eco-Design
ENVIRON UK Ltd
Tel: 01249 700104
E-mail: aturnbull@uk.vironcorp.com
web: www.b2bWEEE.com

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