OAKDENE HOLLINS

Outputs from Workshop "Remanufacturing in the UK"

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On behalf of

SEEDA

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Overview

The workshop comprised:

- Presentation of the Oakdene Hollins/Resource Recovery Forum report, national and regional perspectives on resource use
- Case studies of different remanufacturing companies
- A series of agenda-setting workshops

Summary Notes

The major themes arising from the speaker presentations, comments in plenary session and the workshop sessions were:

1. **Consumer perception and standards**
    a. The barrier of buying "second hand". How to change customer perceptions?
    b. Customers needed reassurance about quality, hence link to standards
    c. Remanufacture, re-conditioning, refurbishment were all a grey area with potentially different quality outcomes. Possible clarification by standards.

2. **Legislation & policy**
    a. Remanufacture was only loosely linked to legislation (WEEE directive), sometimes not at all (ELV directive)
    b. Remanufacture has the potential to link to producer responsibility initiatives
    c. Remanufacture is consistent with Sustainable Consumption and Production (SCP) framework

3. **Overseas dimension**
    a. Remanufacturing has to fit within the global manufacturing economy, and incorporate impact of low cost manufacturing countries into its strategy
    b. Little is known of overseas activity, including sectoral emphasis, best practice, government policy

4. **Integration with business, economic, manufacturing and materials management strategies**
    a. Complementary approach to recycling
    b. Need for tools to determine whether remanufacturing is environmentally the best solution
    c. Need to link to whole product development and manufacturing strategy
    d. Potential for linking to alternative business models than produce-sell-dispose
    e. Potential for economic development / skills development

Workshop feedback is given in more detail in following sections.

Breakout Group 1: Research (1)

1. **Energy Model**: a model or tool was required to look along the supply chain and decide whether remanufacturing was worthwhile compared to other options. Mention was made of the Surrey University CHAMP model, which incorporated the environmental impact of logistics and of a possibly forthcoming carbon footprinting tool.

2. **Sustainable design:** incorporation of de-manufacturability into the design process e.g. University of Berlin (disassembly of washing machines); University of Bristol (design for multiple lives).

3. **Business models:** new business models need research, including whole life costing; also rationale for existing decision making (e.g. timescale of a person's position within a company).

4. **Legal issues:** important for tax reasons (VAT). What is the definition of "new"? Could this be as contentious as definitions of "waste"? Is it OK to sell as "new" even though it is not (e.g. Hewlett Packard "replacement" printers supplied under warranty rather than "new" printers)

5. **Perceptions of "2nd hand":** how can remanufactured goods be made desirable? Link to work on standards/specification; insurance implications; methods of capturing the history of the product (RFID etc).

6. **Remanufacturing strategy:** how to use JIT and other manufacturing techniques in remanufacture. How can manufacturing be linked to remanufacturing?

7. **Trade mark:** is there potential for a remanufacture trade mark? Perhaps link this to eligibility for tax breaks?

8. **Shortening product development lifecycles:** the requirement of companies to launch new products ever more swiftly has a negative impact on remanufacture - the product development process is so swift that remanufacturability is difficult to build in – too much of a rush. R&D and preproduction is also squeezed.

9. **Anticipating failure rates:** knowledge of components failure rates will help plan remanufacture – knowing which components need replacing

10. **Integrating overseas research:** look at the non-obvious places (e.g. China) not just the obvious places such as Germany.

Breakout Group 2: Research (2)

1. **Customer perception:** perceptions of 2nd hand. What would make people buy remanufactured? Lots of information in Mintel. Evidence is out there. Need to link environmental science to social science. Do we need to make the product history transparent to the consumer?

2. **Product strategy:** need to think more innovatively – this was the major failing of the WEEE directive. Perhaps look at glass or tin manufacturing industries and how they come up with new products.

3. **Developing countries:** perhaps look at developing countries (some disagreement on this issue). Perhaps more for inspiration on resource efficiency than for specific remanufacturing examples that can be transferred?

4. **Global consumption issues:** need to link to global manufacturing, innovative manufacturing, Factor 10 issues

5. **Understanding sectors:** the health of remanufacturing is different across different sectors – what are factors influencing the remanufacturing market?

6. **Strategic Management:** are remanufacturing companies small or large? How do they manage themselves strategically? Is it right to market these products as "environmental". Is there scope for redesign strategies, perhaps helped by disassembly manuals? How can re-use be assisted and effected?

7. **Decision support tool:** when should products be remanufactured/recycled/re-used? Perhaps need some exemplars of common products. This discussion was wide-ranging and covered
    a. **Impact of high value (perhaps high 2nd hand value)**
    b. **Labelling of products, including RFID identification**
    c. **Identification by quality standards**
    d. **Need for LCA – need to see the environmental argument for remanufacture**

8. **Economic instruments:** manpower is taxed (National Insurance) therefore impact on remanufacture, which will always be more labour intensive than manufacture. Need to understand how the market could be influenced, for example by VAT concessions

9. **Waste regulation:** no remanufacturers have waste licences, but Environment Agency implies that they might need them.

Breakout Group 3: Promotion (1)

1. **Perception of remanufacturing:**
    a. Poor level of awareness
    b. Unclear definitions
    c. (Quality) standards required
    d. Consumer/customer knowledge of "non-new" status may be detrimental

2. **How can benefits be sold?**
    a. Sell economic benefits
    b. As good as new (plus environmental credentials)
    c. Cost and quality competitive

3. **Awareness initiative / organisation**
    a. Source of information for business purchasers
    b. Some kind of representative body/bodies needed but maybe not just one overarching entity – may be an association of sub-sectoral organisations

4. **Extended into consumer purchasing**
    a. Engage with advertising / marketing sector
    b. Can you utilise the original brand?
    c. Common issues with B2B of finding markets for products and quality/standards.

Breakout Group 4: Promotion (2)

1. **Perceptions:** mixed, by sector.
    a. Seen as a threat (OEMs vs independents)
    b. Existing prejudice vs "2nd Hand" can be overcome by cost advantage
    c. "Upgraded" has more positive connotations
    d. Start with B2B then move to B2C by sector (raises exposure of subject)

2. **Organisation:**
    a. Within SCP – could have a WRAP-type body eg BREW financed
    b. Could have a regional basis … cluster development

3. **Lobbying:**
    a. Awareness raising
    b. Inform policy
    c. Engagement (rather than lobbying) is best option

4. **Advertising:**
    a. Could be a part of CSR (Corporate Social Responsibility) agenda, but B2C would need a marketing strategy
    b. Quality is the main marketing barrier
    c. Maybe no generic message (environmental) – most consumers not interested
    d. B2C relies upon image/brand
    e. If clear standards can be established, fit for purpose, remanufacture doesn't need to be mentioned

Breakout Group 5: Policy (1)

1. **Government Intervention**
    a. Government should intervene only when it has ruled out "lack of intervention", i.e. because the activity would happen anyway.
    b. If the Government does intervene, it should happen at an EU level as well as in the UK. Intervention should be in the context of a Thematic Resource Strategy.
    c. Producer responsibility legislation e.g. for ELV and WEEE should be amended to embrace remanufacturing as a compliance option.

2. **Standards**
    a. Government may have a role in accelerating the development of standards, as has happened via WRAP, but the concerted action of trade groups may be more effective per sector.
    b. Definition of waste can adversely affect day-to-day handling of end-of-use materials. Harmonisation of definitions is required.

3. **Skills**
    a. Ecodesign is a necessary component of accelerating remanufacture. End-of-pipe is counter-productive.

Breakout Group 6: Policy (2)

1. **Government Intervention**
    a. Liberalising legislation based on desirable outcomes is preferable to imposition of more standards etc.
    b. Producer responsibility legislation e.g. for ELV and WEEE should be amended to embrace remanufacturing as a compliance option.
    c. Tax breaks or credits could encourage responsibility as opposed to legislative stick.

2. **Public Policy**
    a. Government should lead by example and purchase remanufactured and recycled. It should focus on desirable outcomes not processes.
    b. Public body procurement should lead by example in purchasing resource- efficient services. Indicators/criteria should be adjusted accordingly.
    c. RDA/Gov't focus groups should target and woo key sectors for above actions.

3. **Standards**
    a. Government may have a role in accelerating the development of standards, as has happened via WRAP, but the concerted action of trade groups may be more effective per sector.
    b. Flagship sectors should be identified to progress standardisation.

4. **Skills**
    a. Lack of skills and poverty are linked. Learning Skills Council/New Deal/ Modern Apprenticeships could be leveraged to assist remanufacturing.
    b. There is a role for RDAs, RRF, Business Link etc. to communicate this.