Social partnership based sector dialogue on resource efficiency of aluminium products

a joint project in Germany between

BMU Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit
(Federal Ministry for the Environment, Nature Conservation and Nuclear Safety)

GDA Gesamtverband der Aluminiumindustrie (GDA aluminium trade association)

IGM Industriegewerkschaft Metall (IGM metall trade union)
Objectives – IG Metall trade union

- Encourage **innovative approaches** to resource efficiency of aluminium products by means of a joint **dialogue process in the industry**

- Utilise potential so that increasing costs for raw materials and energy **do not inevitably** lead to location-related problems

- More cost efficiency in the use of resources **instead of a narrow view** and increasing pressure on labour costs

- Increase knowledge of sustainability and life-cycle thinking among **works councils and employees**

Instil life into the **task of worker participation** and integrate it into practical activities.
Objectives – GDA aluminium trade association

- **Community interest:** acceptance of the material safeguards employment

- **Resource efficiency** of aluminium products depends on behaviour during production and consumption

- Inform employees about the influence of resource efficiency both inside their plants and outside of them

- Encourage resource efficiency of aluminium products by means of innovation and behaviour at work and as a consumer

Employees‘ double function: producer and consumer.
Sequence of events

**1st Dialogue Workshop**
- Preparation
- Aim:
  - Transfer of knowledge
  - Discussion
  - Preparation of survey

**2nd Dialogue Workshop**
- Questioning
- Interviews with works councils and company managements
- Implementation
  - May `08
  - July `08
  - April `09

Identification of potential ways of increasing resource efficiency during the production and consumption of aluminium products.
Participation – employee attitude survey

- 15 locations of 10 companies
- Returns from the following processing areas: electrolysis, mould casting, rolling, extrusion, drawing (wire), recycling and finishing
- 1727 questionnaires returned, 16% of all employees of the 15 plants participating

The first broadly based sector-wide survey of resource efficiency by a social partnership in Germany.

Skill structure – participants in the survey

- Semi-skilled: 12.3%
- Skilled worker: 39.5%
- Master craftsman: 12.7%
- Commercial training: 17.0%
- Engineer: 8.4%
- Other graduate: 10.1%
Employee attitude survey - questions

Perception

- Do you regard an increase in efficiency to be important?
- How do you rate the resource efficiency of aluminium over the whole life cycle?

Situation analysis

- What importance does an increase in resource efficiency have in your day-to-day work?
- What importance does an increase in resource efficiency have when you use aluminium products?

Exchange of ideas

- Name measures that would allow resource efficiency to be increased.
- Use the expertise of employees – define knowledge gaps – open up fields of activity

Chart 6
Employee attitude survey – key results

Do you regard increasing resource efficiency during the production and use of aluminium products as being important?

- Very important: 65.1%
- Important: 32.1%
- Moderately important: 1.6%
- Barely important: 0.1%
- Unimportant: 0.4%
- Don't know: 0.1%

97% of those questioned considered an increase in resource efficiency to be ‘very important’ or ‘important’.
Employee attitude survey – key results

How do you personally rate the resource efficiency of aluminium products?

- Very high: 17.8%
- High: 43.9%
- Average: 23.5%
- Low: 3.2%
- Very low: 0.5%
- Don't know: 9.9%

In your opinion, how does the general public rate the resource efficiency of aluminium products?

- Public perception of resource efficiency:
  - Very high: 3.1%
  - High: 8.5%
  - Average: 17.4%
  - Low: 32.2%
  - Very low: 30.4%
- Resource efficiency of use of aluminium in packaging:
  - Very high: 5.3%
  - High: 7.8%
  - Average: 25.0%
  - Low: 34.0%
  - Very low: 21.0%
- Resource efficiency of use of aluminium in vehicles:
  - Very high: 3.6%
  - High: 8.2%
  - Average: 15.1%
  - Low: 26.4%
  - Very low: 39.7%
- Resource efficiency of use of aluminium in building:
  - Very high: 8.2%
  - High: 3.0%
  - Average: 28.4%
  - Low: 16.2%
  - Very low: 33.5%
  - Don't know: 7.8%

Employees rate the resource efficiency of aluminium products as ‘high’ (average value 2.2 on a scale from 1 to 5). By contrast, they think public perception is significantly worse (average value 3.3).

Chart 8
Employee attitude survey – key results

How do you estimate your own influence on resource efficiency?

Over 70% of those questioned rated their personal influence between ‘very high’ and ‘average’.
Employee attitude survey – key results

How does increasing resource efficiency of aluminium products influence the way you go about your work?

- Very strongly: 12.0%
- Strongly: 36.8%
- Average: 28.7%
- Little: 11.5%
- Very little: 3.8%
- Not at all: 3.8%

Employees strongly guided by goal of resource efficiency.
Employee attitude survey – key results

Would you like more information about the resource efficiency of aluminium products?

- yes: 76%
- no: 24%

Which topics would you like to have more information on?

- Production of aluminium: 57%
- Processing of aluminium: 65%
- Use of aluminium products: 68%

The need for information is high, particularly on the use of aluminium products.
Employee attitude survey – suggested measures to be taken

Name three measures that in your opinion would most effectively increase the resource efficiency of aluminium products

Measures for improving the resource efficiency during production

Examples:

- Reduce rejects and scrap rate
- Optimise processes and procedures
- Optimise recycling and scrap processing
- Reduce energy consumption
- Involve employees

Measures for improving resource efficiency during use of products

Examples:

- Inform customers, change consumer behaviour
- Increase recycling rate, improve sorting
- Change product design
- Recycling-oriented product design

Almost 3,000 mentions result in concrete and practically relevant proposals for improving resource efficiency.
Interviews with experts

- 8 interviews with management representatives – mainly managing directors
- 8 interviews with members of works councils – mainly chairs of works councils
- Duration of interview: 2 - 5 hours
- Interviews conducted using interview guides

Interviews with experts together with employee attitude surveys provide the basis for representative results.
Assessments from the interview partners

As a formative feature, the support of a social partnership will get noticed – ‘unique opportunity’

Important objectives from the point of view of many interview partners:

- Concrete incentives in practice
- Clarity, traceability, comprehensibility
- Elaborate more specifically on aluminium and resource efficiency

Evaluation of the first workshop:

- Participation and constellation of participants as well as standard of interviews/discussions positive
- More new content and even more substantiated facts desired, be more specific about aluminium
Statements from interviews on possible ways of increasing resource efficiency
(by way of example)

- Management of scrap along the whole value chain (in-house recycling as well as correctly sorted recirculation of scrap)
- Operational potential: heat recovery, burner/furnace technology, load-dependent operation of power plant, use of operating materials (rolling oil, cooling water etc.)
- Greater need for information on resource efficiency of aluminium products (especially in the building and packaging sectors)

Dynamic increases in efficiency occurred in recent years.
Courses of action relating to resource efficiency of aluminium products

(examples derived from the survey and the interviews)

- Definition of relevant topics (management of scrap, plant processes, product design, material flow management together with customers, resource efficiency of aluminium products, recycling, consumer behaviour, etc.)

- Prepare topics for internal presentations and posters on plant level

- Integration of the topics in in-company education and training

Use information to create more knowledge relating to aluminium and resource efficiency.
Acknowledgements and contacts

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