Schneider Electric IT (APC by Schneider Electric) Materials Evaluation

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May 2013
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31.4 billion $ sales (FY2011)

39% of sales in new economies (FY2011)

130,000+ people in 100+ countries

4–5% of sales devoted to R&D
# SE-IT Business Overview

**Our Vision**
We see a world where we can all achieve more while using less of our common planet

**Our Mission**
We help people make the most of their energy

**Brand Promise**
Schneider Electric’s broad portfolio of activities in efficiency management makes our products, solutions, and services

- safe
- reliable
- efficient
- productive
- green

### Green Premium
Generate baseline environmental data regarding product portfolio

### EverGreen
Utilize New Product Design to improve sustainability metrics of the product portfolio

### Materials Roadmapping
Engage “Edison” Expert Network to evaluate materials identified as important to the Schneider Electric product portfolio.

- Find sustainable alternatives,
- perform evaluations,
- establish standard replacements to communicate to supply chain.
SE-IT Business Overview

**Business Size**

- **$4.64B**
  - 2011 annual sales

**Go to Market Strategy**

- **IT Distribution**
- **End Users**
- **Value Added Resellers**
  - Electrical Distribution & Contractors

**Sales by Offer**

- 16% Services
- 45% Transactional
- 39% Solutions

**Sales by Geography**

- 37% New Economies
- 63% Mature Economies

**Segment Responsibility**

- Finance
- Cloud/Collocation
- IT

**SE-IT Products**
We have to decide on which Safer Chemical to use….

……..We make the best decision we can, but often end up with unintended consequences.

Avoid the Regrettable Substitution:

- Phase out of PBDE flame retardants without providing suppliers with guidance. A number switch to red phosphorus based chemicals.
- Product failures caused by the red phosphorus result in $5M+ of product recalls

To select the right Safer Chemical requires the right data!
Model – Safer Chemical

A Miracle Occurs!
Phthalates in PVC Wire – Plasticizer in the insulator of PVC wire (Power Cords, wire assemblies)

- For applications that rely on plasticizers to achieve performance
  - Power Cords – customers expect flexibility
  - Wire harnesses with tight radius bends

Critical Concern

- Most common phthalates listed as SVHCs in REACH legislation. REACH includes a regulatory process that might result in use prohibitions.
- Select "best" substitute technology to guide engineering and supply chain to an endpoint that brings value to SE
- Avoid making a selection that results in having to redo it all again.
SE- IT Critical Materials: Phthalates in Cords/Wire

- Phthalate Use – Facts and Figures

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<th>Purchases (M€)</th>
<th>Weight (kg)</th>
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<td>2012 Purchases of Wires with Phthalates</td>
<td>25.0</td>
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<th>$billion of 2011 NR</th>
<th>% of Total</th>
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<td>SE-IT NR with wires with phthalates</td>
<td>0.85 billion</td>
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SE- IT Critical Materials: Phthalates in Cords/Wire

- Find the **Right** Safer Chemical to replace Phthalates:
  - Utilize SE expert community to evaluate and select the **Right** substitute
    - Materials Roadmapping Team, Cross functional technical/financial evaluations, establish standard replacements to communicate to supply chain.
  - Involve experts beyond SE
    - Private – Public Partnership with multiple stakeholders (GC3)
    - Supply chain, start-ups, academia
  - Leverage existing SE sustainability initiatives to test/promote safer chemicals.
  - Leverage marketing advantages as an early adopter of safer chemical
# Model – Safer Chemical (2)

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Leveraging New Product Design (1)

- Product design with maximum environmental characteristics:
  - RoHS/REACH (v8) compliant
  - High energy efficiency, managed outlets
  - Green plastics – unit and packaging, no FR
  - EOL Management, Environmental datasheets
  - Higher Cost ($79 vs. $249)

- Evaluate successful characteristics and bring the valued ones to the standard product portfolio

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> Learn more about our energy-efficient products and commitment to the environment
Leveraging New Product Design (2)

● Product design with maximum environmental characteristics:
  ● Lithium vs. Lead Acid battery
  ● High energy efficiency (EnergyStar®)
  ● Green plastics – unit and packaging
  ● Reduced weight

● Base Unit: $100 vs. $350
  ● Marketing specifically to niche market that is willing to pay for maximum environmental characteristics.

● Evaluate successful characteristics and bring the valued ones to the standard product portfolio