



Toxics Use Reduction Institute

RC Source Reduction: *Aiming for Zero Waste*

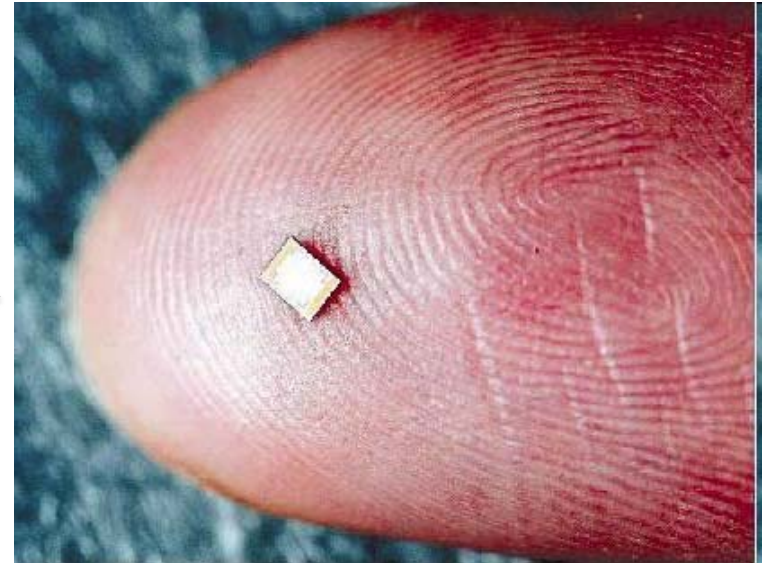
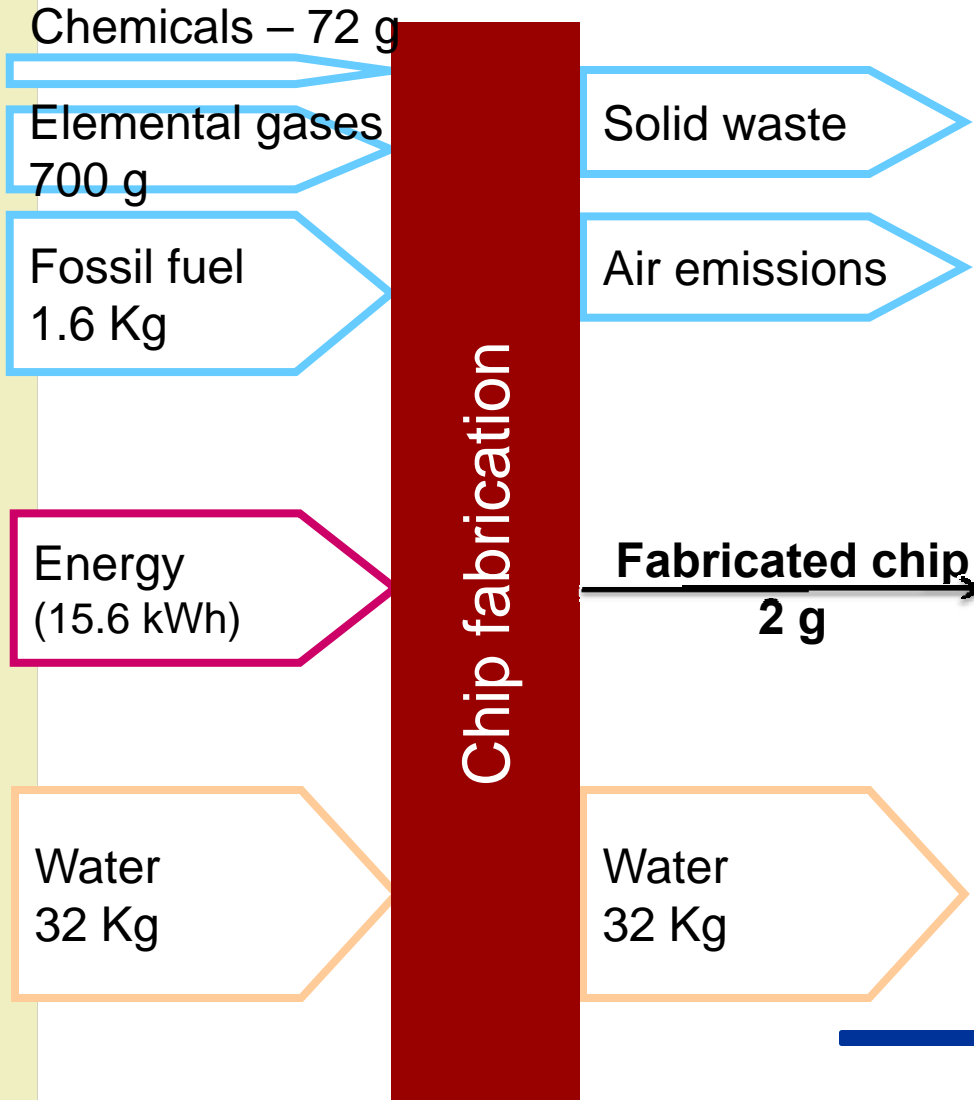
May 5, 2011

Spring Continuing Education Conf

Lowell, MA



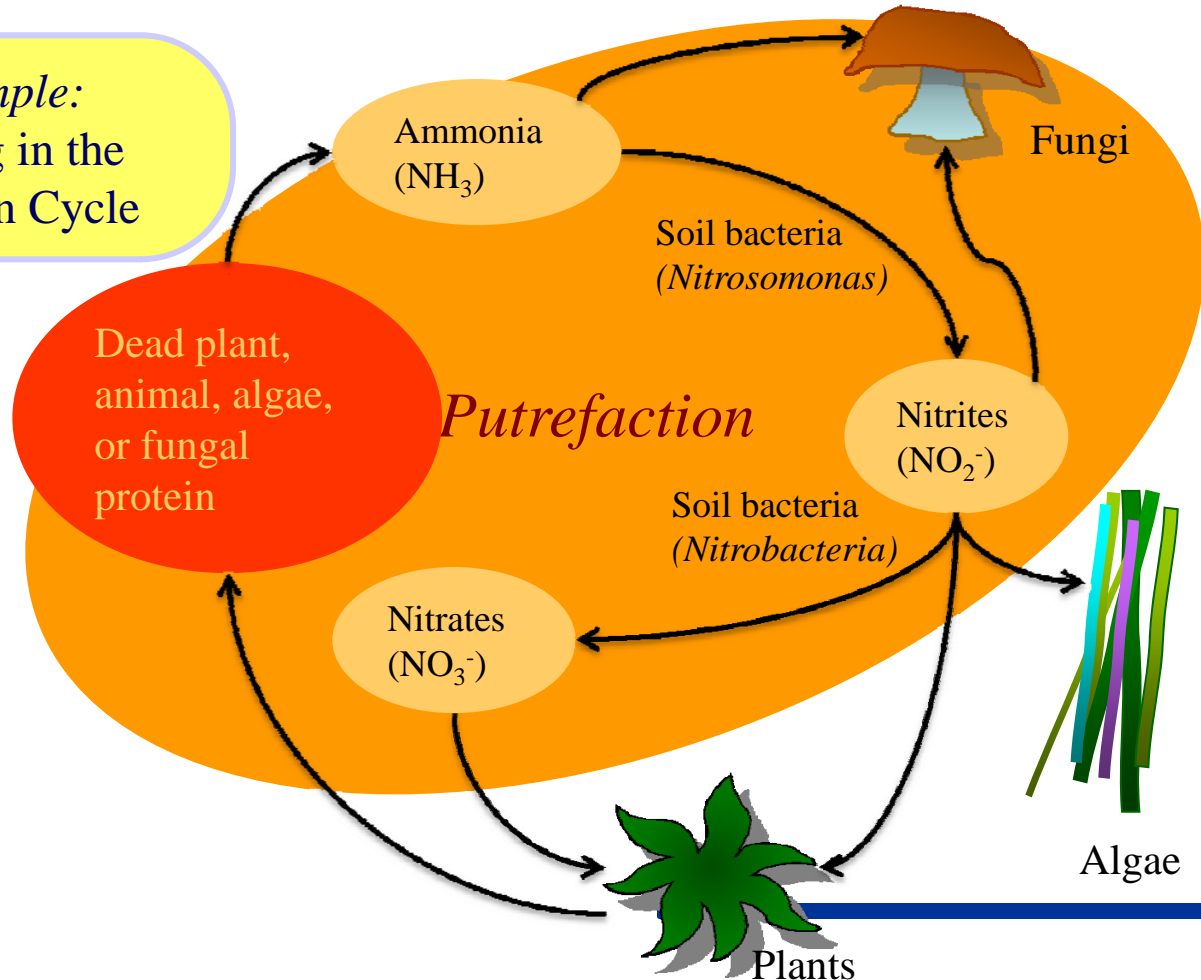
The 3.7 pound microchip



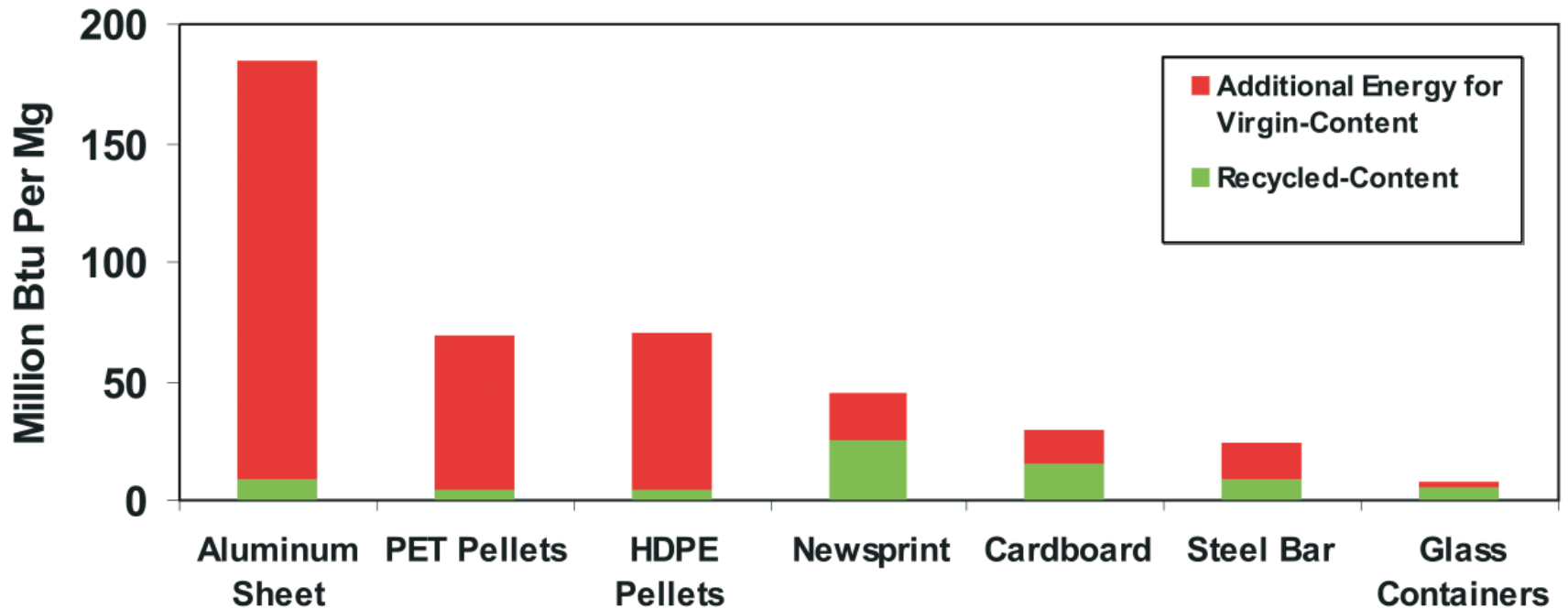
Resource Conservation in nature

- In nature there is no such thing as 'waste'
- Waste of one organism = food for another

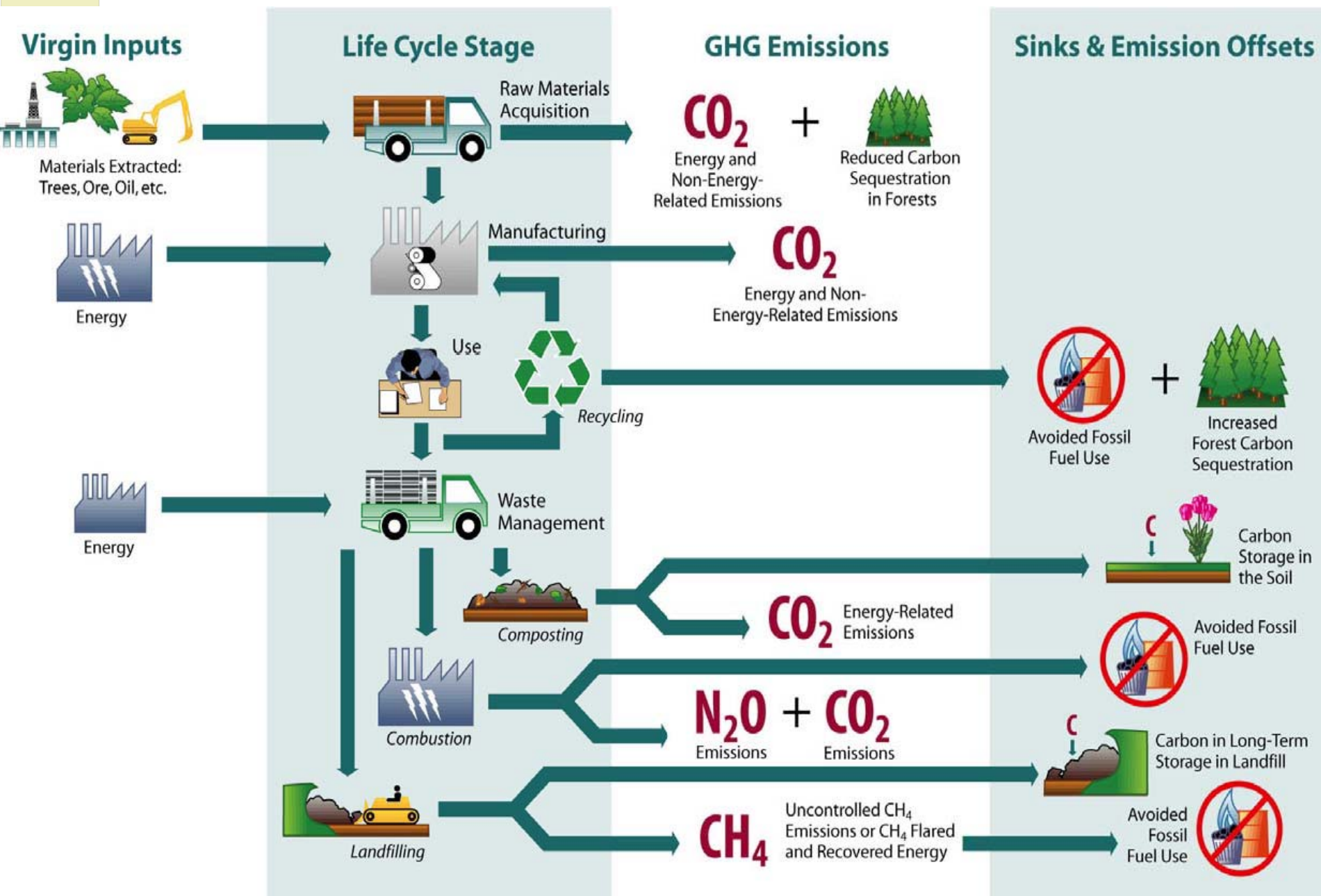
Example:
Rotting in the
Nitrogen Cycle



Waste – Energy Connection



Jeffrey Morris, “Comparative LCAs for Curbside Recycling Versus Either Landfilling or Incineration with Energy Recovery”, *Int’l Journal of Life Cycle Analysis*, 2004



Subaru 'Zero Waste' plant



Material Utilization Factor

$$\text{Material Utilization Factor} = \frac{\sum \text{raw materials input (weight or volume)}}{\text{product produced (weight or volume)}}$$

Example: Outdoor Industries Association

Scoring (max points = 5)
 Material Utilization at the product assembly stage

	Apparel	Footwear	Soft Goods (tents, sleeping bags, etc.)	Hard Goods (skis, snowboards, bindings, rock climbing equipment, water bottles etc.)
<input type="checkbox"/> 5 POINTS	> 97 %	> 95%	> 97 %	> 95 %
<input type="checkbox"/> 4 POINTS	93 - 96 %	89 - 94%	93 - 96 %	90 - 94 %
<input type="checkbox"/> 3 POINTS	89 - 92%	83 - 88%	89 - 92%	85 - 89%
<input type="checkbox"/> 2 POINTS	85 - 88%	77 - 82%	85 - 88%	80 - 84%
<input type="checkbox"/> 1 POINT	80 - 84%	70 - 76%	80 - 84%	75 - 79%
<input type="checkbox"/> 0 POINTS	< 80%	<70%	< 80%	<75%
<input type="checkbox"/> -1 POINTS	Not known	Not known	Not known	Not known

Zero Waste Alliance

Agenda for this session

- Massachusetts Solid Waste Master Plan
John Fischer, MA DEP
- The EPA Waste Wise program
Janet Bowen, EPA Region 1
- Reuse and recycling in business
Mark Lennon, Institutional Recycling Network

Speaker Contact Info

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