Sustainability in Business
Baxter’s approach
March 2008

Jenni Cawein
Sr Manager, Corporate EHS Engineering
Baxter Healthcare Corporation
Leading Supplier of Healthcare Products

- 2007 Global Sales $US 11.3 Billion
- 46,000 employees in more than 250 facilities
- 65 manufacturing facilities in 27 countries
- Local presence in more than 110 countries

Baxter’s Global Manufacturing Facilities
Product portfolio

Medication Delivery
- Drug Delivery
- Anesthesia
- Nutritional Products
- Oncology

Renal
- Dialysis Products
- Dialysis Services
- Disease Management

BioScience
- BioPharmaceuticals
  - Recombinant
  - Plasma
- Vaccines
- BioSurgery
- Blood Therapies
Major Operations include:

- Plastics Extrusion
- Molding
- Filling
- Sterilization
- Chemical Compounding
- Assembly
- Packaging
- R&D
- Warehouse and Distribution
Where do we begin?

Business Excellence Model

Key Factors & Strategic Challenges

Strategic Objectives

Value Streams / Functions - Key Metrics

Opportunity Identification, Prioritization, and Project Selection

Methodology

DMAIC

6σ Kaizen Lean

Resource Management & Total Employee Involvement

Achievement of tangible, financially verifiable results
Key Strategic Challenge: Global Energy

- Demand for energy rising rapidly
  - By 2030, global energy consumption expected to rise 70%
  - Growth in emerging economies projected to triple over 25 years in Asia (India and China)
- Most economies fundamentally fossil-fuel based (nonrenewable resource)
- Much fossil fuel supply exists in unstable areas of the world
- Climate change
Although Baxter’s gotten more energy efficient...
Baxter Cost of Energy (1990-2005)

$ in Millions

...our costs continue to rise
We know

- cost of energy will continue to rise
- cost of water will continue to rise
- cost of raw materials will continue to rise
- cost of transportation will continue to rise

And that material and resource efficiency will give us a competitive advantage (in addition to being the right thing to do...)
Increasing Population and Consumption

1930: 2 Billion
1999: 6 Billion

3 people added every second

1 Billion in 10 years - Double by 2050

96% of growth in Emerging Economies

Sources: United Nations Environment Programme’s Global Environmental Outlook 2000, World Resources Institute
Sources:
Shell Oil, UNEP's Global Environmental Outlook 2000, World Resources Institute

Decreasening Natural Resources

- Known oil reserves to last 42-44 years at current demand
- 1/3 population with water shortages in 25y
- Half of the world's forests were lost over last 40 years
- The USA, 4.7% of population, uses 25% of resources

World Trends

- 1900
- 2000
- 2050
- 2100

- 1/3 population with water shortages in 25y
- Half of the world's forests were lost over last 40 years
- The USA, 4.7% of population, uses 25% of resources
Decreasing Natural Resources

Increasing Population and Consumption

1900 2000 2050 2100

The "Big Squeeze"

Resource Shortages
Social Unrest
Other Global Business Trends

- Global cost-competition
- Growing influence of environmental education
- Growing importance of reputation and branding
- Shareholder environmental and social activism
- Producer responsibility laws
- Growth of NGOs
- Demand for “transparency” of corporations (laws, internet, reporting standards)
- Growing global competition for new talent
What are the consequences for business?

How are we addressing these trends?
Sustainable Development

Definition

A business approach to create long-term shareholder value by embracing opportunities and managing risks deriving from economic, environmental and social developments.

Dow Jones Sustainability Index

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

United Nations Brundtland Commission, 1987
The Triple Bottom Line

- Economy
- Environment
- Social Responsibility

Graphic used courtesy of DuPont
Key SD Learnings and our strategy at Baxter
1. The Trends are real

Opportunity vs. Constraint

Defensive Enterprise

Long Term Profitability

Strategic Enterprise

Natural Strategies, Inc.
2. We are witnessing the beginning of an economic transformation.

From Linear to Cyclical
First Industrial Revolution:

People are scarce, resources are abundant so you want to:

INCREASE LABOR PRODUCTIVITY

Tax the use of people, subsidize the use of resources and everyone prospers!
Next Industrial Revolution:

Materials mobilized in economy, put into products, & still there six months after sale = 1%

Global Waste = 500 BILLION tons per year

= VAST BUSINESS OPPORTUNITY!

People are abundant, resources are scarce so:

INCREASE RESOURCE PRODUCTIVITY

Insuring efficient use of resources is key to future global prosperity

Source: L. Hunter Lovins presentation to AME Conference, Chicago Oct 2007
Waves of Innovation

Hargroves and Smith 2005

1st wave
- Iron
- Water power
- Mechanization
- Textiles

2nd wave
- Steam power
- Railroad
- Steel
- Cotton
- Electricity
- Chemicals
- Internal combustion engine

3rd wave
- Petrochemicals
- Electronics
- Aviation
- Space

4th wave
- Digital Networks
- Biotechnology
- Software information technology

5th wave
- Sustainability
- Radical resource productivity
- Whole system design
- Biomimicry
- Green chemistry
- Industrial ecology
- Renewable energy
- Green nanotechnology

6th wave

Who will be the next Fortune 50?

Source: The Natural Advantage of Nations, Hargroves and Smith, Earthscan, 2005
3. This transformation is increasingly being led by CEOs and Executives...

- Now seen as sensible business strategy by many traditional companies

- Particularly strong in large multinationals
  - Dupont, Shell, BP, Johnson & Johnson, HP, General Electric, etc.

Visibility

“The larger and more highly visible the company, the more likely it is to be developing sustainability programs.”

PriceWaterhouseCoopers
2002 Sustainability Survey Report
...and customers are demanding it!
Customer Requirements & Emerging Purchasing Practices

CleanMed
Conferences for Greening Health Care

Green Buildings
Environmentally Preferable Products
Waste Reduction: Reuse, Recycle

CleanMed 2006 Seattle, WA
19-20 April 2006
(click here for more information)

CleanMed Europe 2006
29 - 31 May 2006
(click here for more information)

CleanMed is the premier environmental conference for leaders in health care. The conferences attract key decision makers from across the health care supply chain. Click on the above links for agendas, speakers, and registration information.

CleanMed's Past
Presentations and downloads from past conferences:
(click here for 2004 (Europe) - in English
(click here for 2004 (Europe) - in German
(click here for 2004 (usa)
Premier's Position Statement:
Environmentally Preferable Purchasing

Revised March 2004

The goal of Premier’s Environmentally Preferable Purchasing (EPP) Program is to support the healthcare industry’s effort in reducing or eliminating products deemed harmful to the environment. EPP encompasses products and packaging that are, in general, less toxic, minimize pollution, more energy efficient, and are safer for patients, workers and the environment when compared to competing products and services. These include products that are biodegradable, contain less toxic and hazardous chemicals and additives, do not contain mercury, promote good indoor air quality, and/or can be re-used or recycled to minimize waste.

General
Premier will:

A. Solicit input and work with member hospitals to define what environmentally preferred
CleanMed 2005

Plenary Session of 5 Group Purchasing Organizations (GPO’s):

Amerinet  Broadlane  Consorta  Novation  Premier

>$50 Billion in purchasing power!

• Represent over 9000 U.S. hospitals

Two themes:

• No PVC/DEHP
• Environmentally Preferable Purchasing is here to stay
  – More sophisticated databases
  – Educational program for hospital purchasing staff
4. Regulations are accompanying this transformation

- European Pension Fund laws
- European take-back laws
  - Packaging (Baxter paid > $1MM in Germany alone)
  - Electronic equipment (WEEE)
  - US states beginning to adopt
- Clean production law in China
  - “…promote the sustainable development of the economy and society…”
- Restrictions on hazardous substances (RoHS)

5. From more services to less “stuff”
Sustainable Development is Sustainable Business!

“A Paradigm Shift

“Many companies believe that more emphasis will be placed on sustainability in the future, and that sustainability is a paradigm shift that will fundamentally change the way companies are internally managed and externally evaluated.”

PriceWaterhouseCoopers
2002 Sustainability Survey Report
Value of SD to Corporation

1. Corporate reputation
   - Market share (customers)
   - Talent attraction and retention (employees)
   - Attracting capital investors (socially responsible investors)
   - Support for international expansion (communities)

2. Reduction of risk

3. Ability to drive innovation/growth

4. Financial performance (waste, safety = $)
Sustainability pays

New report from Goldman Sachs July 5-6, 2007: Companies considered leaders in environmental, social and governance (ESG) policies are leading the pack in stock performance – by an average of 25%. 72% of the companies on the list outperformed industry peers.
Percentage change in total return of environmental leaders vs. laggards in the forest and paper products sector 1999-2003.

Source: Innovest Group
Percentage change in total return of environmental leaders vs laggards in the USA electric utilities sector 2000-2003

Source: Innovest Group
Evolution of Baxter’s Sustainability Program

- **Regulatory Compliance**
  - mid-70’s

- **Risk Reduction**
  - 1980’s

- **Management Systems**
  - 1990’s

- **Sustainable Development**
  - 2000’s

- **Deeper integration into the business**
  - Lean and 6 δ
  - Greening Supply Chain
  - Product Life Cycle
  - Sustainability steering committee
  - Integrated health
  - Carbon trading (CCX)

- Public Reporting
- Setting Goals
- Tracking Performance
A history of our path to Sustainability

Early 80's
- Establish Sr Management Env. Review Board

Early 90's
- CNN report on Baxter TRI releases
- Program rejuvenated – management systems approach

Mid 90's
- Issue first internal Environmental Report

Mid 80's
- Major merger – program retreats to firefighting mode

Mid 70's
- Establish Env. Program – policy, manual, conferences, audits
A history of our path to CSR

Mid 90’s
- Combined Environmental with H&S and joined CERES

Early 90’s
- Issue first public environmental report

2000
- Piloted GRI Guidelines

2005
- Formal assessment of sustainability program
- CEO commits to sustainability/Publish first Sustainability Report

2007
- Carbon Neutral Headquarters & Product
- Establish Sustainability Steering Committee
- Integrate EHS further into business (Lean, 6δ, risk-based approach)
- Shareholder resolution on PVC
- Issue first public environmental report
- Carbon Neutral Headquarters & Product
Baxter’s Approach

1. Communication

Key Messages from CEO Bob Parkinson:

“Where 20 years ago, quality and profitability were thought to be disconnected, that concept is inconceivable today. I believe that over the NEXT 20 years, any disconnect between profitability and social and environmental responsibility will be similarly inconceivable”
“Carbon Neutral” Facilities
(Offset All GHG Emissions)

Bob Parkinson Baxter CEO
Announced beginning in 2007 corporate complex
“carbon neutral”
Developed in 2006, launched in 2007 - including executives from multiple functions

Tasked with setting companywide strategy and goals (beyond reporting) to support defined long-term sustainability priorities

Report back to Bob Parkinson, Baxter CEO – and his team
Sustainability Steering Committee
Executive-level Members

Executive Sponsor: Corporate VP, Global Manufacturing

Co-Chairs: VP, EHS
VP, Corporate Communication

Members: VP, Ethics and Compliance
VP, Manufacturing
VP, Talent Acquisition
VP, Technology Resources
President, Medication Delivery
VP, Global Supply Chain
VP, Operations Therapeutics
<table>
<thead>
<tr>
<th>OUR PEOPLE</th>
<th>OUR OPERATIONS AND PRODUCTS</th>
<th>OUR WORLD</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAXTER WILL FOSTER:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. A more safe and healthy workplace</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. A more diverse and inclusive workplace</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Ethical conduct and legal compliance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAXTER WILL DRIVE:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. A green supply chain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Reductions in its carbon footprint</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Reductions in its natural resource use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Enhanced product stewardship:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• By introducing green concepts in R&amp;D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• By minimizing the environmental footprint of its products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAXTER WILL ELEVATE:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Access to healthcare:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• By creating innovative products that help save and sustain lives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• By creating products for developing economies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• By enhancing its product donation strategy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• By helping to transform the U.S. healthcare system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. The company’s commitment to education, with an emphasis on math and science</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Setting Goals and Measuring Progress

ENVIRONMENTAL PERFORMANCE AT-A-GLANCE

In 2006, Baxter concluded its first year of progress on its 2010 environmental goals. As the graph below indicates, Baxter is on target to meet or exceed its water usage, energy usage, greenhouse gas emissions and environmental-incident reduction goals. However, the company has not made significant progress on its total waste-generation reduction goal. See the pages in this section for more detail.

See Baxter’s sustainability report at www.baxter.com/sustainability for details
4. Reporting on Progress

Global Reporting Initiative (GRI) and Transparency

Baxter Sustainability Report

- Purpose
  - Internal agent for change
  - External credibility
- 2007 due in June

Our goal: Incorporate into SEC Annual Report

Organizations Creating the GRI

- Association of Chartered Certified Accountants – United Kingdom
- Baxter International – United States
- Canadian Institute of Chartered Accountants – Canada
- Colombian Business Council for Sustainable Development – Colombia
- Centre for Science and Environment – India
- Coalition for Environmentally Responsible Economies – United States (Chair)
- Council on Economic Priorities – United States
- Environmental Auditing Research Group – Japan
- General Motors Corporation – United States
- Green Reporting Forum – Japan
- Institute of Social and Ethical Accountability – United Kingdom
- Investor Responsibility Research Center – United States
- ITT Flygt – Sweden
- New Economics Foundation – United Kingdom
- Sustainability – United Kingdom
- United Nations Environment Programme
- World Business Council for Sustainable Development
Stakeholder Engagement

Get feedback on annual Sustainability report from:

- CERES
- Customer Sustainability Advisory Council
- PVC Shareholder’s group
- ERM CVS (report auditors and ISO accreditor)
- SustainAbility consultancy
- On-line survey
**Baxter’s Approach to SD**

-- The Continuous Improvement Process

1. **Collect Data to Measure Performance**
2. **Plan and Work to Address Gaps**
3. **Solicit Stakeholder Feedback**
4. **Identify Strengths and Gaps**
5. **Report Data**

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**Baxter**
Results?

Show us the $$$!
Increased Profitability

- Energy costs reduced in 2005, which resulted in reduced cost avoidance and savings.
- In 2006, Baxter EHS discontinued tracking packaging-reduction savings at the corporate level. The company's 2010 EHS goals do not cover packaging reduction.

BAXTER 2006 ENVIRONMENTAL FINANCIAL STATEMENT

<table>
<thead>
<tr>
<th>Description</th>
<th>2006</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Conservation - Current and New Business Unit Cost</td>
<td>$784</td>
<td>$704</td>
</tr>
<tr>
<td>Renewable Energy - Tax</td>
<td>$679</td>
<td>$646</td>
</tr>
<tr>
<td>Energy Conservation - Energy Reduction Programs</td>
<td>0.4</td>
<td>0.3</td>
</tr>
<tr>
<td>Energy Conservation - Miscellaneous Technology</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Packaging Unit Savings - New Business and Programs</td>
<td>$1,605</td>
<td>$1,683</td>
</tr>
<tr>
<td>Total Savings and Cost Avoidance Programs</td>
<td>$1,645</td>
<td>$1,646</td>
</tr>
<tr>
<td>Total Environmental Costs</td>
<td>$1,007</td>
<td>$978</td>
</tr>
</tbody>
</table>

SAVINGS & COST AVOIDANCE

$14.1M

Amount EHS-related initiatives saved in 2006

In compiling the EFS, Baxter uses the following terms and conventions:

Monetary Amounts
## Environmental Financial Statement
### 2006 Summary

<table>
<thead>
<tr>
<th>Description</th>
<th>$MM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost of Basic Program (Professionals, programs, pollution controls, etc.)</td>
<td>14.8</td>
</tr>
<tr>
<td>Total Remediation, Waste &amp; Other Response Costs</td>
<td>22.8</td>
</tr>
<tr>
<td>Environmental Savings</td>
<td>14.1</td>
</tr>
<tr>
<td>(Waste source reduction, recycling, energy &amp; water conservation)</td>
<td></td>
</tr>
<tr>
<td>Cost Avoidance from Efforts Initiated in 6-years Prior to Report-Year</td>
<td>76.2</td>
</tr>
<tr>
<td><strong>Total Income, savings &amp; Cost Avoidance in Report-Year</strong></td>
<td>52.7</td>
</tr>
</tbody>
</table>

*See all details at [www.baxter.com/sustainability](http://www.baxter.com/sustainability)*
Increased Productivity

Energy usage from Baxter operations (per million dollars of sales)

<table>
<thead>
<tr>
<th>Region</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia</td>
<td>661</td>
<td>688</td>
<td>726</td>
<td>773</td>
<td>825</td>
</tr>
<tr>
<td>Latin America</td>
<td>801</td>
<td>846</td>
<td>836</td>
<td>822</td>
<td>800</td>
</tr>
<tr>
<td>Europe</td>
<td>2,935</td>
<td>3,011</td>
<td>2,970</td>
<td>2,847</td>
<td>2,855</td>
</tr>
<tr>
<td>North America</td>
<td>4,688</td>
<td>4,939</td>
<td>4,944</td>
<td>4,935</td>
<td>4,897</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>9,084</td>
<td>9,484</td>
<td>9,475</td>
<td>9,376</td>
<td>9,376</td>
</tr>
</tbody>
</table>

- **Trillions of Joules per Million Dollars of Sales**
  - 2002: 1,122
  - 2003: 1,065
  - 2004: 996
  - 2005: 952
  - 2006: 902

- **2010 Goal**: Reduce energy usage by 20 percent indexed to revenue

---

1 Energy usage from Baxter operations excluding energy consumption associated with material and product delivery and employee commuting and travel (Baxter Operations Total line item from Energy Usage and Greenhouse Gas Emissions table).
Increased Productivity

TOTAL WASTE
(metric tons)

(per million
dollars of sales)

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia</td>
<td>6,050</td>
<td>6,050</td>
<td>6,050</td>
<td>6,050</td>
<td>7,100</td>
</tr>
<tr>
<td>Latin America</td>
<td>4,050</td>
<td>4,050</td>
<td>5,100</td>
<td>4,150</td>
<td>4,050</td>
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<tr>
<td>Europe</td>
<td>22,200</td>
<td>20,100</td>
<td>19,050</td>
<td>18,050</td>
<td>21,100</td>
</tr>
<tr>
<td>North America</td>
<td>40,750</td>
<td>38,650</td>
<td>34,400</td>
<td>31,600</td>
<td>29,400</td>
</tr>
<tr>
<td>Total</td>
<td>73,050</td>
<td>68,850</td>
<td>64,600</td>
<td>59,850</td>
<td>61,650</td>
</tr>
</tbody>
</table>

- Metric Tons per Million Dollars of Sales
  - 2010 Goal

Reduce total waste (non-hazardous and regulated combined) 30 percent indexed to revenue

1 Excludes waste associated with United States Renal Home Care operations since patients may now dispose of unused product rather than returning it to Baxter for disposal.
Increased Productivity

**WATER USAGE**
(though cubic meters)

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia</td>
<td>1,429</td>
<td>1,514</td>
<td>1,727</td>
<td>1,779</td>
<td>1,689</td>
</tr>
<tr>
<td>Latin America</td>
<td>1,391</td>
<td>1,400</td>
<td>1,406</td>
<td>1,470</td>
<td>1,383</td>
</tr>
<tr>
<td>Europe</td>
<td>4,598</td>
<td>4,757</td>
<td>4,485</td>
<td>4,444</td>
<td>4,519</td>
</tr>
<tr>
<td>North America</td>
<td>7,014</td>
<td>7,042</td>
<td>6,468</td>
<td>7,022</td>
<td>6,546</td>
</tr>
<tr>
<td>Total</td>
<td>14,431</td>
<td>14,713</td>
<td>14,085</td>
<td>14,716</td>
<td>14,135</td>
</tr>
</tbody>
</table>

**Thousand Cubic Meters per Million Dollars of Sales**
- 2002: 1.78
- 2003: 1.65
- 2004: 1.48
- 2005: 1.49
- 2006: 1.36

**2010 Goal**
Reduce water usage by 20 percent indexed to revenue
Reputation and Brand Strength
Greater Investor Appeal
Baxter is Medical Products Leader in Dow Jones Sustainability Group World Index
Owned by many SRI funds
Reduced operational burden, interference

- US EPA’s National Environmental Performance Track Corporate Leader
  - Flexibility in permitting rules and exemption from routine monitoring and inspections

- Bioscience Facility in Thousand Oaks, CA
  - Favorable track record on environment and community outreach critical factor in persuading officials to grant approval for construction
Driving Innovation:

Product Sustainability & the Product Development Process (PDP)
LCA studies the EHS aspects and potential impacts throughout a product's life from raw material acquisition through production, use and disposal.
Baxter’s New AVIVA product

Non-PVC material

- Manufactured with 100% Green-e Certified Renewable Electricity
- 12,000 metric tons CO2 avoided during first three years
Baxter
Generate Electricity from Solar Power

Baxter Malta
Baxter purchased 20,500 MW of renewable power in 2007.

(Baxter recognized by the US EPA as one of the top 30 purchasers of renewable power in the U.S. in 2007)
Addressing Global Climate Change

- State of Illinois – climate change advisory group
- Wind turbine – Northampton
- Solar installations – Malta, Valencia and Puerto Rico
- Renewable electricity – AVIVA product and Austria sites
- Lean energy program
- Green buildings
- 2010 GHG Reduction Goal
- Deerfield, IL
- Corporate Aviation
- Sherbrooke, Canada
- Cartago, Costa Rica
- Chicago Climate Exchange
- India Climate Exchange
Why Sustainability?

*Important Corporate Focus:*

- Profitability and Productivity
- Reputation/Image
- Innovation
- Brand
- Transparency
- Increased CSR Reporting
- Ability to Attract/Retain and Motivate Talent
- Social Responsibility
- Charitable Giving
- Appeal to Investors
Why Sustainability?

Investors
NGO's
Communities
Ethical
Regulatory compliance
Customers!
Bottom-line value!

For more details:
www.baxter.com/sustainability