Honeywell Performance Materials And Technologies

Financials

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales (B)</th>
<th>Segment Margin %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$4.1</td>
<td>14.6%</td>
</tr>
<tr>
<td>2010</td>
<td>$4.7</td>
<td>15.8%</td>
</tr>
<tr>
<td>2011</td>
<td>$5.7</td>
<td>18.4%</td>
</tr>
<tr>
<td>2012E</td>
<td>~$6.1 - $6.2</td>
<td>~18%</td>
</tr>
</tbody>
</table>

Recent Highlights

- Delivered Record Performance – Profit, Segment Margin, Cash
- Established New Game-Changing Technologies
- Improved Plants With Many Running at Record Levels
- Expanded Global Presence and Sales

Business Units

- Advanced Materials
- UOP

Geographic Mix

- North America
- Latin America
- EMEA
- Asia Pacific

Note: 2011 Sales

Ahead Of Long-Term Targets
A Transformed Business

**Now**
- Record Profitability
- Strong Mix of Growth Businesses with Strong Position in a Range of Good Industries
- Differentiated Product Line
- Robust NPI Pipeline with Game-Changing Technologies
- Strong Management and Processes
- Global Player, with 58% of Sales Outside U.S.

**Then**
- Barely Profitable
- Bad Mix of Businesses
- Undifferentiated Products, Competing on Price
- Limited IP Protection and Technology Focus
- Underperforming Management
- Over 76% of Sales in U.S.

**Segment Margin**

<table>
<thead>
<tr>
<th>Year</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Margin</td>
<td>1.7%</td>
<td>2.8%</td>
<td>4.3%</td>
<td>5.3%</td>
<td>7.9%</td>
<td>12.3%</td>
<td>13.5%</td>
<td>13.7%</td>
<td>14.6%</td>
<td>15.8%</td>
<td>18.4%</td>
</tr>
</tbody>
</table>
Strong Management Driving Results

<table>
<thead>
<tr>
<th>Differentiator</th>
<th>Mechanism</th>
<th>Annual Segment Margin, PMT vs. Industry Peers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytical Capabilities and Innovation Engine</td>
<td>Technology Investments and VPD™ Process</td>
<td></td>
</tr>
<tr>
<td>Plant Performance and Process Technology</td>
<td>HOS and Plant Strategic Plans</td>
<td></td>
</tr>
<tr>
<td>Sales and Marketing Excellence</td>
<td>Global Demand Capture and Sales Force Deployment</td>
<td></td>
</tr>
<tr>
<td>Operating Approach and Leadership</td>
<td>Business Decision Week</td>
<td></td>
</tr>
</tbody>
</table>

* Specialty and Diversified based on average of companies reporting FY11 actuals
PMT Core Strategies

Operational Excellence

HOS
Increased Attainment
Yield Improvements
Debottlenecking
Plant Strategic Plans
Safety

New Product Introductions

Molecule Scale-Up
Technology Leadership
Application Development

Globalization and Market Creation

High-Growth Region R&D
Global Demand Capture
Strong Governance And Processes

Sales and Marketing Excellence

Sales Force Deployment
Regionalization
Pricing Excellence

Long-Term Growth

Investments / Partnering
Leveraging Technology Pipeline
Project Execution

Successfully Implemented At PMT
Operations: Electronic Materials

- **HOS Lean**: ↓ Cycle Times, ↓ Cost
- **Yield Debottleneck**: ↑ Capacity, ↓ Cost
- **SIOP Discipline**: ↑ Customer Responsiveness, ↓ Inventory
- **Quality Excellence**: ↑ Customer Satisfaction, ↓ Cost

### Product 1 – Asia
- **Inventory**: -45%
- **Walking Distance**: -87%
- **Part Traffic Distance**: -50%
- **Lead Time**: -55%
- **Crew Size**: -50%
- **Manufacturing Conversion Cost**: -50%

### Product 2 – U.S.
- **Inventory**: -60%
- **Walking Distance**: -70%
- **Part Traffic Distance**: -85%
- **Lead Time**: -82%
- **Crew Size**: -50%
- **Manufacturing Conversion Cost**: -28%

**HOS Paying Dividends In Production**
## New Products: UOP

### Oleflex™ Technology
- Produces Propylene (in High Demand) for Plastics From Natural Gas at Lower Cost
- Six Contracts, Including Five in China, in 2011

### ADS-47 Adsorbents
- Improves Yield for In-demand Building Blocks for Plastics in Current/New Plants
- First Sale in 2011

### E-911 Adsorbents
- Filter Materials Remove Radioactive Contaminants From Water
- Cleaning Radioactive Water in Fukushima, Japan

### Uniflex™ Process Technology
- Processes Heavy Oils and Offers 4 to 10% Additional Transport Fuel Per Barrel
- First License to Pakistan's National Refining Ltd.

### Methanol-to-Olefins Technology
- Produces Low-Cost Plastic From Natural Gas/Coal Rather Than Oil
- First License in China, a Key Market for the Technology
Globalization: Resins And Chemicals

Caprolactam

• Critical Ingredient for Making Nylon Used in Carpeting, Clothing, Engineered Plastics

Nylon Resin

• Used in Applications From Food Packaging to Automotive

Ammonium Sulfate

• Effective Fertilizer Used Globally for a Range of Plants and Crops

Driving Global Growth

- Doubled Sales From Outside U.S. for Key Products Over the Last Four Years
- 41% of Sales Outside the U.S.
- Moved From Distributors to Direct Sales to Extract More Value
- >40 New Customers in Asia in 2011
- Leveraging Global Technology Centers of Excellence to Engineer for Local Markets

Major U.S. Export

CAGR: ~19%

2007

2011
Collaborative, Online Process to Identify and Prioritize ~500 Opportunities Per Year

- 18% of Sales From New Products Launched Since 2008
- ~175 New Customers in 2011
- Current NPI Pipeline: ~$1B Sales/Year in 2016
- Applications Ranging From Lightweight Ballistic Materials to Asphalt Additives

**Fast-Cycle, New Product Machine**

- Identification and Sampling
- Customer Qualification
- Conversion

**<1 month**
- Value Prop
- Economics

**6-12 months**
- Pilot and Trial
- Customer Value

**<2 months**
- Pricing
- Launch
Growth: Fluorine Products

**Solstice™ 1234yf For Mobile A/C**

- Global Warming Potential of 4 vs. 1430 for Current Refrigerant
- Comparable Cooling Efficiency to Current Refrigerant
- Near Drop-in Replacement, Saving Significant Cost for Customer vs. Alternative
- Meeting New European Regulations
- Significant Customer Wins
- Strong Patent Position
- $1.5B Opportunity

**Opportunity**

- High Growth Opportunity
- HON Only a Minor Producer of Current Mobile A/C Refrigerant Today

**Superior Environmental Performance**

- 30% Lower Emissions vs. Alternative

---

**Global Light Vehicle Builds (M)***

- 2011E: 77.6
- 2020E: 107

Source: Goldman Sachs Japan 2011

---

**Direct Emissions**

**Indirect Emissions**

- HFC (Today’s Refrigerant)
- Solstice 1234yf
- CO2 (Competing Solution)
Transformed New Product Introductions

Specialty Materials

10 Years Ago

- Limited Metrics
- Stage Gates, But No Business Ownership
- Technology, Rather Than Business, Process
- No Management of Entire Portfolio
- Little Data on R&D and NPI Performance
- Poor Ability to Forecast Sales Impact From NPI
- Little Investment in Game-Changing Technologies

Today

- Good Metrics
- Business Leaders Engaged at the Highest Level – CEO and VP/GMs
- True Cross-Functional Engagement
- Value Propositions Guiding Decision Making
- Top-level Management of Portfolio Ensures Prioritization of Resources
- Enhanced Ability to Forecast Sales Impact From NPI
- Investing in Game-Changing Technologies

VPD™

People, Processes And Portfolio Keys To Success
# People

## The Right People…. 
- 1,100 Scientists
- ~400 Ph.D.s
- 2,800 Process Engineers
- 3,915 Patents Globally

## … In The Right Places Globally
- 8 Technology Centers of Excellence
- Newest Facilities in India and China, Developing Products/Applications for Local/Global Markets
- Increased Global Process Engineering Capabilities

## Recognized Researchers In Their Fields

<table>
<thead>
<tr>
<th>Year</th>
<th>Award</th>
<th>Recipient</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>ACS Earle B. Barnes Award for Leadership in Chemical Research Management</td>
<td>Ben Christolini</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>AIChE Fuels &amp; Petrochemicals Division Award</td>
<td>Gavin Towler</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>UOP-ENI Green Jet &amp; Diesel team – AIChE Sustainable energy award</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>ACS National Award for Creative Invention</td>
<td>Jeff Bricker</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>ACS Schoellkopf Medal Award</td>
<td>Rajiv Singh</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>Perkin Medal</td>
<td>Ian Shankland</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>National Medal of Technology</td>
<td>UOP</td>
<td></td>
</tr>
</tbody>
</table>

## “Punching Above Our Weight”

- PMT Ranks No. 4 in Its Sector for Innovation, Placing it Among Companies of Much Larger Scale and Sales
- Issued Patents at Record Levels
- Invention Disclosures at Record Levels

---

**Technology Breadth And Depth**
### Velocity Product Development Process

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Stage 4</th>
<th>Stage 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition of Needs</td>
<td>Proof of Concept Testing</td>
<td>Application Testing, Piloting, Basic Engineering</td>
<td>Scale-Up, Plant Design and Engineering</td>
<td>Launch</td>
</tr>
<tr>
<td>Business Case</td>
<td>Voice of the Customer</td>
<td>Product And Process Development</td>
<td>Commercial Readiness</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Product Qualification, Regulatory Approvals</td>
<td>Demonstration Runs, Customer Qualification, Launch Plan</td>
<td></td>
</tr>
</tbody>
</table>

### Fast Cycle Applications
- Leverages Existing Technologies and Capabilities
- Technology and Marketing Agility
- Applications Expertise
- Lower Resources and Capital

**Cycle Time:** 6 Months to 2 Years

### Technology Leadership
- Technology Licensing Model
- Strong Research Pipeline
- New Materials Discovery
- Process Development and Pilot Plants
- Technology Peer Reviews
- Customer / Demonstration Runs

**Cycle Time:** 2 to 5 Years

### New Molecule
- Molecule Discovery
- Regulatory Approvals
- Asset and Capital Investments
- Process Development and Scale-Up
- Front-End Engineering
- Technology Peer Reviews

**Cycle Time:** 5 to 10 Years

---

**Common Process Tailored For Three Business Models**
Fast Cycle: Spectra® X Ballistic Materials

Superior Performance

<table>
<thead>
<tr>
<th>Application</th>
<th>Market Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law Enforcement and Federal Agencies</td>
<td>$50M+</td>
</tr>
<tr>
<td>Special Ops</td>
<td>$60M+</td>
</tr>
<tr>
<td>Military Vests</td>
<td>$100M+</td>
</tr>
<tr>
<td>Military Helmets</td>
<td>$60M+</td>
</tr>
</tbody>
</table>

“Today's High End Vest”

15% Better Ballistics

9mm V50 (fps)

Today's High End Vest

Vest with Spectra X

15% Lighter Weight

Weight (lbs)

Today's High End Vest

Vest with Spectra X

“This is the best stuff we’ve ever shot ... you have a winner.” CEO, Leading Vest Manufacturer

Leveraging Breakthrough Fiber Technology Across Multiple Segments
New Molecule: LGWP Materials

Creating Value For Global Customers

<table>
<thead>
<tr>
<th>Extending Solstice™ LGWP Platform</th>
<th>Opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aerosol / Insulation Panels</strong></td>
<td>• Extends and Expands HON Position</td>
</tr>
<tr>
<td>Solstice 1234ze</td>
<td>• Demand for Energy-Efficient Insulation Driving Future Growth</td>
</tr>
<tr>
<td>Global Warming Potential of 6 vs. 1430</td>
<td>• Strong Patent Positions</td>
</tr>
<tr>
<td>Meets All Requirements</td>
<td>• Good Customer Acceptance</td>
</tr>
<tr>
<td>Non-Flammable</td>
<td>Using Existing Products/Technology As Feedstocks for New Products</td>
</tr>
<tr>
<td>Economic in Use Today</td>
<td><strong>Leveraging Assets</strong></td>
</tr>
<tr>
<td><strong>Foam Insulation / Solvents</strong></td>
<td></td>
</tr>
<tr>
<td>Solstice 1233zd</td>
<td></td>
</tr>
<tr>
<td>Global Warming Potential of 7 vs. 1030</td>
<td></td>
</tr>
<tr>
<td>Improved Energy Efficiency</td>
<td></td>
</tr>
<tr>
<td>Non-Flammable</td>
<td></td>
</tr>
<tr>
<td>Near Drop-in Replacement</td>
<td></td>
</tr>
<tr>
<td><strong>&gt;$300M</strong></td>
<td></td>
</tr>
</tbody>
</table>

Opportunity

- Extends and Expands HON Position
- Demand for Energy-Efficient Insulation Driving Future Growth
- Strong Patent Positions
- Good Customer Acceptance

Leveraging Assets

Using Existing Products/Technology As Feedstocks for New Products

Existing Products

- 240
- 245fa

New Products

- 1233zd
- 1234ze

Creating Value For Global Customers
## Technology Leadership: UOP

### Technology Focus Areas

| Process Technology | • Providing Refiners, Petrochemical Producers More Feedstock Flexibility, Higher Yields  
|                    | • Processing Heavier Crudes and Getting More Out of Each Barrel of Oil  |
| Gas Processing     | • Removing Broader Group of Contaminants From Natural Gas  
|                    | • Making Processing Units Smaller and More Robust for Off-shore Applications  |
| Catalysts and Adsorbents | • Boosting Yields in Both Current and New Process Operations  
|                    | • Moving into Adjacencies, New Applications  |
| Renewables         | • Allowing Refiners to Produce Real Fuels From Biofeedstocks Such as Algae  
|                    | • Processing Solid Biomass Such as Forest Waste to Transportation Fuels  |

### Competitive Advantage

| • More Than 100 Pilot Plants to Test Process Technologies  |
| • High-Throughput Screening to Rapidly Evaluate Catalysts and Materials  |
| • Ability to Evaluate Materials at the Atomic Level  |
| • Advanced Computer Modeling and Simulation  |
New Product Portfolio Metrics

- Prioritized and Reduced Number of Projects
- Concentrated Resources on Top Projects
- Accelerated Execution

- Increased Portfolio Value
- Increasing New Product Sales as % of Total Sales Over Five-Year Period
- Mix of New Products Shift – More New vs. Replacement Products

- Track and Measure New Product Programs Each Month
- Exceeded our New Product Forecast Each of the Last Two Years
UOP Industry Landscape

Global Energy Demand Tracks GDP

- Worldwide Energy Demand
- Source: US Energy Information Administration

Natural Gas Opportunity

- Gas Share of Global Energy to Grow From 21% to 25% by 2035
- Source: US Energy Information Administration

Refining Opportunity

- 5-8% Growth
- Regional Factors
- National Security
- ~1.3% Capacity Replacement
- Environ. Reg.

Petrochemical Example

- Demand for “On-Purpose” Propylene Expected to Nearly Triple From 2010 to 2020
- “On-Purpose” Production
- Conventional Production

Underlying Growth Trends In UOP Sweet Spot
UOP Adding Value

Boosting Diesel Yield
- Highest Yield, Lowest Sulfur Technology; 200+ Units Globally
- Technology to Improve Fuel Quality; 300+ Units Globally
- Catalysts Optimize Yields and Profitability

Average $15B Investment

Customer Result
- Increase in Feedstock Value ($/MT) $270
- Incremental Conversion to Higher-Value Fuels 60%
- Customer Value Created $2.3B

Upgrading Heavier Crude
- Industry-leading Conversion (90%+) to Fuels with Less By-products
- Process to Convert Contaminated Feedstocks into Gasoline

Average $1B Investment

Customer Result
- Increase in High-Value Fuel Conversion 4-6%
- Increase in Refiner Margins 50%
- Customer Value Created $300M

Optimizing Refineries
- Configuration
- Design Optimization
- Design Services
- Training/Start-Up
- Front-End Engineering Design
- Energy Savings

Average $10B Investment

Customer Result
- Increase in Refinery Margins vs. Base Design 20%
- Reduction in Construction Cycle Time 1 yr
- Customer Value Created $2B
Advanced Materials Transformation

Segment Profit Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Profit Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
</tr>
</tbody>
</table>

‘08 – ’11 CAGR +30%

Highlights

- More Than Doubled Segment Profit Since 2008 High Point
- Pricing, Operations Excellence Driving Results
- Creating New Markets
- Executing Robust NPI Pipeline
- Investing in New Plants for Growth

Strong NPI Pipeline

- Asphalt Additives
- Low-Global-Warming Products
- Resins for Fishing Nets
- Films for PV Panels
- Spectra® Helmets

Businesses Performing Strongly
Advanced Materials Highlights

Fluorine Products

- Achieved Record Profitability
- Launched Solstice™ Mobile A/C Refrigerant (HFO-1234yf), Gas Blowing Agent (HFO-1234ze) and Liquid Blowing Agent (HFO-1233zd) and Secured ~$1B in New Contracts
- Created Sinochem JV to Expand 245fa Blowing Agent in Asia

Game-Changing Technology

Solstice yf Refrigerant

Resins And Chemicals

- Achieved Record Profitability
- Daily Rigor on Price
- Effective Global Reach
- Designed and Licensed First Sulf-N® 26 Lower Explosive Fertilizer Plant
- Acquired Phenol Facility; Diversified Cumene Supply for Hopewell Production

Global Position and Reach

Sulf-N® 26 Fertilizer

Specialty Products

- Achieved Record Profitability and New Products
- Launched Expansion Plans for Aclar, Photovoltaics and Asphalt
- Continued Success in New-Product Commercialization
- Breakthrough Spectra® X Gaining Traction in the Market

Electronic Materials

- Major Wins in the Differentiated Space of Targets, Electronic Polymers and PV
- Significant Wins in Electronic Chemicals
- Gains With Key Customers to Grow in Semiconductor Down Cycle

NPI Driving Growth

Spectra® Helmet Technology

Adjacent Market Growth

Physical Vapor Deposition Target
Truly Global

- New/Expanded Regional Technical Sales and/or Support
- New/Expanded Technology Development Capabilities
- New/Expanded Procurement Capabilities
- New/Expanded Project Engineering Capabilities

India Technology Center

- Expands Global Research Capabilities For:
  - Refining, Petrochemical
  - Low-Global-Warming Products
  - Nylon and Additives Applications
- First UOP Pilot Plants Outside U.S.
- Close-to-Customer Technology Development

Approaching 50% Of Sales From High Growth Regions In 2012
Becoming The Chinese Competitor

Step 1: Establish Strong R&D and Technology Presence

Step 2: Enhance Sales and Marketing Presence

Step 3: Strategic Acquisitions and In-Country Manufacturing

Strongly Competitive

Import Goods from Developed Regions

Sales

Time

• Joint Venture With Sinochem to Produce Blowing Agents
• Expand SUOP Catalyst Production

• Expanded Direct Customer Base for Caprolactam, Resin
• Doubling UOP Sales Force in China

• Shanghai Lab Expanded to Serve Local Customers
• >$80M in 2011 Sales From New Products Developed At the Lab

Strengthening High-Growth Region Leverage
Honeywell Operating System

HOS Deployment Status

<table>
<thead>
<tr>
<th>Year</th>
<th>Sites Deployed</th>
<th>Bronze Certified</th>
<th>Silver Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>15</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Today</td>
<td>29</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>2014E</td>
<td>38</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HOS Results

- Safety (TCIR): 64% Reduction
- Quality (PPM): 65% Reduction
- Delivery (OTTR): 3 pt Improvement
- Inventory (DOS): 7 day Improvement
- Cost Improvement: 12%

Observed Improvement for Plants Reaching Bronze Status

Nearly 50% of Conversion Cost in Bronze or Silver

HOS Driving Gains In Production
# Business And End Market Update

<table>
<thead>
<tr>
<th>Business</th>
<th>Current Environment</th>
<th>Great Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>UOP</td>
<td>• Continued Global Investments to Meet Refined Product Demand</td>
<td>• Sustained Technology Leadership Position in Key, Emerging Refining Technology</td>
</tr>
<tr>
<td></td>
<td>• High Win Rates and Execution of Backlog Driving Strong Results</td>
<td>• Natural Gas Emerging As Growth Opportunity</td>
</tr>
<tr>
<td>Resins &amp; Chemicals</td>
<td>• Overall Tight Caprolactam Supply/Demand, But Prices Moderating Off 2011 Highs</td>
<td>• Lowest-Cost Position in Key Products</td>
</tr>
<tr>
<td></td>
<td>• Fertilizer Demand Steady, But Prices Moderating Off Late 2011 Highs</td>
<td>• Strong, Growing Position in Emerging Regions</td>
</tr>
<tr>
<td>Fluorine Products</td>
<td>• Moderation From Record Price Levels Due to Increased Supply on Key Products</td>
<td>• Recognized Leader in Refrigerants, Blowing Agents, Solvents</td>
</tr>
<tr>
<td></td>
<td>• Three New Low-Global-Warming Molecules</td>
<td>• Next-Generation Low-Global-Warming-Potential Products Drive Growth</td>
</tr>
<tr>
<td>Specialty Products</td>
<td>• Continued Strength in Armor, Films</td>
<td>• Attractive Businesses Serving Niche Segments in Larger Markets</td>
</tr>
<tr>
<td></td>
<td>• New Product Wins Gaining Traction</td>
<td>• Fast-Cycle Expertise With Robust New Product Pipeline and Marketing Capabilities</td>
</tr>
<tr>
<td>Electronic Materials</td>
<td>• Weaker Demand Expected Through At Least Q1 Due to Continued Inventory Drain</td>
<td>• Strong Positions With Key Industry Players</td>
</tr>
<tr>
<td></td>
<td>• Moderate Growth in Second Half of 2012 As Inventory Rebuilds</td>
<td>• Expanding Into Attractive Adjacencies</td>
</tr>
</tbody>
</table>

Great Positions In Good Industries
Long-Term Outlook Update

($B)

Sales

Long Term Target: 7 - 9% CAGR

2012 Up 8 - 10%

Segment Margin

Long Term Goal: 16 - 18%

Overdriving Long-Term Targets
Summary

• Operating Margins at Record Levels

• Outperforming Peers

• Strong Management Structure, Disciplined Process

• Robust New Product Pipeline, Investing for Growth

• Growing Globally in Presence, Sales