



Innovest
STRATEGIC VALUE ADVISORS

The Business Case for Green Chemistry

Innovest Uncovering
Hidden Value for
Strategic Investors

New York

Paris

Toronto

London

San Francisco

Sydney

Tokyo

- Innovest Company Overview
- Changing Dynamics of the Chemicals Sector
- Investment Drivers
- Innovest Research
- Distinguishing Leaders and Laggards
- Investment Strategy

- Innovest Strategic Value Advisors is an international investment research and advisory firm, specializing in analyzing “**non-traditional**” **drivers of risk and shareholder value**, and their impact on company competitiveness, profitability and share price performance.
- **Complements not replaces** traditional investment analysis
- Rating of more than **2,300** companies globally on Environmental, Social and Governance issues with a specialty in climate change
- **50+ analysts**, offices in 6 countries on four continents, and clients in over 20 countries. Innovest’s largest outside investor: ABP (Netherlands), second-largest pension fund in the world
- Innovest has been ranked as the **#1 global provider of “non-traditional” investment** research in both 2007 and 2006 by the Thomson Extel survey of over 140 major institutional investors.
- In 2007, Innovest is recommended by the **Enhanced Analytics Initiative** (\$2.6 trillion in combined assets).
- Experts in climate change risk, **author Global Carbon Disclosure Project** since 2002
- 10 out of the top 25 global asset managers in the world use Innovest research.
- Key clients include: JP Morgan, Goldman Sachs, UBS, HSBC, ABN AMRO, SSgA, ABP, BNP Paribas, CalPERS, Henderson, Hermes, CPPIM, Norwegian Petroleum Fund, New Zealand Super Fund
- Innovest clients have collective assets under management of **over \$7 trillion**
- \$1.3 billion in domestic, international, and emerging markets sub-advisory mandates

Intangible Value Assessment (IVA) Methodology

The Iceberg Balance Sheet

- 4 pillar approach to assessing intangible value...
- 120 different scoring points in total
- Spectrum across RISK, MANAGEMENT AND OPPORTUNITY
- Emphasis on Emerging Markets and Product Liability performance

Sustainable Governance

- Strategy
- Capability/ Adaptability
- Traditional governance practices

Environment

- Quality of environmental management
- Environmental risks & Eco-efficiency
- Strategic profit opportunities

Human Capital

- Recruitment retention strategies
- Employee motivation
- Labor relations
- Innovation capacity
- Knowledge Development & Dissemination
- Health & Safety
- Progressive workplace practices

Stakeholder Capital

- Regulators & Policymakers
- Local communities
- NGOs
- Customer relationships
- Alliance partners
- Supply chain
- Social benefits of products & services

1. Sector Overview

Identification of sector-specific risks and opportunities
Production of Sector Overview

2. Collection of Research Data

Sources: Annual / Env / Social Reports; Company press releases; Industry-specific news sources; Media searches – RBB, Bloomberg, Factiva; Gov't & regulatory bodies; NGOs

3. Interview with Company

Interview conducted with appropriate company senior executives, focusing on issues arising from preliminary analysis

4. Completion of Rating Model

Qualitative and quantitative data analysis and finalization of scores in Rating Model

5. Final Product

Final company ratings (AAA-CCC) assigned and verified by sector teams and Head of Research

Intangible Value Assessment (IVA) Ratings

7 tier rating scheme

AAA:	BEST IN SECTOR A company with minimal, well-identified environmental/social risks and liabilities, and with a strong ability to meet any losses which might materialize. Extremely well-positioned to handle any foreseeable tightening of regulatory requirements, and strongly positioned strategically to capitalize on environmentally/socially-driven profit opportunities.
AA:	A company with environmental/social risks and liabilities which have been well-identified and provided for. This position is unlikely to be impaired by any foreseeable tightening of regulatory requirements. The company is well-positioned strategically to capitalize on environmentally/socially-driven profit opportunities.
A:	A company with large but well-identified environmental/social risks and liabilities, and sufficient financial and managerial strength to absorb all but exceptional risks. Able, also, to finance any currently proposed regulatory requirements. Above-average positioning with respect to profit opportunities.
BBB:	AVERAGE A company with strong managerial capability, but one where environmental/social risks and liabilities are a potential source of loss, though not on any material scale. Average level of positioning vis a vis profit opportunities.
BB:	A company with good managerial capability, but one where environmental/social risks and liabilities are a potential source of material loss. Below-average level of strategic positioning.
B:	A company whose environmental/social risks and liabilities create a strong likelihood of material losses in both profitability and competitive position. Significantly below-average strategic positioning.
CCC:	WORST IN SECTOR A company where there are significant doubts about management's ability to handle its environmental/social risks and liabilities, and where these are likely to create a serious loss. Well below-average ability to capitalize on environmentally/socially-driven profit opportunities.

- New vs. Old Chemistry
- Redefinition of chemical risks
- Chemical liability - two sided investment driver
- Shifting Markets

Pesticides (synthetic to bio-pesticides)

- \$2 billion reduction in pesticide demand since 1995
- Bio-pesticide industry expected to grow by 20% per annum

Bio-based Plastics

- Global market for bio-based plastics expected to grow 18% per annum
- Demand from packaging sector

- Innovest: Gap between leaders and laggards

■ Feedstock Costs

■ Growing Consumer Demand for Eco-Efficient Products

■ Public Awareness/Concern

■ Science

158 published studies on brominated flame retardants in 2004-2005 (30% increase)

110 published studies on PFOA in 2004-2005 (19% increase)

64 published studies on low dose bisphenol A in 2004-2005 (17% increase)

■ Media Attention

■ Litigation

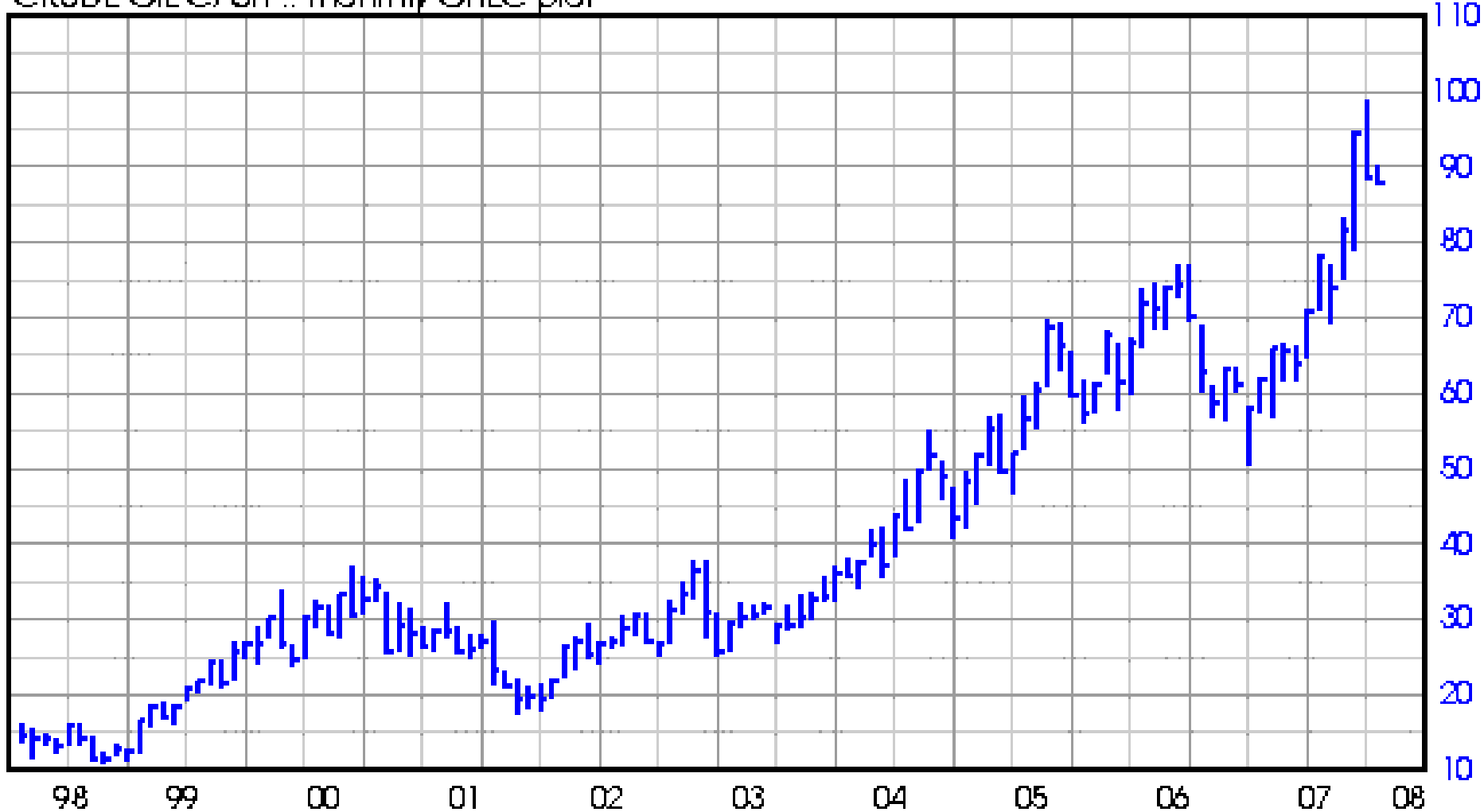
PFOA

■ Regulatory Drivers

EU - Cosmetics Directive, RoHS, WEEE, REACH

Feedstock Cost: Energy Prices

CRUDE OIL CASH .. monthly OHLC plot



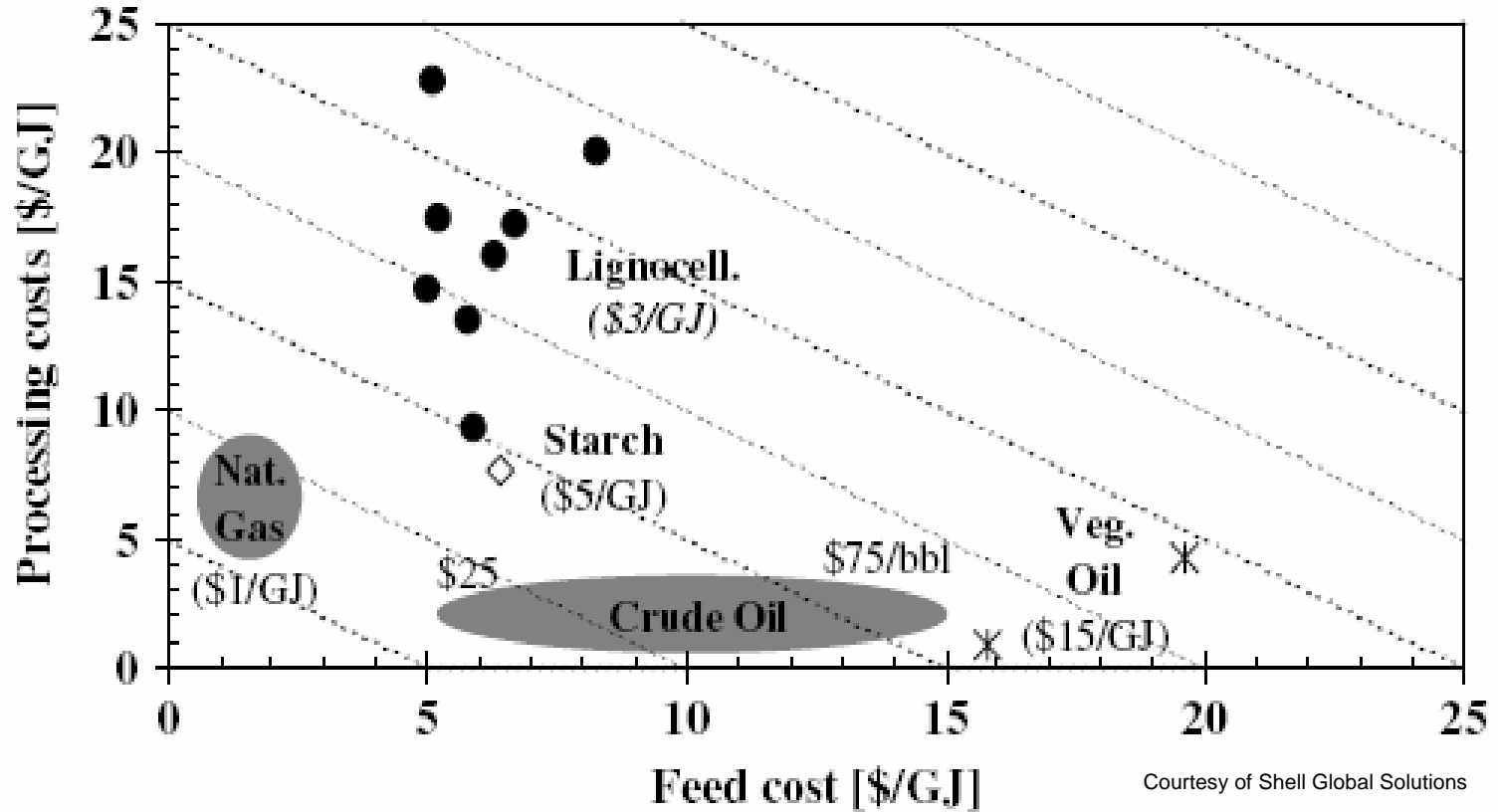
Feedstock Cost: Energy Prices

NATURAL GAS CASH .. monthly OHLC plot



Trade-off between Processing and Feedstock Costs

Feed and processing cost of transportation fuels derived from renewable vs. fossil resources



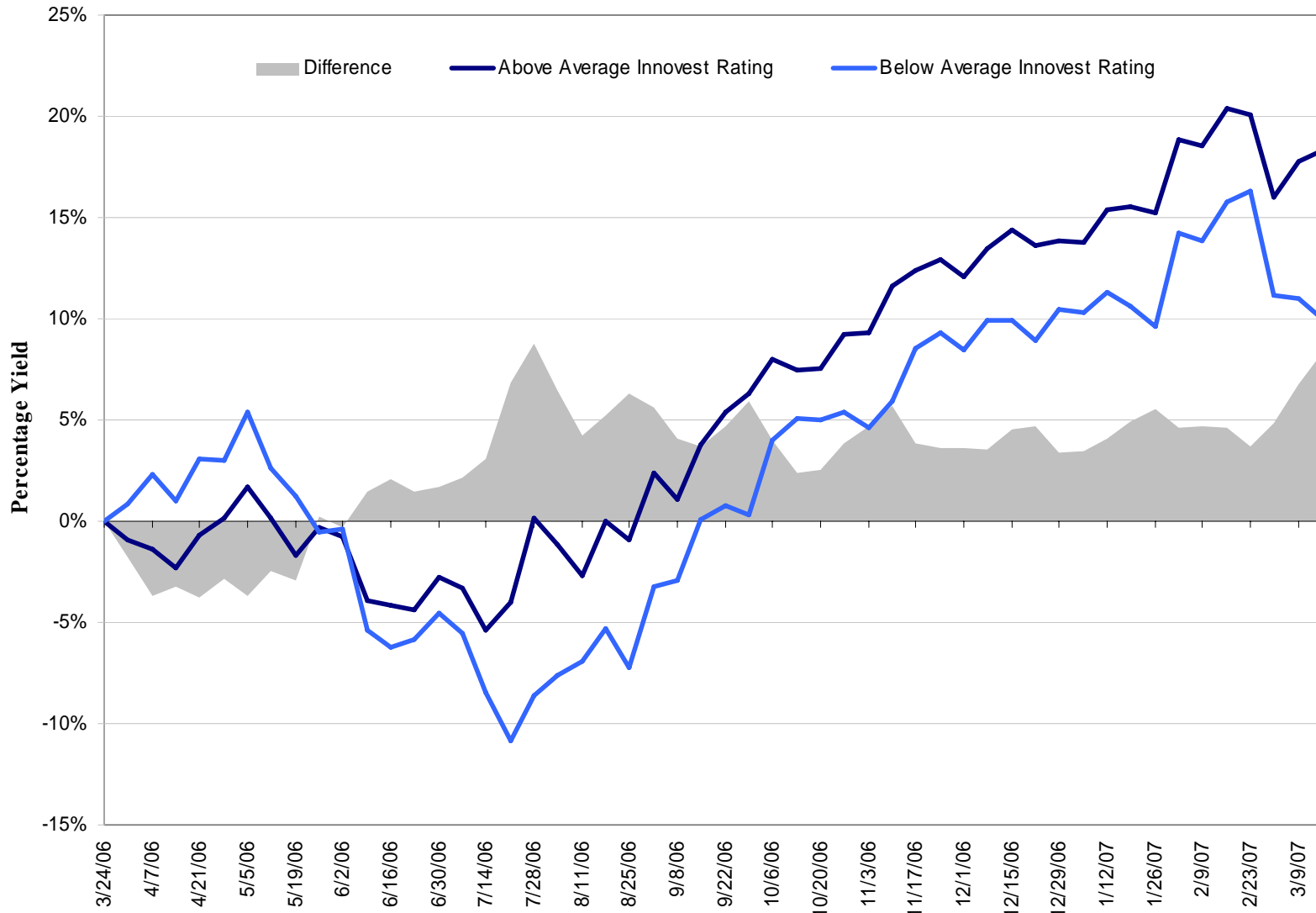
Courtesy of Shell Global Solutions

- Risks and profit potential spurred by chemical liability issues
- 3-prong Rating Matrix: Management, Risk and Improvement, and Profit Ops
- Five-factor benchmarking, case studies of best practice

Multi-Line Retail Sector	Corporate Commitment to a Safer Alternatives Policy	Consumer Awareness	Internal Capacity Building	Data Development	Supply Chain Alignment
Costco Wholesale Corp.	3	2	2	5	0
Kohls Corp.	0	1	0	0	5
Marks & Spencer Group	10	8	9	9	9
Target Corp.	6	4	4	5	4
Wal Mart Stores Inc	8	7	7	6	8
Boots Group PLC	10	8	8	10	9
Kingfisher plc	9	7	7	8	8
Home Depot	2	1	3	3	2
Lowe's	4	1	4	4	3
Sears Holdings Corporation	0	1	1	1	1

■	A-Range
■	B-Range
■	C-Range

Performance of Innovest Top Picks



- Green Chemistry investment
- In-house groups to assess the science and engage with stakeholders
- Supply chain management
- Rigorous communication of initiatives to consumers
- Proactive participation in industry eco-initiatives (in applicable sectors)
- Thorough understanding of the business case for environmentally salient product development

- Increasingly tangible repercussions
- Product differentiation
- Number of companies increasing

For a copy of the report please visit
www.innovestgroup.com