Alpha from Sustainability
Part 2: Investment Value Chain Discussion
Chemicals sector

- Commodity Chemicals
  - Highly commoditized, low margin business, cyclical
- Specialty Chemicals
  - Agrochemicals
  - Flavours and Fragrances, Nutrition
  - Specialty catalysts (automobile/recycling)
  - High performance plastics, engineering resins
  - Industrial Gases
  - Paint, coatings
Europe’s largest chemicals companies

- **Air Liquide**
  - Manufactures industrial and medical gases
    - (O2, H2, N2 etc.)

- **BASF**
  - Manufactures a broad range of chemicals
    - incl fertilizers, pesticides, petrochemicals, polymers and resins

- **Johnson Matthey**
  - Auto–catalysts and recycling
Europe’s largest chemicals companies

- Solvay
  - Chemical and plastic products
- Syngenta
  - Crop protection products and seeds
- Umicore
  - Auto-catalysts and recycling
Akzo produces decorative paints, performance coatings and specialty chemicals.

- The **Decorative Paints** segment supplies a full range of interior and exterior decoration and protection products for both professional and do-it-yourself markets.
- The **Performance Coatings** segment engages in general industrial coatings, protective coatings, automotive vehicle refinishes, aerospace coatings, coil and extrusion coatings and packaging coatings.
- The **Specialty Chemicals** segment includes such as disinfectants, plastics, soaps, detergents, cosmetics, paper and asphalt.

The company was founded in 1994 and is headquartered in Amsterdam, Netherlands.
Dutch chemicals companies: Royal DSM NV

- DSM operates in the following segments: Nutrition, Performance Materials, Polymer Intermediates, and Innovation Center.
  - The **Nutrition** segment focuses on human nutrition and health, animal nutrition and health, and personal care.
  - The **Performance Materials** segment makes synthetic fibers, engineering plastics, and resins used in coatings
  - The **Polymer Intermediates** segment supplies key intermediates to DSM Engineering Plastics and also sells some intermediates to the market
  - The **Innovation Center** segment develops businesses, and includes the Business Incubator and Emerging Business areas; and DSM Venturing, which actively invests in start-up companies that create innovative products and services in health, nutrition, and materials.

- The company was founded in 1902 and is headquartered in Heerlen, Netherlands.
Air Liquide

Over 60% of the Group’s R&D budget is focused on applications to protect life and the environment. The Group’s main innovation tracks in the environmental sphere are:

- Hydrogen, a clean energy carrier
- CO2 capture and storage
- Photovoltaics
- Oxycombustion
- 2nd-generation biofuels
AkzoNobel

- “Our 2020 targets are based on creating more value from fewer resources (measured by a new Resource Efficiency Index)”
- “Creating business value through products and solutions which provide both functionality and other sustainability benefits, as well as cost savings from operational efficiencies. Target: 20 percent revenue from eco-premium solutions with a downstream benefit by 2020”
BASF

“We minimize risks by using our materiality analysis to identify relevant issues early on, and through operational excellence in our business processes.

- We set ourselves globally uniform standards for the environment, safety, security, health protection, product stewardship and compliance, as well as labor and social standards.
- We conduct internal audits on process and occupational safety as well as environmental and health protection.
- We review labor and social standards within the framework of a monitoring system. Ecological and social criteria are also relevant for us in the selection of our suppliers.”
Sustainability meets profitability?

**DSMN.AS**

- DSM

  “Sustainability continues to be an important business driver in addition to being our core value and responsibility.

  - Our ECO+ solutions, which provide customers with clear ecological benefits over more conventional products, are growing faster and more profitably than non-ECO+ sales. They now account for 45 percent of all DSM sales and over 90 percent of our innovation pipeline.

  - In the year, we also began developing a comparable People+ strategy for those products that improve the lives of people. With the People+ program, we make the people element of People, Planet and Profit more tangible, transparent and comparable, as we have done for planet with ECO+.”
Johnson Matthey

“There are two key business drivers for sustainability which engender responsible business practices and support future growth.

- The first focuses on our internal operations and on designing and manufacturing our products more efficiently using fewer resources. This approach helps us to reduce our costs and at the same time reduces our impact on the planet.

- The second driver concerns our products and services and focuses on developing improved, more efficient solutions for our customers. By doing this we can enhance our customers’ performance and improve their sustainability footprint which, in turn, will improve our competitiveness.”
Sustainability meets profitability?

SOLB.BR

- Solvay
  - A “Product-Application Combination” is assessed according to two dimensions:
    - the risk related to the environmental impact of manufacturing
    - the degree to which the product in this application is in line with the solutions consumers are seeking to address their own sustainable constraints
  - Currently, our portfolio meets 36 of “Product-Application Combinations” matching solutions sought by customers in order to be more sustainable and ultimately delivering environmental benefits to the end consumer.
Syngenta

“We are developing complementary solutions based on genetics, crop enhancement chemistry and improved agronomic practice to **improve water use efficiency**. This is a key area of concern for growers, as competition for water resources will increase with population growth, urbanization and through the effects of climate change.

We have launched our first drought tolerant corn variety in the US – AGRISURE ARTESIAN™.” (protecting yield under water stress)
Sustainability meets profitability?

UMI.BR

- Umicore
  - “Umicore has a world leading position in the field of cobalt-based materials for the widely used Lithium-ion rechargeable batteries. These batteries are increasingly being used in environmentally friendly hybrid cars, which have more exacting requirements in terms of the battery’s weight, power and resistance to shock and heat.”
Example: PRI’s integration framework

**Figure 1: Integrating ESG analysis into listed equity analysis**

- **ECONOMIC ANALYSIS**: Understanding how ESG factors affect economic growth and macro themes, such as resource scarcity.
- **INDUSTRY ANALYSIS**: Understanding how ESG factors influence consumer preference and regulatory change, such as environmental legislation.
- **COMPANY STRATEGY**: Understanding how a company manages ESG risks and opportunities, for example in supply chain management.
- **FINANCIAL REPORTS**: Understanding how ESG factors impact on earnings growth, operational efficiency, intangible assets and underlying cash flows.
- **VALUATION TOOLS**: Understanding how analysts are integrating ESG considerations into valuation tools, such as discount rates and economic value added.

**Case studies:**
- **ECONOMIC ANALYSIS**: Newton Investment Management, Oddo Securities
- **INDUSTRY ANALYSIS**: Société Générale, ClearBridge Investments, Macquarie Securities
- **COMPANY STRATEGY**: UBS
- **FINANCIAL REPORTS**: Kepler Capital Markets, Cheuvreux, Carbon Tracker, Société Générale, Macquarie Securities, Citi, RobecoSAM, West LB
- **VALUATION TOOLS**: Citi, RobecoSAM, Macquarie Securities, West LB

Source: PRI research
Research & information flow

- Companies
- Sell-side analysts
- Buy-side analysts & PMs
- SRI research providers
- Asset owners

CFA Society Netherlands
ECONOMIC ANALYSIS

How do ESG factors affect macro economic factors (such as GDP growth, inflation, market access etc.)

Questions to consider:

- Do the following issues have any specific relevance to the valuation of Chemicals companies:
  - Demographic change
  - Resource scarcity
  - Climate-mitigation-influenced energy pricing
  - Physical impacts of climate change
  - Political stability
INDUSTRY ANALYSIS

How do ESG factors influence the shape of industries? How do they affect growth rates, consumer preference, regulatory constraints, the power of buyers & suppliers, innovation, new entrants & substitute products?

Questions to consider:

- How could climate mitigation measures affect energy prices and costs to commodity and industrial gas companies? Could energy-efficiency drive demand for new chemical products?
- How do health-conscious consumers affect the market size for the nutrition segment?
- Will growing global protein demand create new / alternative markets for chemicals companies?
- Which end markets are in most need of sustainability solutions? Construction? Autos? Which companies are best positioned to respond to these needs? How will they monetise this?
- What future for a bio-based economy for energy & materials?
- Do regulatory restrictions on chemicals limit sales growth or spur & reward innovation?
COMPANY STRATEGY

How do ESG factors influence the competitive positioning and performance of individual companies (within a sector)?

Questions to consider
• Do sustainability regulations create opportunities for some companies relative to others?
• Are resource constraints having any impact on feedstock prices? Are some companies positioned relatively well to others?
• In which areas is sustainability-based R&D giving rise to new patents?
• From which customer segments is sustainability-related demand strong?
Can ESG factors be fed into the income statement (revenues, costs, margins), the balance sheet (capex, intangible assets) or cashflow statement?

Questions to consider

- **P&L:** Where can eco-products or socially-purposed products deliver greater market share & volume growth? Where are they needed for client retention & revenue protection?
- **P&L:** Where can eco-products or socially-purposed products lead to lower operating costs? Where higher margins?
- **BS:** Where do environmental standards force additional capex? Does this generate a return?
How can ESG factors be used to influence valuation tools – such as discount rates and economic value added?

Questions to consider

• Should valuation be adjusted to account for good / poor corporate governance?
• Which issues merit such adjustments?
• For which companies in the sector is this relevant?

• Does strong sustainability management justify adjustments to the discount rate? To beta? If so, by how much? Why?
In this sector, sustainability and corporate governance factors:

A. Are not material to valuation

B. May be material to valuation but are probably already priced in by the market

C. Have potential to deliver sustainability-driven ‘alpha’
Where in the valuation process, do you think sustainability factors are likely to have most impact?

A. Economic analysis
B. Industry analysis
C. Company strategy
D. Financial reports
E. Valuation tools