



THE GLOBAL COATINGS INDUSTRY: ON THE WAY TO RECOVERY

Cynthia Challenger

CoatingsTech, Contributing Writer

The recent global recession from 2008–2010 heavily impacted the coatings industry. The significant declines in the housing and automotive markets, coupled with the rise in unemployment, led to drastic reductions in consumer and industrial spending, including purchases of paints and coatings. For approximately the last year, reports have been far more positive; the unemployment rate has fallen, the automotive industry has experienced record growth around the world—and in at least some parts of the United States—housing starts and existing home sales are on the rise. What does all this mean for the global coatings industry in terms of its recovery, and what might be expected in the coming months?

A LOOK AT THE NUMBERS

The global coatings industry in 2014 is valued by market research firm Kusumgar, Nerfi & Growney (KNG) at \$125 billion. The architectural and OEM segments each account for approximately 41% (\$51 billion), with the remainder attributed to the special purpose segment. KNG pegs the total volume of global coating sales in 2014 at 86 billion wet formulated pounds, with the architectural, OEM, and special purpose sectors accounting for 58%, 29%, and 13%, respectively.

In dollar terms, the Asia Pacific region accounts for 40% of the global coatings market, with sales rising at an annual rate of 8%. China is the largest contributor in this region, according to principal consultant Steven Nerfi. Europe, including both western and eastern countries and Turkey, is the second-largest market at 28% and is growing at 2% annually. North America accounts for 21% of global sales in dollar terms, and Nerfi pegs the annual growth rate in this region at 1%. KNG attributes the remaining 11% of sales to South and Latin American countries, Russia, and several others, and estimates a 5% annual growth rate for these markets.

When broken down by formulation type, solvent-based coatings take the largest share of global coatings sales in dollars at 48%. Not surprisingly, however, they have the

lowest annual growth rate at 4%. Water-based formulations come in second, with a 40% market share and a growth rate of 5% per year. Powder coatings and radiation-cured coatings are well behind at 9% and 2% of the market, respectively, but also have the highest growth rates at 8% and 7%. The remaining types of coatings, including 100% solid liquid coatings, account for the remaining 1% of global revenue and are growing at 55%, according to Nerfi. "Globally, solvent-based coatings are still dominant because there are many places in the world where strict environmental regulations have not yet been put into place. However, the trend towards more environmentally friendly technologies, including higher solids and waterborne formulations, continues," Nerfi observes.

When questioned about expectations for continued growth, Nerfi anticipates that the blockbuster levels of production seen before the recession will not return, and that the modest levels of growth experienced in 2014 will be the norm.

INDUSTRY PERCEPTIONS

CoatingsTech surveyed a wide range of industry experts to gather the perspectives of different players in the coatings value chain on where the paint and coatings industry is today compared to where it was prior to the recession, both overall and in different regions and major sectors of the market. Participants included Paul Juras, global marketing manager, crosslinkers and Stefan Smeets, global marketing manager, powder coating resins, both with Allnex; Eric J. Kaiser, business director—Americas for Arkema Coating Resins; Steven Sternberger, director of industrial marketing, NAFTA, for coatings, adhesives, and specialties with Bayer MaterialScience LLC; Mike Crosby, transportation segment manager for the dispersions & pigments division of BASF Corporation; Barry Chadwick, Benjamin Moore's senior vice president of operations; Brad Mondla, marketing manager, Americas for Celanese; Daniel Murad, president and CEO of The ChemQuest Group; Sylvia Insogna, marketing director,

North America for Dow Coating Materials; Julie Vaughn, vice president of marketing & business development with Emerald Performance Materials; Jennifer R. Turner, marketing manager with Evonik Coating Additives; Robert Poemer, business unit leader at Heucotech, Ltd.; David Tierney, global business director for building products with Lonza Industrial Solutions; and Michael D. Brown, president of StrategyMark, Inc.

CT: How well do you think the coatings industry has recovered thus far, overall?

Robert Poemer, Heucotech: In our experience, following the economic crisis in 2008/2009, the global coatings market has been recovering, but quite slowly.

Julie Vaughn, Emerald Performance Materials: Overall, we see a stable global growth environment today and believe that the overall coatings market has nearly recovered to pre-recession levels. However, the demand is stronger for materials that enable low- and zero-VOC solutions and can still deliver value and premium performance.

Steven Sternberger, Bayer MaterialScience: We believe that the coatings industry has rebounded beyond pre-recession levels and is experiencing worldwide growth. Importantly, the industry has turned from a cost-cutting mode to a new era of innovation across all segments. As examples, industrial coatings formulators are bringing new value to customers by reducing energy consumption and speeding factory lines, leaders in corrosion protection are launching next-generation products that increase productivity, and architectural coatings innovators are continuously raising the bar with higher-value technologies.

Paul Juras, Allnex: Generally, 2014 got off to a sluggish start due to the severe weather in North America and geopolitical events in Eastern Europe and the Middle East. Most recently, however, we have been encouraged by growth in Asia combined with recovery in both the United States and Europe. With the exception of some parts of Latin America, global automotive build rates and GDP growth have been favorable, and we see these improvements as good general growth indicators for the coatings market.

Eric J. Kaiser, Arkema Coating Resins: 2014 seems to have been an improved year for the coatings industry in most regions. We have seen stabilization of the market in Europe, North America has definitely shown signs of some recovery, and Asia continues to grow, albeit at rates that are well below the peak-growth rates of a few years ago. Although Brazil has lagged expectations due to ongoing economic and political challenges, we remain optimistic about this regional market in the medium to long term and we are investing there.

“INDUSTRIAL COATINGS FORMULATORS ARE BRINGING NEW VALUE TO CUSTOMERS BY REDUCING ENERGY CONSUMPTION AND SPEEDING FACTORY LINES, LEADERS IN CORROSION PROTECTION ARE LAUNCHING NEXT-GENERATION PRODUCTS THAT INCREASE PRODUCTIVITY, AND ARCHITECTURAL COATINGS INNOVATORS ARE CONTINUOUSLY RAISING THE BAR WITH HIGHER-VALUE TECHNOLOGIES.”

Michael D. Brown, StrategyMark: The overall coatings market continued modest recovery in 2014 across all regions, except Europe. The recovery at the market level is spotty, however; for example, the global automotive market is at record highs and the recovery is “complete,” with even the European automotive sector having a good year. The architectural segment has also shown relatively broad recovery, with the exception of Europe. Other segments such as the marine sector continue to struggle due to industry fundamentals.

Daniel Murad, The ChemQuest Group: In 2014, growth of the overall U.S. coatings market has been modest at slightly above GDP and approximately 3.5–4% over 2013. This improvement is driven by improvement in economic conditions in general, including the strong recovery of the construction and automotive markets and a return to healthier levels of industrial production.

Barry Chadwick, Benjamin Moore: 2014 has been a very solid year with consistent performance across all markets and areas of the United States, and business is up overall. However, we believe that there is a ways to go before the architectural coatings market will be fully recovered. During the recession, the market contracted approximately 30% in volume terms. If we look at where the market would have been without the recession and compared that volume to where it is today, we are still behind. The residential architectural market is still down by 15–20%, while the commercial segment is even further behind at just 50%.

“IN DOLLAR TERMS, THE ASIA PACIFIC REGION ACCOUNTS FOR 40% OF THE GLOBAL COATINGS MARKET, WITH SALES RISING AT AN ANNUAL RATE OF 8%.”



CT: How is the automotive/OEM sector faring?

Eric J. Kaiser, Arkema Coating Resins: In our experience, industrial segments in the United States have been slower to recover, but we have seen some improvement in recent months.

Michael D. Brown, StrategyMark: Global automobile sales surpassed pre-recession highs and hit record unit sales in 2014.

Brad Moncla, Cefanese: We have actually found that industrial/OEM coatings have fared best since the recession as part of a U.S. renaissance in manufacturing. Total

U.S. manufacturing output is approaching record levels last seen in 2007. The segments that have shown the most strength include automotive and appliance coatings.

Julie Vaughn, Emerald Performance Materials:

Growing consumer confidence has driven increases in discretionary spending, providing a significant boost in the automotive sector and vehicle production growth. With respect to OEM coatings, both the automotive and furniture/cabinet segments have fared best, due to greater adoption of new technologies to drive performance and value.

Steven Sternberger, Bayer MaterialScience: In addition to automotive coatings, we see heavy-duty truck and general industrial coatings experiencing significant growth.

Sylvia Insogna, Dow Coating Materials: Rail is a major bright spot for industrial coatings demand in North America, driven by the domino effect of increasing consumer confidence, increasing consumer spending, and the increasing need for the transport of goods and materials. Currently, rail car demand significantly exceeds supply and will fuel robust growth in OEM coatings through 2015 and into 2016, with a growing portion of this space going to waterborne acrylics for direct-to-metal application, due to a combination of durability and low VOC.

Mike Crosby, BASF Corporation: The global automotive market is expected to grow at around 4% again in 2015. China's 8.8% growth has been largely responsible for the 5% Asian growth. North American demand has been very strong, and another 3% is likely for 2015. European growth should range between 0-1% in the West and 2-3% in the East. Russia and Brazil have been off substantially in 2014, but some recovery should occur in 2015. Indian production is accelerating as well. Overall, continued low interest rates along with an expanding consumer base in China are the main drivers for continued automotive growth in 2015.

Daniel Murad, The ChemQuest Group: The OEM coatings sector in the United States through July 2014 was up 5% year on year, and the growing demand from

the automotive sector was a huge positive factor. In fact, new vehicle sales are up 5-10%, depending on the model. The industry is doing well on a global basis too; we expect the global growth of automotive coatings to be 3.5% year on year worldwide in 2014. Other OEM segments are improving as well, with furniture and appliance coatings of particular note.

Q&A What about the architectural segment?

Michael D. Brown, StrategyMark: The North American architectural market, specifically in the United States, appears headed for another strong year with growth in the mid-single digits, driven by recovery in discretionary spending by homeowners and new commercial construction. Recent growth trends in income, particularly for young families, point to further household development late this year and into 2015, which has a direct impact on both new and existing homes sales and subsequent coatings consumption. The European Union market had very modest recovery and continues to lag and disappoint. Consumer and construction spending continue to be affected by sovereign debt, fiscal issues, and geopolitical uncertainty. Asia remained a strong contributor to global architectural demand, however, with high single digit growth.

Barry Chadwick, Benjamin Moore: Much of the growth that we are seeing in the architectural coatings market is due to the strength of the housing market. The excess inventory that was a problem during the recession has been eliminated. As a result, new homes are being built, sales of existing homes are up, and even the commercial construction market is reviving. While growth in this sector has been slower than that seen for the residential market, it is coming back pretty rapidly now.

Daniel Murad, The ChemQuest Group: In the U.S. architectural market, we are seeing growth at a rate of 3.5% in 2014 over 2013 through August. On an annualized basis, new residential construction has



"GLOBAL AUTOMOBILE SALES SURPASSED PRE-RECESSION HIGHS AND HIT RECORD UNIT SALES IN 2014."



"IN ADDITION TO AUTOMOTIVE COATINGS, WE SEE HEAVY-DUTY TRUCK AND GENERAL INDUSTRIAL COATINGS EXPERIENCING SIGNIFICANT GROWTH."



reached ~430,000 units, which is up from the trough at ~350,000, but still a far cry from the peak level of ~1.6 million, so there is growth, but it is not overly strong. The new home inventory is about six months, which is a good indication the market is healthy, but it has been that way for the last year, and it was expected that a much stronger recovery would be under way by now, and that hasn't happened yet. In addition, resales of existing homes, which drive 80–85% of the architectural coatings market, seem to be fluctuating rather than steadily climbing. There are also pockets of strong growth (the South and West Coast) and areas where the market is still depressed (midwestern and New England states). The bright spot from our perspective is the commercial market, which traditionally lags the residential market by approximately 12–15 months and is finally picking up. This market is up about 8.5% year on year, with most increases due to private spending (office buildings, power generation, and manufacturing).

Brad Moncla, Celanese: On the architectural coatings side, there has been slow and steady growth since 2010 as employment has rebounded. The volume has not approached the pre-recession levels of 2005, however, because housing starts are still about half. On the other hand, the value of paint sold has eclipsed that of pre-recession levels and continues to grow. There are a variety of higher-end products, including paint-and-primer-in-one and deck and concrete restoration products, that have driven the revenue growth.

Robert Poemer, HeucoTech: Credit availability, reduced unemployment, improved consumer confidence, and an overall improvement in the economy are all positives for the architectural market. However, the market continues to stagnate with the hope of significant improvement still not being attained.

Sylvia Insogna, Dow Coating Materials: The architectural coatings industry has enjoyed a particularly strong market recovery from late 2013 through 2014, not only because of an increase in new housing starts, but also thanks to an overall feeling of improved wealth among consumers and a large inventory of repaint projects that were put on hold during the recession. During this time period, we've seen a notable increase in home improvement spending. Consumers are feeling more assured of the economic recovery, as well as their position in real estate. Houses are moving and that is helping to bolster price. For the consumer, it all adds up to a greater willingness to spend more to improve their homes.

"THE VALUE OF PAINT SOLD HAS ECLIPSED THAT OF PRE-RECESSION LEVELS AND CONTINUES TO GROW. THERE ARE A VARIETY OF HIGHER-END PRODUCTS, INCLUDING PAINT-AND-PRIMER-IN-ONE AND DECK AND CONCRETE RESTORATION PRODUCTS, THAT HAVE DRIVEN THE REVENUE GROWTH."

CT: What about the market for protective and marine/special purpose coatings?

Juife Vaughn, Emerald Performance Materials:

In general, the marine/protective segment has shown weakness due to low new-vessel build activity stemming from overbuilding in previous years. However, transport of oil/gas and chemicals is a growing portion of this segment, driving the need for corrosion protection and hydrocarbon-resistant coatings, and has shown strength over the past year. Conversely, the market for coatings used in packaging is faring relatively well. While packaging types have been evolving and trending away from traditional coatings, demand for coatings in packaging applications is still increasing.

David Tierney, Lonza Industrial Solutions: We are seeing a significant increase in the global manufacture of marine coatings as the shipbuilding industry recovers to support the growing need for oil transport.

Michael D. Brown, StrategyMark: We see metal packaging as continuing to show poor growth in the developed regions, although this decline is being partially offset by growth in emerging regions.

Robert Poemer, HeucoTech: Growth in the protective coatings market should derive from developments in the oil and gas sector and from infrastructure investments after the economic recession. In addition, the automotive OEM refinish market continues to be strong for the United States.

Daniel Murad, The ChemQuest Group: This market consists of field-applied coatings, particularly industrial maintenance and infrastructure coatings, and automotive refinish. Industrial maintenance is driven primarily by public and private construction, and largely public construction of roadways, bridges, pipelines, etc., and private activities such as oil exploration, rail transportation, and chemical manufacturing. Demand is growing, but only modestly. The automotive refinish market is primarily driven by accident rates, which are down due to increased safety regulations and expected to decline further once the U.S. Department of Transportation adopts standards for inter-vehicle communication and enough vehicles with such capabilities are on the road.

Sylvia Insogna, Dow Coating Materials: On the industrial side, we are seeing a steady but much more moderate rate of recovery because this segment is largely influenced by corporate spending on maintenance and capital improvement projects, as well as government investment in new build and maintenance of infrastructure. These expenditures track closely with growth in GDP, which has been steady but moderate.



"WE ARE SEEING A SIGNIFICANT INCREASE IN THE GLOBAL MANUFACTURE OF MARINE COATINGS AS THE SHIPBUILDING INDUSTRY RECOVERS TO SUPPORT THE GROWING NEED FOR OIL TRANSPORT."

CT: What about the different geographic regions—what differences in recovery have you seen?

Robert Poemer, Herculotech: The long-struggling European paint and coatings industry has been slowly recovering, but annual growth might not exceed 2% for the next five years. Russia, Turkey, and other Eastern European countries are expanding faster than the western countries. The United Kingdom and Germany have improved, and there is moderate recovery in France and Poland. Southern Europe has finally stopped declining. Countries that have been linked with negative headlines in the past due to continued market shrinkage, such as Greece, Italy, and Spain, are also showing signs of recovery. Still, these countries are struggling and their economies remain far from what they were before 2008. In contrast, the Asia-Pacific market is expected to grow at 8% or more during 2015 and will probably reach a global volume share of at least 50%. The U.S. market continues to grow in all sectors, including automotive, industrial, and architectural, although growth is varied, with automotive coatings continuing to exceed expectations, industrial coatings showing low single digit growth, and architectural coatings showing some signs of life.

Julle Vaughn, Emerald Performance Materials: The North American market recovery from the 2009–2010 recession has been slow but steady, with demand lagging well below the peak experienced from 2005–2007 but reaching an increased value. Growth in Asia continues to be strong, albeit at a lower level than seen in previous years, while the recovery in Europe continues to be sluggish due to weakness in the economy overall. Latin America has also shown solid growth in some countries, but performance in Brazil, Argentina, and Venezuela—which had once been strong—has been disappointing as a result of political factors, policies, and inflation. Growth in emerging markets, particularly China, continues to remain the highest.

CT: What are the current key drivers for growth in the coatings industry?

Steven Sternberger, Bayer MaterialScience: There are numerous drivers for each segment of the coatings market. Some overlap, while others are unique to a given sector. They range from auto builds and weather to housing starts and the availability of investment capital, plus of course consumer confidence and the general rate of economic growth.

Paul Juras, Alinex: Favorable capital investment forecasts in emerging markets such as China and Southeast Asia are, in our view, solid signs for sustained growth.

Jennifer R. Turner, Evonik Coating Additives: Shale gas is a game changer to drive growth for the U.S. economy and the coatings industry. Almost every day, some new announcement is made about shale gas or the construction or expansion of an ethane/ethylene cracker project. At the moment, there have been relatively few links between this phenomenon and the coatings industry. However, the potential for shale gas and the subsequent re-shoring of manufacturing back to the United States to drive growth in our industry is perhaps unparalleled.

Shale gas feeds the ethane/ethylene value chain, which is the basis for the raw materials for a large percentage of the manufactured goods we use every day. That also includes many of the raw materials for coatings. The higher availability of these raw materials, as well as the potentially positive impact on raw material costs, could drive industry growth, including coatings. Shale gas also has the potential to drive down energy costs, which is a major factor for energy-intensive production facilities in the United States.

Shale gas and re-shoring can lead to growth in employment, more consumer spending, and higher demand for coatings. However, we must be cognizant of the political and environmental hurdles associated with shale gas, which have not all been addressed.

Sylvia Insogna, Dow Coating Materials: New construction, reduced unemployment, improved consumer confidence, and increased consumer spending continue to be the fundamental drivers for growth in the architectural coatings industry. Additional growth also will come from emerging innovations that address global megatrends such as health and wellness, energy efficiency, and sustainability. Likewise, growth in industrial coatings will rely on continued improvement in GDP and the ripple effects on government and corporate spending, with opportunities for additional growth from innovations that open up new application spaces for coatings.

Current examples include the use of insulation coatings to replace traditional materials for industrial piping, as well as coatings for sound damping in automobiles and appliances.

In addition, in the architectural market, we're seeing a subtle shift in DIY versus contractor sales, with the contractor market recovering more strongly at the expense of the DIY market. Many attribute this shift to the increase in new residential builds, but our research tells us that this

"IN THE ARCHITECTURAL MARKET, WE'RE SEEING A SUBTLE SHIFT IN DIY VERSUS CONTRACTOR SALES, WITH THE CONTRACTOR MARKET RECOVERING MORE STRONGLY AT THE EXPENSE OF THE DIY MARKET."

trend is less about new home starts and more to do with our overall aging population. A greater percentage of consumers fall into an older age bracket that prefers to hire contractors versus completing home improvement projects themselves. Coupled with an increase in consumer confidence, this demographic shift will favor the contractor market over the DIY market in terms of recovery and growth, albeit slightly, for the foreseeable future.

Michael D. Brown, StrategyMark, Inc.: For the most part, emerging markets continue to drive the global coatings industry, with some increasing boost from North America, particularly in the architectural and automotive segments.

Brad Moncia, Celanese: The key current drivers that will impact the coatings industry in the near term include the slow recovery in employment and consumer confidence. Expenditures on big ticket items such as cars and appliances will continue to show strength.

Julie Vaughn, Emerald Performance Materials: There are a number of positive trends that will continue to drive growth for the coatings industry. For example, new home starts continuing to rise, modest growth in commercial building, and economic growth leading to consumer confidence and corresponding increased spending on home owner improvements will all drive growth in architectural coatings. Light vehicle production is on the rise and has finally recovered to pre-recession peak levels, which will drive increased use of special purpose coatings. Overall industrial production has been increasing at a greater rate than that of the overall GDP, which drives industrial and OEM coatings. Also contributing to growth is the stability of raw material costs, particularly for titanium dioxide.

Eric J. Kaiser, Arkema Coating Resins: Innovation and cost control continue to be key drivers across all segments. VOC reduction and an overall shift to more environmentally benign formulations have been key drivers for some time now, particularly in the architectural coatings segment.

David Tierney, Lanza Industrial Solutions: Government legislation and fiscal control strongly affect the building of new homes, which directly impacts architectural paint consumption. We have seen this effect in particular in China, the largest market worldwide.

Robert Poemar, Heucotech: For all regions, research and development in the coatings industry is continuously driven by the increasing ecological awareness of the end user, as well as legislative requirements resulting in a growing demand for eco-friendly and sustainable product solutions. Green technologies, high performance properties, and efficiency enhancements are still the major driving factors in the pigment industry. On a global basis, sustainability factors such as energy savings, preservation of resources, and replacement of environmentally concerning products or raw materials are becoming

increasingly important to the industry. In addition, government investments, population growth, social housing programs, and the introduction of new technologies will provide opportunities in the future for gaining new business.

Barry Chadwick, Benjamin Moore: In addition to the shift from DIY to contractors, which we also see as an indication that people have more money to spend and thus as a very positive trend for the architectural coatings market, we are seeing a significant growth in demand for premium products. This trend reflects a greater interest in performance rather than price, which was driving purchasing decisions during the recession. We also expect a shift in focus from very low- and zero-VOC products to zero-emission products, because the technology has advanced to the point where there is no compromise on performance with zero-VOC formulations. Finally, there is growing interest in higher-performance, purpose-built coating products that are designed to meet the needs of specific applications, such as vinyl siding. The move to water-based systems is also driving the development of new resins and additives designed to address performance-related issues that are unique to these systems, such as greener biocides that prevent microbial growth but are not harmful to end users or the environment.

Daniel Murad, The ChemQuest Group: We are also seeing the zero-VOC trend in architectural coatings, with a number of companies going beyond regulatory requirements to even lower VOC levels. As a consequence, vinyl acetate ethylene (VAE) resins have become more significant as alternatives to vinyl acrylics. The use of softer resins has presented some challenges with respect to maintaining applied coating properties, though, such as stain resistance, blocking, and gloss, which is driving the development of self-crosslinking resins and other new technologies. The concept of user friendliness also continues to be important, with coatings manufacturers focused on giving the end user a better experience while also expanding the painting window to wider temperature ranges and wet weather.



"OVERALL INDUSTRIAL PRODUCTION HAS BEEN INCREASING AT A GREATER RATE THAN THAT OF THE OVERALL GDP, WHICH DRIVES INDUSTRIAL AND OEM COATINGS."



CT: Are there any key headwinds that the industry must face?

Julie Vaughn, Emerald Performance Materials: We don't anticipate any major headwinds in the U.S. market in 2015. The U.S. debt is a drag on overall GDP growth and is lowering growth by 1%, according to some economists, which is slowing the recovery. We do also expect growth in China to be somewhat reduced, based on reports of new construction overbuilding and high vacancy rates.

Stefan Smeets, Ailnek: Despite some optimism mid 2014, partially stimulated by government actions to meet GDP growth targets, the economic recovery in China remains uncertain. The slower domestic growth could further stimulate Asian competitors to aggressively enter the European and American markets. Also in Europe, the manufacturing sector lost further growth momentum over the last few months, and real GDP growth has been revised downward to below 1% in 2014. Therefore, the European Central Bank announced in the beginning of September a further decrease in the interest rate of 10 basis points to a historical low in order to further improve credit supply. In addition, certain trade agreements (e.g., Korea) are negatively impacting European competitiveness, both for raw materials and finished goods.

With respect to raw materials, increasing imports from Asia, both raw materials and coating resins, has placed enormous pressure on the profitability of key suppliers, which are focusing their future capital investments in Asia.

Eric J. Kaiser, Arkema Coating Resins: While there is a reasonable level of stability for certain raw materials, others are experiencing upward cost pressure. Vinyl acetate is noteworthy as a key raw material in the architectural coatings segment. In the United States, most suppliers have been under sales control or force majeure for several months now. While this near-term situation is expected to improve by the end of the year, there have been permanent capacity shut downs in Europe that will tighten the global supply/demand balance, looking to next year.

Barry Chadwick, Benjamin Moore: We are expecting some inflation in raw material prices as suppliers attempt to gain back some of the margins they lost during the recession, with a possible increase of 3-5%. We also anticipate that trucking shortages will be an issue for all industries in 2015. The workforce shrank significantly during the recession and has not been replaced. New restrictive regulations limiting driver hours and affecting other aspects of the trucking business have contributed to a reduction in new entrant numbers. There is therefore significant competition for trucking services. There is also some concern about shortages of painting contractors, particularly in cities. Some larger painting firms that serve the commercial/industrial market are having difficulty finding skilled painters, because many left the industry during the recession and moved on to other jobs.

Sylvia Insogna, Dow Coating Materials: On the industrial side, funding for capital improvements and infrastructure maintenance will continue to be a challenge; however, continued, albeit modest, growth is expected in North America due to the need for maintenance of aging infrastructure and pockets of opportunity such as shale gas development and the previously mentioned increase in demand for rail transportation.

Brad Moncla, Celanese: A key headwind facing the U.S. architectural coatings market for the remainder of 2014 and into 2015 is higher mortgage rates and their potential impact on existing home sales. The U.S. Federal Reserve at some point will raise interest rates, which will likely have a moderating effect on home sales. The increase in mortgage rates in 2013 caused a 10% drop in sales.

David Tierney, Lonza Industrial Solutions: For the architectural and marine coating sectors, regulatory restrictions and the public and customers' perceptions of the environmental impacts of coatings are a major concern.

CT: Is there anything of particular note that occurred in 2014 that you believe has had or will have a significant impact on the industry?

Sylvia Insogna, Dow Coating Materials: Nearly every part of the coatings supply chain felt the effects of the extreme weather events in early 2014 that were associated with the Polar Vortex. Extremely cold temperatures created challenges for raw material production and, combined with heavy snow, had an impact on transportation and supply. On the retail side, many exterior paint projects were pushed further into the spring, contributing to a delayed start to the paint season as the weather temporarily held back coatings demand. On a brighter note, we saw the introduction of high quality paints that pushed performance boundaries and reached new levels of performance in key areas such as hiding and stain resistance. These high quality paints have established new price points in the premium paint segment, and their success demonstrates that consumers are willing to pay more to get more.

"WE ALSO EXPECT A SHIFT IN FOCUS FROM VERY LOW- AND ZERO-VOC PRODUCTS TO ZERO-EMISSION PRODUCTS, BECAUSE THE TECHNOLOGY HAS ADVANCED TO THE POINT WHERE THERE IS NO COMPROMISE ON PERFORMANCE WITH ZERO-VOC FORMULATIONS."



Steven Sternberger, Bayer MaterialScience:

Increased "re-shoring and near-shoring" and global investment in industry and infrastructure throughout the North American region is having a significant, positive impact on the regional coatings market.

Robert Poemer, HeucoTech: Every political crisis has a deep impact on the global coatings industry. As one current example, the crisis in Ukraine will have a significant impact for the slowly recovering Western European economy. In the worst case scenario, companies based in Europe could have problems with their supply chains, particularly those with manufacturing plants in Russia. Specifically, car producers in Germany could be in trouble, because much of their manufacturing takes place in Russia. There could consequently be an impact on the local automotive OEM paint industry.

Eric J. Kalsner, Arkema Coating Resins:

Accelerated industry consolidation was an important development in 2014 with several significant acquisitions among coating producers. This has the effect of increasing competitive intensity in an already highly competitive market.

Daniel Murad, The ChemQuest Group: The cost of money has come down and valuations are up. As a result, it is now a seller's market for all of those companies that waited to put their businesses on the block. Given the current situation, we expect merger and acquisition activity to pick up in 2015 beyond the recently heightened levels experienced this year.



"A KEY HEADWIND FACING THE U.S. ARCHITECTURAL COATINGS MARKET FOR THE REMAINDER OF 2014 AND INTO 2015 IS HIGHER MORTGAGE RATES AND THEIR POTENTIAL IMPACT ON EXISTING HOME SALES."

home furnishings. Higher interest rates will also slow capital spending, but this decline will be offset by more maintenance and discretionary spending on capital in-place and infrastructure.

Stelan Smeets, Alinex: Looking into 2015, most macroeconomic indicators show modest growth, with clear regional differences as in 2014. Further consolidation of raw material and coating suppliers is expected.

Additionally, key coating resin suppliers will need to compete in emerging countries against well-established local resin manufacturers. The industry position on key chemicals of concern is increasingly being influenced by public opinion, and thus addressing these issues is becoming a major driver of new product development, a situation that will be even more evident in 2015.

Julie Vaughn, Emerald Performance Materials:

Overall, we expect modest, steady growth. There is a continued focus on VOC reduction globally, and China is beginning to address its pollution problems. New VOC tests, such as the chamber test (ISO 16000-6), are being embraced in certain

segments, which will further drive down VOCs and influence raw material selection preferences. The drive to reach zero VOCs will also continue to promote innovation across the supply chain. As we have seen, substitution of softer resins as a route to lower VOCs can lead to other performance challenges, such as poor blocking, stain resistance, and scrub resistance. Technology continues to be developed across the supply chain to address these performance challenges. Recently, there has been heightened concern about food safety, including the migration of chemicals from packaging into food. This trend will also influence the selection of ingredients used in coatings, adhesives, inks, and other materials required for packaging applications.

Barry Chadwick, Benjamin Moore: We expect that 2015 will be better than 2014. We are very optimistic about the demand for residential architectural coatings given the strong signs coming out of the housing market, and we anticipate good growth in demand for commercial architectural coatings, particularly in healthcare. At the same time, we are not anticipating any major capacity shortages for raw materials or significant regulatory changes. Consequently, we expect continued market performance with positive growth.

David Tierney, Lonza Industrial Solutions: We are optimistic that the global architectural market will continue to grow as the trend towards urbanization continues, especially in Asia. ●

CTA What are your expectations for 2015?

Steven Sternberger, Bayer MaterialScience: We expect next year to bring continued solid growth in North America and continued but slower growth in Asia. We are also cautiously optimistic about the growth potential in Europe.

Michael D. Brown, StrategyMark: Industry growth will likely remain even with 2014, but with slightly different drivers. Slowing growth in emerging markets will be offset by slowly improving growth in North America and possibly Europe. The negative impact of higher interest rates on housing will be offset by faster-growing household development. Automotive market demand will flatten and possibly decline slightly as interest rates rise, but also because consumers will shift their spending to other discretionary items, such as appliances, electronics, and