

by Scott Detiveaux Orr & Boss, Inc.\* utomotive OEM (Original Equipment Manufacturer) coatings are coatings that are applied to automobiles, light trucks, vans and sport utility vehicles, and associated vehicle parts in a factory environment. This category encompasses electrodeposition and other primers, primer surfacers, colorcoats, basecoats, and clearcoats for both plastic and metal substrates used on the exterior, interior, and underbody of the referenced vehicles. Included in this segment are coatings for the main body that are typically applied at an assembly plant of the vehicle manufacturer, as well as parts manufactured by independent tier suppliers that paint components at their own facilities.

The automotive OEM coatings segment is an important component of the global coatings market. One of the largest industrial segments, it comprises approximately 7.5% of the value of the total coatings market, representing roughly \$7 billion in sales for 2008. The current global economic downturn has affected virtually every industry, including paint and coatings. Since the demand for automotive OEM coatings is inherently linked to automobile production, the dramatic decline in automobile production over the past two years has had a significant impact on coatings demand.

In 2008, the International Paint and Printing Ink Council (IPPIC) retained Orr & Boss, Inc., a leading U.S.-based international management consulting firm, to prepare a comprehensive, in-depth market analysis entitled Global Paint and Coatings Industry Market Analysis Report (2007–2012). Coatings market data presented in this article is based on the intensive market research conducted for the report and examines how the continuing downturn in the global economy impacts the automotive OEM coatings market.

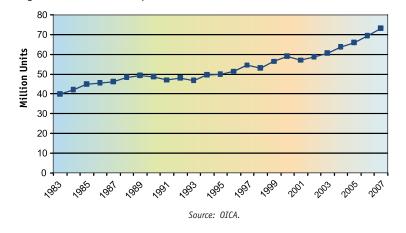
### MARKET OVERVIEW

Two significant trends are affecting the demand for automobile OEM coatings. The first is the aforementioned decline in vehicle production. The second, related trend is a shift in regional production. Both of these trends have long-term implications for the industry. Over the period 2002–2007,

<sup>\*44450</sup> Pinetree Dr., Ste. 203, Plymouth, MI, 48170.

# Automotive OEM Coatings Market: Impact of the Global Economic Downturn

Figure 1—Global vehicle production, 1983-2007.



global automobile production grew at an annual rate of 3.9%. Growth during this period was slightly above the historical annual growth rate in global vehicle builds over the past 10 to 15 years. *Figure* 1 depicts annual vehicle builds over the past 25 years.

The recent trend in growth rates, however, is a far cry from what has been experienced historically. From 2007 to 2008, global light vehicle production fell by over 5%. Forecasts for 2009 have the market suffering a *further* decline of 9 to 12%. The implications for the coatings industry are significant. Global vehicle production for 2009 is forecast to be similar to production levels of 2004; therefore, demand for automotive OEM

coatings is forecast to decline to similar levels. This represents a decline in automotive OEM coatings demand of approximately 15% compared to 2007 demand.

Recently, the International Monetary Fund downgraded its 2009 global GDP forecast to 0.5% annual growth. It is, however, projecting an annual growth of approximately 3% for 2010. This is consistent with a recovery in the global economy occurring sometime between mid-year 2009 and early 2010. Beyond 2010 the forecast is for a return to historical economic expansion levels. The pattern of recovery for the global automotive market is forecast to be similar, with one notable exception: the decline in vehicle demand has far outpaced the decline in overall economic activity and, consequently, there is a much bigger hole to dig out of. Current

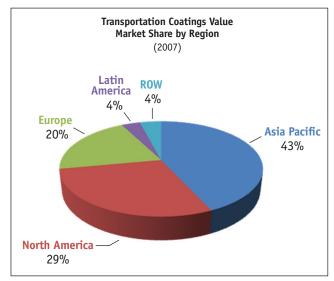
forecasts suggest that global vehicle production will not return to 2007 levels until 2011 or 2012. Demand for automotive OEM coatings is forecast to follow suit.

### REGIONAL VARIATION

The second macro trend affecting the market for automotive OEM coatings is the shift in regional production. In 2007, the Asia Pacific region accounted for approximately 43% of all transportation coatings demand. This is consistent with overall regional distribution of vehicle production. *Figure 2* depicts overall transportation coatings value by region for

www.coatingstech.org June 2009 37

Figure 2—Global transportation coatings value by region.



Source: Orr and Boss estimates

2007. This is a significant shift compared to 2002, when North America accounted for 40% of global transportation coatings value. For the period 2002-2007, automobile production in North America grew at an annual rate of approximately 2.5%. Over this same period, production in Asia Pacific grew at an annual rate in excess of 10.5%. This growth in Asia Pacific has largely been fueled by growth in China. According to the International Organization of Motor Vehicle Manufacturers (OICA), there were approximately 1.1 million cars produced in China in 2002. In 2007, China produced nearly 6.4 million cars. It is worth noting that cars produced in China are largely for domestic consumption. In January of this year, for the first time ever, China overtook the U.S. in terms of monthly car sales. If current trends continue, China would become the world's largest automobile market by 2010.

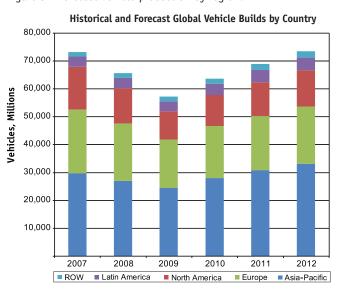
This shift in regional production distribution is forecast to continue over the next five years. Vehicle production in Western developed economies is not forecast to return to 2007 levels until roughly 2012, whereas production in China is forecast to continue to increase—albeit at lower than historical levels—throughout this timeframe. The result is that by 2013, Asia Pacific is predicted to account for nearly 45% of all vehicles produced, with the bulk of the growth coming from China. The increase in share for Asia Pacific primarily will come at the expense of North America. Europe's share of total production is forecast to be relatively constant, owing largely to growth in Eastern Europe. *Figure* 3 illustrates forecast growth by region.

As is the case with the overall decline in demand, the shift in distribution of regional production has significant implications for the automotive OEM coatings market. For the most part, automotive OEM coatings are produced in the region in which they are applied. Therefore, as car production shifts from traditional regions to emerging ones, coatings production will likely follow suit. Production shifts also have implications for overall demand. Automobiles intended for domestic consumption in Asia tend to be smaller than those produced for U.S. consumption. They also tend to have a greater use of plastic components. Both of these factors would tend to depress overall demand.

Given the ongoing discussion regarding the viability of the Big Three U.S. automakers, it is also worth noting that their share of vehicle production is forecast to continue to decline. In 2008, Ford, Chrysler, and GM accounted for nearly 60% of all light vehicles produced in North America. Current forecasts suggest that over the next five years the combined production share of the Big Three in North America will fall to less than 50%. This lost share is anticipated to be largely captured by Asian transplants such as Toyota, Hyundai, and Honda. A failure of any of the Big Three or major restructuring resulting in divestitures will likely accelerate this trend. The consequent shift in Big Three market share will have ramifications on market share of coatings suppliers and could open the door for increased participation in the North American automotive OEM coatings market by Asian coatings suppliers.

[Chrysler filed for bankruptcy on May 1, 2009, and GM filed on June 1, 2009—Ed.]

Figure 3—Forecast vehicle production by region.



Source: Orr and Boss estimates.

# MANEUVERING THROUGH THE DOWNTURN

As we have stated, the current economic downturn is having a significant impact on the global automotive market, and consequently also the global market for automotive OEM coatings. Companies across the entire coatings value chain such as raw material suppliers, formulators, and distributors are all struggling to manage their business in the face of declining demand. Successful companies are taking action to address the current market conditions. Strategies for survival include reducing operating costs, reducing working capital, and positioning the business for the anticipated market recovery.

To manage declining demand, automotive OEM coatings companies and their suppliers must reduce operating costs. Companies are re-evaluating business processes, work flows and organizational structures, and eliminating non-value-added activities. This includes not only manufacturing activities and costs, but also overhead costs. The automotive OEM coatings business has historically been service-intensive. In the current environment, suppliers can only afford to provide those services that directly or indirectly provide a return. Raw materials are by far automotive OEM coatings suppliers' largest component of cost. Minor savings can have a major impact and will immediately affect the bottom line. Suppliers are evaluating means of reducing these costs such as reducing material waste as well as evaluating alternative, low-cost sources of supply.

Working capital requirements tie up significant resources and affect the borrowing ability of a business. Inventories are a major contributor to working capital. Reducing inventories, and thus working capital, is a challenge for participants in the automotive OEM coatings marketplace. In many instances, coatings companies own the coatings material until the point of application. The challenge is to minimize inventory in a just-in-time environment without sacrificing service levels. Successful suppliers have worked to shrink the supply chain and to improve planning tools in an effort to manage the often conflicting goals of reducing inventories and maintaining service levels.

The current downturn in the automotive OEM coatings market is severe but the market will recover. Suppliers must be ready to capitalize on this market recovery when it occurs. Coming out of this recession, the needs and expectations of customers will likely have changed as they have attempted to manage these difficult market conditions. Suppliers must be able to adapt to these changes. Pricing strategies, credit terms, product mix, and service offerings may need to be altered to meet these shifting needs. Furthermore, the shift in regional auto production may require a reallocation of resources. Businesses that have responded to these changes will be in a position to capitalize on the inevitable recovery.

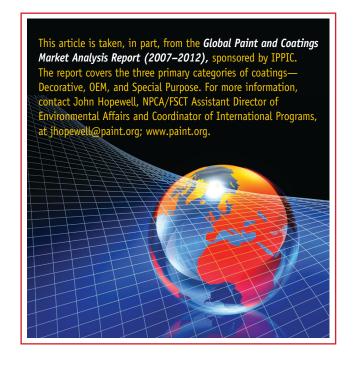
## **SUMMARY**

The automotive OEM coatings sector is a large and important part of the global coatings market. This market faces significant challenges as vehicle production, particularly in Western economies, has slowed dramatically. Furthermore, current forecasts suggest that global



vehicle production will not return to 2007 levels until 2011 or 2012. The recovery in the market will be disproportionate, with higher growth rates occurring in developing regions, particularly in China. This will exacerbate the ongoing shift in production market share away from North America and towards Asia Pacific. While production is shifting somewhat from Western to Eastern Europe, Europe's overall percentage of vehicle production will likely remain fairly constant.

Despite the current environment, automotive OEM coatings will continue to be a large and important part of the global coatings marketplace. The market will recover and grow as vehicle demand and production returns to historical levels. In order to enjoy this anticipated recovery, companies must survive the short-term crisis and position themselves to take advantage of the inevitable upturn. This will be accomplished by aligning costs, working-capital requirements, and product/ service offerings with the changing market.



www.coatingstech.org June 2009 39