The Changing Nature Of The Global Automotive OEM Coatings Market

European Coatings Conference 2013
Düsseldorf, Germany

Prepared by:
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November 12 & 13, 2013
Strategic Partnership with IPPIC

IPPIC’s *Global Paint & Coatings Industry Market Analysis* report has become the industry benchmark for reliable market data and forecasts.

Most recent edition was published in December 2012.

Global Coatings Market Analysis

- **1st Edition:** (2007 – 2012)
- **2nd Edition:** (2009 – 2014)
- **3rd Edition:** (2011 – 2016)

Thank you to IPPIC for the opportunity to share this data with you today.
# 11 Coatings Markets Investigated

1. **Decorative Coatings**
   - Professional Painters
   - Do-It-Yourself (DIY)

2. **Auto OEM Coatings**
   - Passenger Cars
   - Light Trucks
   - SUVs

3. **Transportation Coatings**
   - Heavy Duty Truck & Bus
   - Aerospace
   - Other Land Transportation

4. **Wood Finishes**
   - Wood Furniture, Cabinets, etc.
   - Flat Stock

5. **Powder Coatings**

6. **Coil Coatings**
   - Coil
   - Sheet and Strip
   - Extrusion

7. **Packaging Finishes**
   - Metal Container & Closures
   - Paper, Paperboard, Film & Foil

8. **General Industrial Finishes**
   - Non-Wood Furniture & Fixtures
   - Heavy Machinery & Equipment
   - Home Appliances
   - Other Industrial Products

9. **Automotive Refinish**

10. **Industrial Maintenance & Protective Coatings**

11. **Marine Coatings**
Geographic Regions Investigated

North America

Latin America

Europe

Rest of World (ME & A)

Asia Pacific
Presentation Agenda

I. Brief Overview -- Global Coatings Industry
II. Auto OEM as Part of the Global Coatings Industry
III. Global Industry Forecast
IV. Closing Thoughts
Global Coatings Industry -- 2012
End Use Segments: Volume vs. Value

2012 Volume by End Use Segment
34 Billion Liters

2012 Value by End Use Segment
$110 Billion USD

Source: Orr & Boss, Inc.

Note the Value (Average Price) Differences Between Industrial and Decorative Coatings
Global Coatings Industry -- 2012
Geographic Segment: Volume vs. Value

2012 Global Coatings Industry
Volume by Region
34 Billion Liters

2012 Global Coatings Industry
Value by Region
$110 Billion USD

Source: Orr & Boss, Inc.

Note: Asia Pacific has a lower average price and a different product mix than Europe.
Historical Growth of GDP by Region (2006 to 2011)

Global GDP: 4% CAGR

North America
Europe
Asia Pacific
Latin America
ROW

Sources: IMF; World Bank
How Has this Impacted Coating Growth? 
Regional Growth & Shifts -- Value

2006 Global Coatings Industry Value by Region
$89 Billion USD

- North America: 26%
- Europe: 32%
- Asia Pacific: 33%
- ROW: 5%
- LA: 4%

2012 Global Coatings Industry Value by Region
$110 Billion USD

- North America: 21%
- Europe: 27%
- Asia Pacific: 40%
- ROW: 5%
- LA: 7%

3.6% CAGR

<table>
<thead>
<tr>
<th>Region</th>
<th>CAGR 2006 - 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Europe</td>
<td>0.8%</td>
</tr>
<tr>
<td>Asia - Pacific</td>
<td>6.9%</td>
</tr>
<tr>
<td>Latin America</td>
<td>11.4%</td>
</tr>
<tr>
<td>ROW</td>
<td>4.6%</td>
</tr>
<tr>
<td>Total</td>
<td>3.6%</td>
</tr>
</tbody>
</table>

Source: Orr & Boss, Inc.
How Has this Impacted Coating Growth?
Regional Growth & Shifts -- Volume

2006 Global Coatings Industry
Volume by Region
29 Billion Liters

2012 Global Coatings Industry
Volume by Region
34 Billion Liters

<table>
<thead>
<tr>
<th>Region</th>
<th>CAGR 2006 - 2012</th>
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</thead>
<tbody>
<tr>
<td>North America</td>
<td>-2.0%</td>
</tr>
<tr>
<td>Europe</td>
<td>0.1%</td>
</tr>
<tr>
<td>Asia - Pacific</td>
<td>6.2%</td>
</tr>
<tr>
<td>Latin America</td>
<td>4.8%</td>
</tr>
<tr>
<td>ROW</td>
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</tr>
<tr>
<td>Total</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

Source: Orr & Boss, Inc.
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Auto OEM Coatings - 2006

Distribution of Auto OEM Paint Produced – 2006
~$7 Billion on 1.3 Billion Liters

Source: Orr & Boss, Inc.
Vehicle Production

Light Vehicle Production by Region - 2007 to 2012

- **Asia - Pacific**: 6.3%
- **Europe**: -4.1%
- **North America**: -2.1%
- **Latin America**: 4.6%
- **ROW**: 9.0%
- **Total**: 1.7%

Source: IHS Automotive
Auto OEM Coatings - 2012

Distribution of Auto OEM Paint Produced – 2012
~$8 Billion on 1.6 Billion Liters

Source: Orr & Boss, Inc.
Auto OEM Coatings - 2012

Distribution of Auto OEM Paint Produced – 2012
~$8 Billion

- Asia Pacific: 49%
- North America: 23%
- Europe: 20%
- Latin America: 5%
- ROW: 3%
- China: 24%
- Japan: 12%
- S. Korea: 6%
- India: 4%
- Other: 3%

Source: Orr & Boss, Inc.
Auto OEM Coatings Technologies

Estimated Distribution of Volume and Value of Automotive OEM Coatings by Layer - 2011

Source: Orr & Boss, Inc.

Estimated Distribution of Volume of Automotive OEM Coatings by Technology - 2011
Global Paint Suppliers

Top Ten Global Coatings Producers – 2012

Top 10 Suppliers Comprise Almost 50% of the Global Market.

Source: PCI Magazine
Auto OEM Coatings Suppliers

Five Suppliers Dominate the Global Auto OEM Coatings Market.

- **Regional Concentration**
  - The leading suppliers have varying degrees of penetration in the regional market.

- **Impact of Regional Shifts**
  - Paint formulators are dependent on the auto OEM’s for growth.
  - Changes in regional distribution of builds may shift market shares of the producers.

Source: Orr & Boss, Inc.
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Current GDP Growth Forecasts

- **Conference Board**: Forecasting global GDP growth of 3.1% to 2018.
  - **Uneven Growth**: Growth projected to vary widely by region. Europe, the US & other mature economies to lag global growth.
  - **China and India**: Still projected to lead the world but at a slower pace than in recent years.

Source: Conference Board, May 2013
Current GDP Growth Forecasts

Source: IMF April 2013
Income Growth Forecasts

GDP Per Capita Forecasts by Region – 2012 to 2017

Source: IMF World Economic Outlook, 2013
### Vehicles – Opportunity for Growth

<table>
<thead>
<tr>
<th>Region</th>
<th>2011 Vehicles Per 1000 People</th>
<th>2011 Car Parc (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>679</td>
<td>311</td>
</tr>
<tr>
<td>Europe</td>
<td>442</td>
<td>326</td>
</tr>
<tr>
<td>Latin America</td>
<td>191</td>
<td>114</td>
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<tr>
<td>Asia-Pacific</td>
<td>69</td>
<td>268</td>
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<tr>
<td>ROW</td>
<td>47</td>
<td>60</td>
</tr>
<tr>
<td>World</td>
<td>165</td>
<td>1,078</td>
</tr>
</tbody>
</table>
Forecast Auto Builds

Forecast Light Vehicle Production by Region - 2012 to 2017

Source: IHS Automotive
Global Coatings Industry -- 2012 Volume vs. 2017 Forecast

2012 Global Coatings Industry Volume by Region
34 Billion Liters

2017 Global Coatings Industry Volume by Region
40 Billion Liters

CAGR 2012 - 2017

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<tr>
<th>Region</th>
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<tr>
<td>North America</td>
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<td>1.2%</td>
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<td>Asia - Pacific</td>
<td>4.2%</td>
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Source: Orr & Boss, Inc.

~ $140 Billion USD
Auto OEM Coatings - 2017

Distribution of Auto OEM Paint Produced – 2017
~$11 Billion on 2 Billion Liters

Source: Orr & Boss, Inc.
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Auto OEM Coatings Growth Drivers

- Growth in auto OEM coatings demand is inherently linked to auto production.
  - Auto demand and production are linked to GDP and income levels.

- The good news is that GDP, incomes and auto production are all forecast to grow over the near term.
  - Growth rates will vary by region, but all are projected to show positive growth with developing areas leading the way.

- Due to projected increases in vehicle demand and production, auto OEM coatings demand is likewise projected to increase in all regions.
  - Asia-Pacific will continue to account for the majority of demand.
What Events Could Negatively Impact Forecasts?

- **Continued Sluggishness of the Global Economy?**
  - IMF & World Bank: Have downgraded their short-term global GDP forecasts.
  - IMF has lowered its forecasts for 2013 & 2014 for a fifth consecutive time.
  - Are we at an inflection point for long-term global growth?
    - Even in developing regions?

- **Economic Woes & Debt Issues for Europe & the USA**
  - **Europe:** Has already double dipped. Could it have its own “lost decade?”
  - Will high unemployment & mounting debt keep **USA** “stuck in the mud?”

- **“Thick as a B-R-I-C?” (Brazil – Russia – India – China)**
  - IMF - July 2013: “Downside risk still dominates for a longer-term growth slowdown in emerging market economies …”
  - Conference Board – May 2013: “A more significant slowdown is expected for most developing economies over the next year – and beyond.”
Final Thoughts

- The global auto OEM coatings market has weathered the economic crisis, but not without challenges.
  - High raw material costs and a lack of price leverage continues to squeeze margins.
  - While the market as a whole has rebounded, light vehicle production in Europe and US remains below 2007 levels and is projected to remain so for several more years.

- Coatings formulators and raw material suppliers continue to innovate and work to bring higher value products to the market.
  - Some of these innovations are showcased at this conference.

- Companies that adapt to the changing market conditions and continue to bring value to the auto OEMs and their customers will have the greatest opportunity for success.
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