"A World of Plastics Information"

APRIL 2008

Dear Colleague:

Correction continues cutbacks...deepening economic woes. Most of the global business scenarios are producing chronic slowing of business investment and expansion. This psycho-recession is real and causing concern for our industry's traditional expansionist and innovative stance. However, as we learned in the 90's and in the last decade, the business cycle is very much relevant and as most companies ride out the trough, this is an important few years ahead. Opportunities always abound at this stage in the cycle and new products, markets and applications are to be conquered – and some acquisitions will proceed as "bargains" abound, similar to housing exhibiting record low prices, affording rare opportunities for smart buyers.

We expect a spate of new Mergers and Acquisitions to accelerate in the second half of 2008 and continue into 2009. The expected correction of 2009-2010 has just arrived ahead of schedule due primarily to paucity of credit, triggered by the mortgage melt-down.

Global economic growth next year may be a tepid 2% next year, if at all...but some growth nevertheless. Preparing for an economic downturn is the key to surviving one!

Look for a drop in oil and gasoline prices soon...prices of oil and other commodities are out of whack with supply and demand, and use is all but stagnant. It appears that speculators have taken over many commodities, and the normal determinant factors such as the supply-demand ratios, and the emergence of China and India's growing usage, will once again influence pricing ...and the trend is for a retraction in pricing – good news for most resin feed stocks.

However, currency differentials show no signs of easing...especially the dollars dramatic slide, which shows no sign of rebounding soon. Meanwhile the yuan's appreciation against the dollar should slow down again. Combined with wage hikes in China and cuts in value-added tax rebates, it's raising the cost of many industrial materials, notably **plastics**, giving the U.S. a bit of a competitive edge.

TRENDS: We expect to see crude oil averaging about \$90/barrel this year and inflation at 3% based on that oil price. Of course, inflation in our industry will continue unabated at double digit amounts, based on that high oil price and continued pressure on demand from China and India.

A strong outlook for film and sheet is predicted with 6-7% growth rates sustainable in 2008. This, according to the Film and Sheet Business Index, compiled by Mountaintop Economics. Although packaging accounts for a great deal of this growth, our shapes industry will tend to mimic.

A look at Canadian markets shows that wholesalers had a 4.7% sales year over year increase in 2007 and Canada's manufacturing sector showed a 1% rise. With the Canadian dollar at or near parity with the U.S. dollar, this trend should continue in 2008.

OUTLOOK EUROPE: by Chris Parry, our Special Correspondent, embedded in the U.K.

Plastics are getting a real hammering in the press and other media at the moment. With my "conspiracy" hat on it could sound like a program of distraction to divert us from other more important issues. I even recently heard a BBC radio broadcast about Midway Island and how plastic flotsam is impacting sea-life and in particular the albatross population; and this is thousands of miles from the nearest continental mainland. In the UK the latest government initiative is against supermarket plastic bags. UK retailer, Marks & Spencer, will be charging £0.05 per bag in their food-halls from May. In Ireland where they now charge a tax on disposable plastic bags their use has fallen by 75%, (sounds like a good result). However, sales of plastic bin-liner bags rose by 200% over the same period. Don't these people realise that many plastic bags do actually get re-used for other things?

Green issues are a wonderful political tool to persuade voters that a government really cares, and at the moment it seems that the "villain" is plastics, and the "White Knight" riding to everyone's rescue is "biofuel". Putting the blame on plastics is a bit like blaming the car when someone gets hurt in a motoring accident. The problem is not plastics, the problem, (as always), is people. Sadly, too many people just don't care, and publicly heralded solutions to the problems of plastic waste disposal are at best ill-considered and are a great example of "a little learning" being a dangerous thing. The one thing that we can't do, however, is to bury our heads in the sand and ignore it. It's up to us in the plastics industry to take a lead, because if we don't, it's the "know nothing" politicians who will. Now that's off my chest, some European news items during the month:

There has been an interesting development following the administration of <u>Global EPP</u> in November last year. UK police have charged two men with possible fraud. These allegations centre on the financing of the company using machinery as security. <u>Wavin Plastics</u> is downsizing their plant at Balbriggan in Ireland due to a decline in the Irish construction industry. <u>Octal</u> will install a sheet extrusion plant as a major part of their huge PET resin manufacturing facility that will start up in Salah, Oman in August. In a direct resin to sheet operation they will have an 180,000 tonne APET sheet capability in addition to 150,000 tonnes of bottle grade PET resin. <u>Sabic Innovative Plastics</u> has launched a new Lexan film aimed at the electronics market. Lexan DMX film is a multi-layered film based on the DMX PC co-polymer. Initially manufactured in Mt. Vernon, Lexan DMX will be available globally.

OUTLOOK ASIA: by Mal Binnie, our Special Correspondent, embedded in the Pacific Rim

Concern is being shown throughout the Pacific Area with the continued credit crisis emanating from the USA. The only markets not affected at this time appear to be China and India. The Australian Reserve Bank raised interest rates in March for the 12th consecutive time since 2002. The cash rate is now at 7.25%, the highest it has been in 12 years. When will the turnaround take place??? Polycarbonate is poised to grow faster in Asia than the rest of the world. Global demand reached 2.7 million tones in 2005 and with an annual growth rate of 7% is expected to reach 4 million tonnes by 2010. Many of the 37 newly built or remodelled Stadiums in China for the 2008 Olympic Games have used PC for their structures. More than 35,000 sq m of sheet was developed by Bayer Sheet Europe for these applications.

INDIA: The consumption of plastics in India is moving upwards from 4.8 kgs (10.6 lbs) towards the world average of 15 kg (33 lbs). By 2012 India is expected to be the 3rd largest plastic market behind

USA and China. The construction market is predicted as one of the highest growth and with infrastructure spending planned to grow by \$US 69.5 billion during 2008-2011 international companies such as Mulford International are taking advantage of this growth and have recently added 6 engineers to their Indian team. This infrastructure growth as well as construction includes Airports, Power Plants, Ports, Roads and Sanitation all of which are projects that will benefit the plastics industry. Simi Jain, Rajoo Engineers is reported to have stated that the economic prosperity in India is the cause of plastics consumption increasing and as the economy is predicted to continue its growth so will plastics consumption increase.

CHINA: The Chinese Central Government has restated its target for GDP in 2008 at 8% growth. It also plans to create 10 million new jobs in urban areas and it also plans to hold inflation at below 4.8%. But many Chinese manufacturers are facing higher taxes, new labour laws, increasing energy costs and the growing demands of workers who are becoming increasingly sophisticated and educated. These factors are reported to be forcing many plastics manufacturers either up the Value Chain or in some cases to exit markets. Chinese suppliers are wondering how American consumers will react in the current economic slowdown. Will they buy more "made in the USA" products to protect the domestic economy or buy more cheaper imported products to protect their wallets? As costs in China rise the industry is examining their US markets carefully.

AUSTRALIA: ASI Plastics (Australian Signage & Industrial Plastics) has become a subscriber to our Newsletter and we hope to review their business in the next issue. ASI is located in Sydney, Melbourne, Gold Coast and with it's Head Office in Brisbane. They list in their product range ALUG Aluminium Composite panels, ExCel PC sheet, Vizion Glass and Vizion Flute Board. Halifax Vogel are now distributing DiBond, DiBond digital and Dilite lightwieight aluminium composites for interior and exterior signage and print applications. PACIA Australia announced the appointment of Geoff McAlpine to the position of Director Industry Development-Chemicals to support the CEO Margaret Donnan. Ausplas 2008 7-10 October reports a sharp rise in overseas exhibitors with 3 pavilions already confirmed for Taiwan and China. For Sign industry employees the Sydney Institutes short training courses are attracting more and more applicants. Training is led by Adam Lucas at adam.w.lucas@tafensw.edu.au. Also the Australian Screen Industry has been added to the list of trades currently experiencing skills shortages and are now able to claim subsidies for apprentices. For example a \$13,000 salary subsidy is available for mature age apprentices. The pressure to reduce the use of plastic bags continues in Australia with the South Australia Premier said to be preparing new laws to ban HDPE bags by year end. The talk of bag levies continues to be discussed. Vale. The plastics industry of USA and Taiwan bid farewell on 7th March to Tsing Tsung "TT" Chao, CEO of Westlake Chemical. He will missed by his many friends and business partners in SE Asia. Note: Vietnam Plastics Fair 2008. 13 – 16 May. Ho Chi Minh City, Vietnam.

<u>MANUFACTURER/DISTRIBUTOR BRIEFS</u>: <u>Spartech</u> lays off 350 people company-wide and closes plant in Minnesota. In PVC pipe news, <u>North American</u> is adding a plant in Arizona and Georg Fischer likewise in Beijing, China. <u>Quadrant EPP</u> and <u>Komatsu</u> team up with UHMW truck liners. <u>Eastman</u> increases Tritan PETG copolyester capacity almost 8%. <u>Erie Plastics</u> lays off half its workforce as demand for tubing used for packaging falls. <u>Flourotubing LLC</u> is to begin production at its first U.S. plant.

<u>INDUSTRY INTERVIEWS</u>: Bill Shields, Vice President, GEHR Plastics, USA Bill was born and raised in Wilmington, DE, graduate of LaSalle University, married with 2 children and one grandson.

Editors Note: On March 13, 2008, USA Today did a cover story about American attitudes toward the Iraq War and the unsettled sentiment about the War and the Economy. They interviewed 2021 adults by phone and in person. One of those interviewed in a conference room in Wilmington, Delaware, and whose photograph

was prominently displayed, is someone well known in our industry...<u>Bill Shields</u>. The importance of the subject matter led us to interview Bill immediately after his comments and picture appeared in the national press...herewith some of his thoughts.

- Q. When asked to describe the situation in Iraq in a few words, what was your reply?
- A. Sand!...it's easy to step in it, but its hard to get out.
- Q. What did you mean hard to get out? How does it apply to this war?
- A. I write business plans for my job. They have to come out correctly. It takes time and effort to produce a Plan that works. So I recognized that the plan to go into Afghanistan was a good one; and, the plan to go into Iraq was also a good one. However, I don't see a plan to leave Iraq.
- Q. Why is planning so important and how does lack of planning affect the outcome?
- A. At this stage of the game, with my experience, it appears to me that there isn't any plan to leave Afghanistan either. That apparently has been recognized by other people and this is turning into a major issue with the upcoming elections.
- Q. What do you think is the attitude of our soldiers and citizens towards the war?
- A. Part of my job requires me to travel. I run into our soldiers in the airports around the country and talk to them about their experiences. None of them have been outwardly against the war but all of them want to return to Iraq to be with their fellow soldiers. They don't so much as want to return to duty for the government as much as they have a loyalty to each other.
- Q. How has your background affected your attitude towards the current situation? How is it affecting your current business career?
- A. My father served in the US Navy in World War II. He was not injured and returned home safely. President Nixon signed the end of the Vietnam War while I was still in high school so I did not serve in the armed forces. Instead, I went on to college (as the original plan) and then into the world of business. My second "real" job was in working for a small thermoplastics manufacturer. I liked what I did and therefore stayed in the Industry for the past 25 years.

The War in Iraq has affected the United States in a myriad of ways. It has affected the people through deployment of our military forces and disrupting families as well as the death of 4,000 of our soldiers which leaves a permanent mark on each effected family. In addition to this it has affected the economy in the USA. Quite frankly, war is good for business.

- Q. How does the current situation impact business?
- A. During wartime, the military needs things. They need weapons, ammunition, food, clothing, trucks, airplanes, ships, pumps, valves and processing equipment of all types. These products are all purchased by the federal government from corporations that produce these products. Employment at home (by percentage) increases as businesses add personnel to produce products.

GEHR Plastics is entering its 26th year in the USA. We manufacture over 20 chemically resistant and food compliant materials in both rod and sheet. Our materials are sold through distribution to machine shops that, in turn, machine component parts from our materials which then are assembled into the equipment and products purchased by the federal government for the War Effort. Business is good.

Thank you.

Information contained in this newsletter has been taken from trade and statistical sources that we consider reliable but we cannot assure its accuracy or completeness. Any opinions expressed reflect our judgement as of this date and are subject to change.