Flexible Plastic Packaging
Part One – Market Scenario

By

Dr. Yatish B Vasudeo

Innovation Consultant

The Global Plastics Industry

- Plastics processing is successfully established in every region and country of the world
- The impact of plastics products and goods is felt in every economy and society on the planet
- The average consumer relies on and uses numerous distinct plastics products every day
- Plastics drive the global economy
  - Building and infrastructure
  - Communications
  - Transport
  - Packaging of all consumer goods (rigid and flexible)
  - Leisure and social activities

Global Consumption

The tonnage for the global consumer flexible packaging market is projected at 18.1 million tons in 2011 and is forecast to reach 22.5 million tons by 2016.

Flexible Packaging

- Flexible packaging has also benefited from a wider range of new products being developed by brand owners in an increasingly competitive consumer marketplace.

- Brand owners value flexible packaging for its versatility, comparative low cost and potential for innovation. It is also a lighter-weight pack format.

Flexible Packaging

Flexible packaging has reached market maturity in the developed nations of North America and western Europe and future growth will be modest. Flexible packaging to see stronger growth in developing countries.

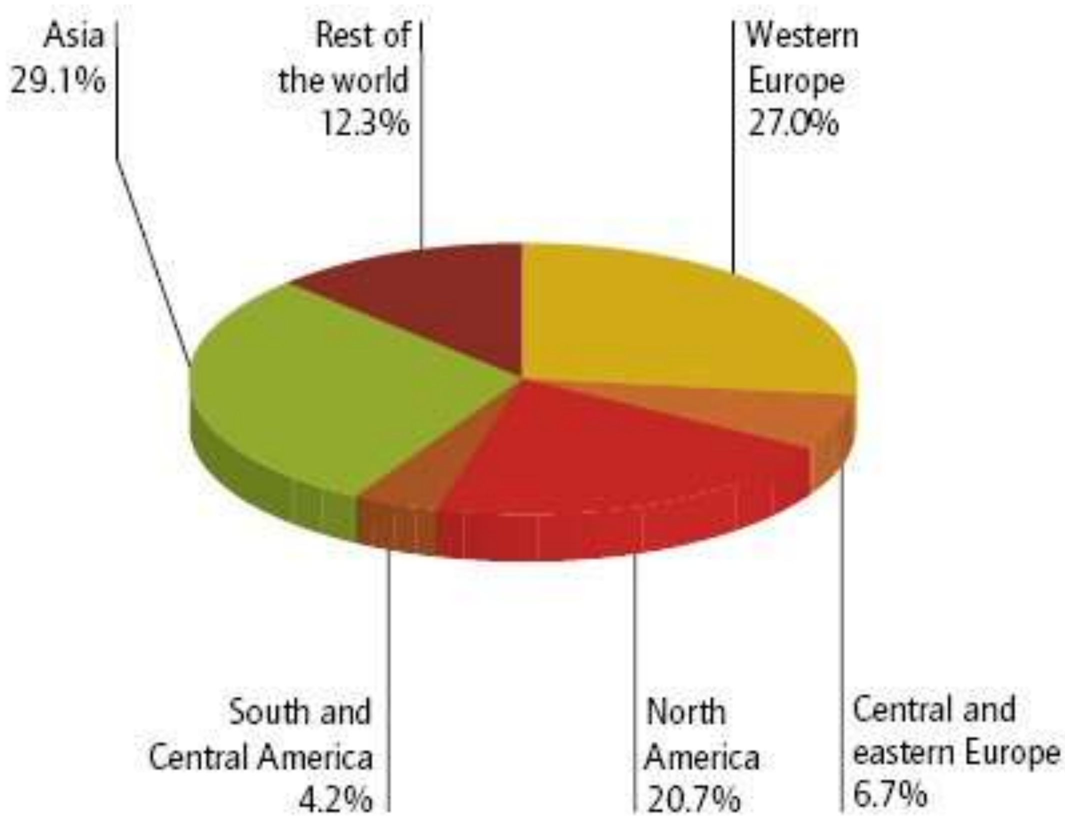
Flexible Packaging

- Asia is the largest regional market with 29.1% of global market volume in 2011, followed by western Europe and North America.
- Asia is also the fastest-growing market for consumer flexible packaging, with a growth forecast 7.9%. The region is forecast to represent 55.0% of total world flexible packaging consumption growth during the period 2011-16.
- India and China are the fastest-growing national markets for consumer flexible packaging together accounting for 44.0% of world flexible packaging consumption growth.

Flexible Packaging

- Flexible packaging materials can be used separately or in combination for primary retail food packaging and non-food packaging applications such as pet food, tobacco, cosmetics and personal care, household detergents, and pharmaceutical and medical products.
- Flexible packaging films can be made from single-web substrates such as flexible plastics (PE, PP, polyester or PA), flexible foils and flexible papers, or they can be coated, laminated or coextruded with other materials to enhance their physical properties in various ways.

Global consumer flexible packaging consumption by region, 2011 (% share by volume)



Source: Pira International Ltd

Food Packaging

- Food accounts for almost three-quarters of global consumer flexible packaging markets and consumption in 2011. Meat, fish and poultry is the largest food sector for flexible forecasts packaging, followed by confectionery and baked goods.
- Flexible pack types include plastic bags and sacks, wrapping films and lidding films, paper bags and wrapper, and aluminium foil laminates, foil lidding, blister packaging and foil bags, sachets and pouches.

Few Comments on Flexible Packaging

"We are facing new threats to food safety due to climate change, the failure to address problems in agriculture, lack of food in the world, and finally finding solutions for sustainable approaches."

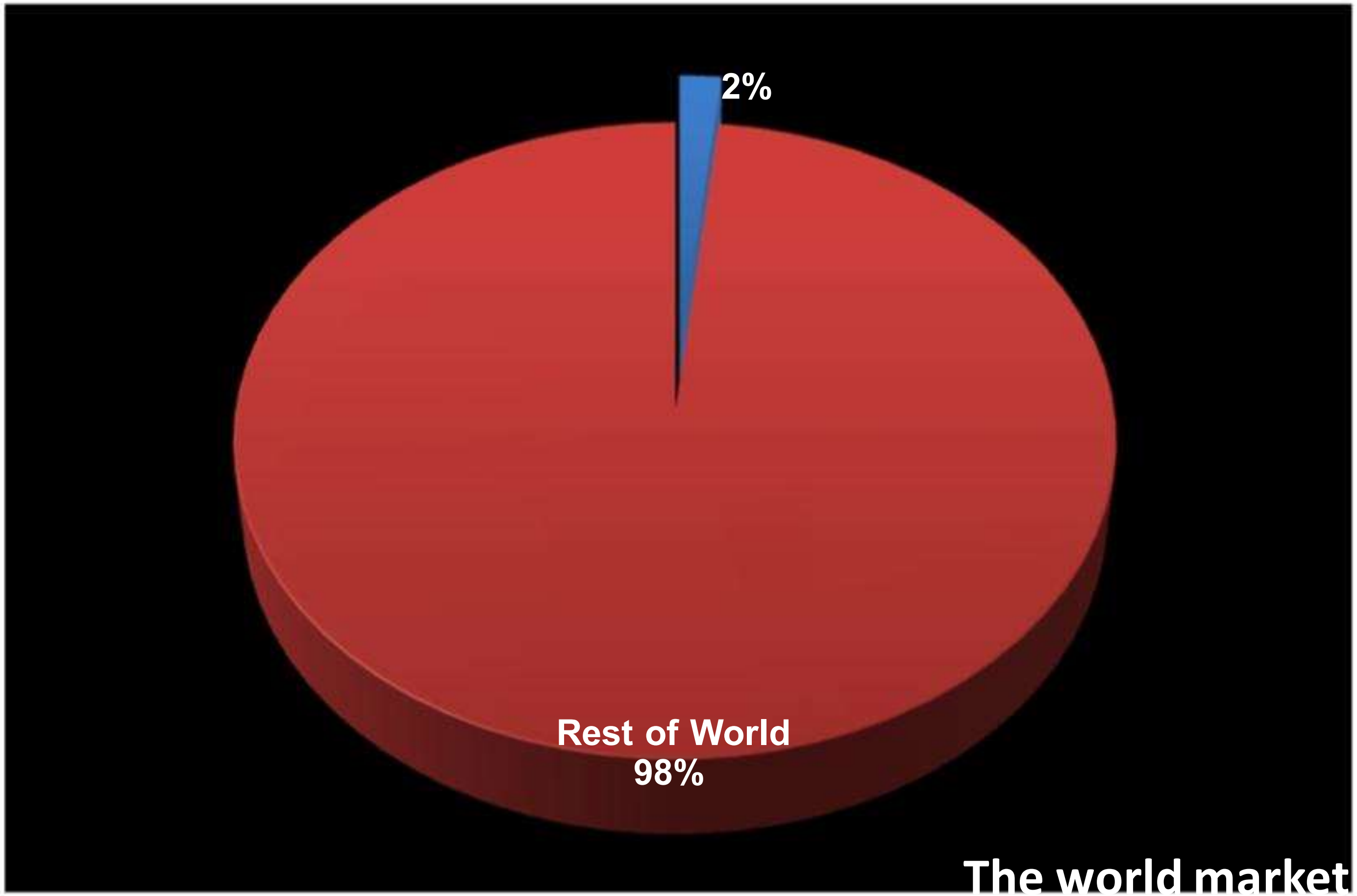
"Continuously evolving legislation and consumer perceptions will drive demand for improved food safety."

"In the future I expect food packaging to have a whole new set of environmental and performance requirements. Public awareness will increase and continual improvement of performance will be required."

"I foresee sustainability in a new context, where food waste, shelf life all go more together."

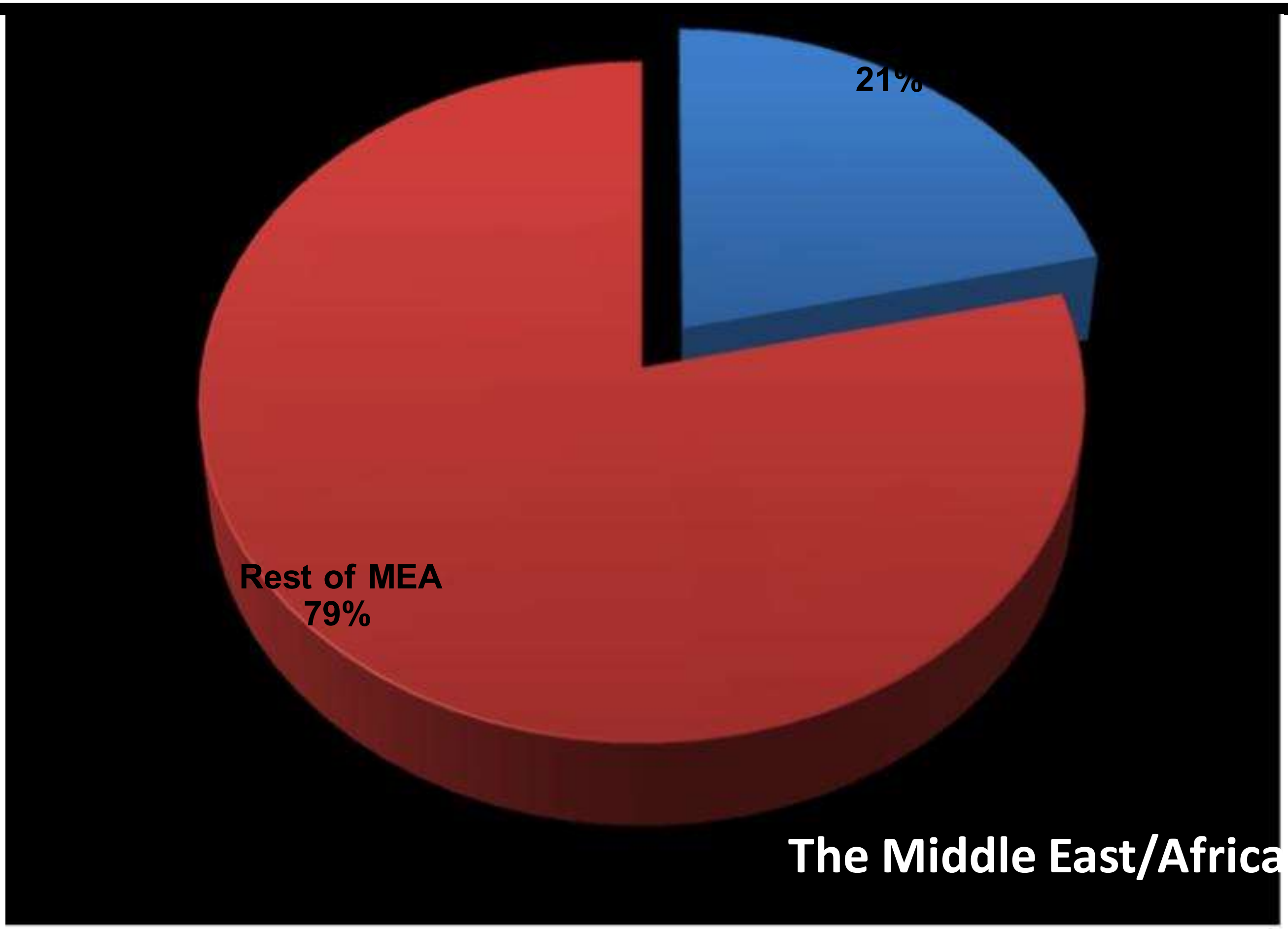
"Food safety and security will be driven by the increasingly global nature of the food supply chain and threats against it."

Position of the GCC in the world

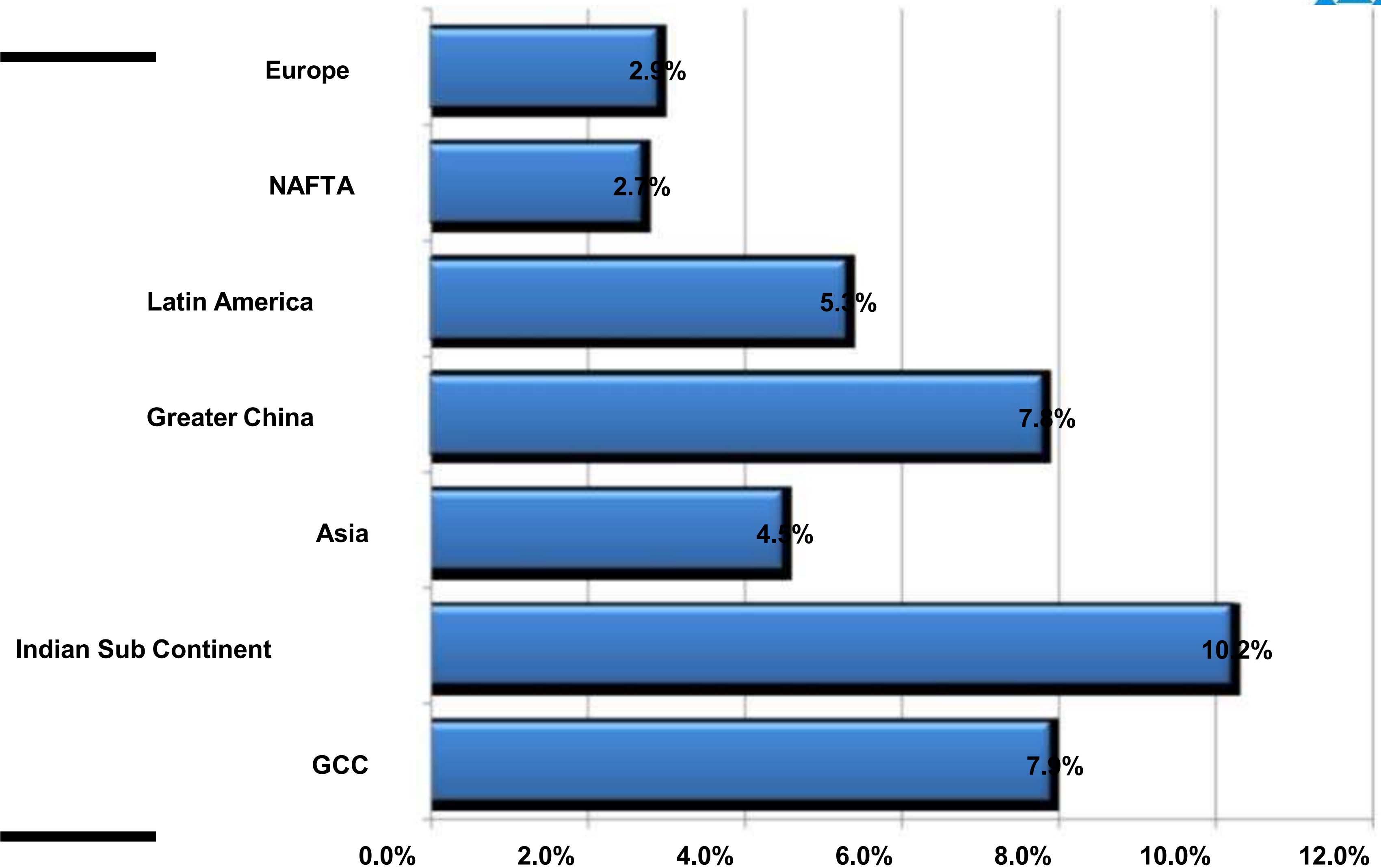


214 million tonnes

Position of the GCC in Middle East Africa



Global polymer growth by region % p.a.



Dynamics of the GCC Market

- GCC has become the leading global trading source of polyolefin resins • The GCC can increasingly offer a full range of all the major thermoplastics • The producers in the region have an advantaged feedstock position ensuring competitivity
- Energy costs for plastics processing are highly competitive • High net reserves and earnings mean capital for downstream processing is readily available
- Governments have the determination to ensure maximum value is added to raw materials
- A strong group of local entrepreneurs are driving the next stage of industrial development
- Investments increasingly have a global dimension

Investment by plastics convertors

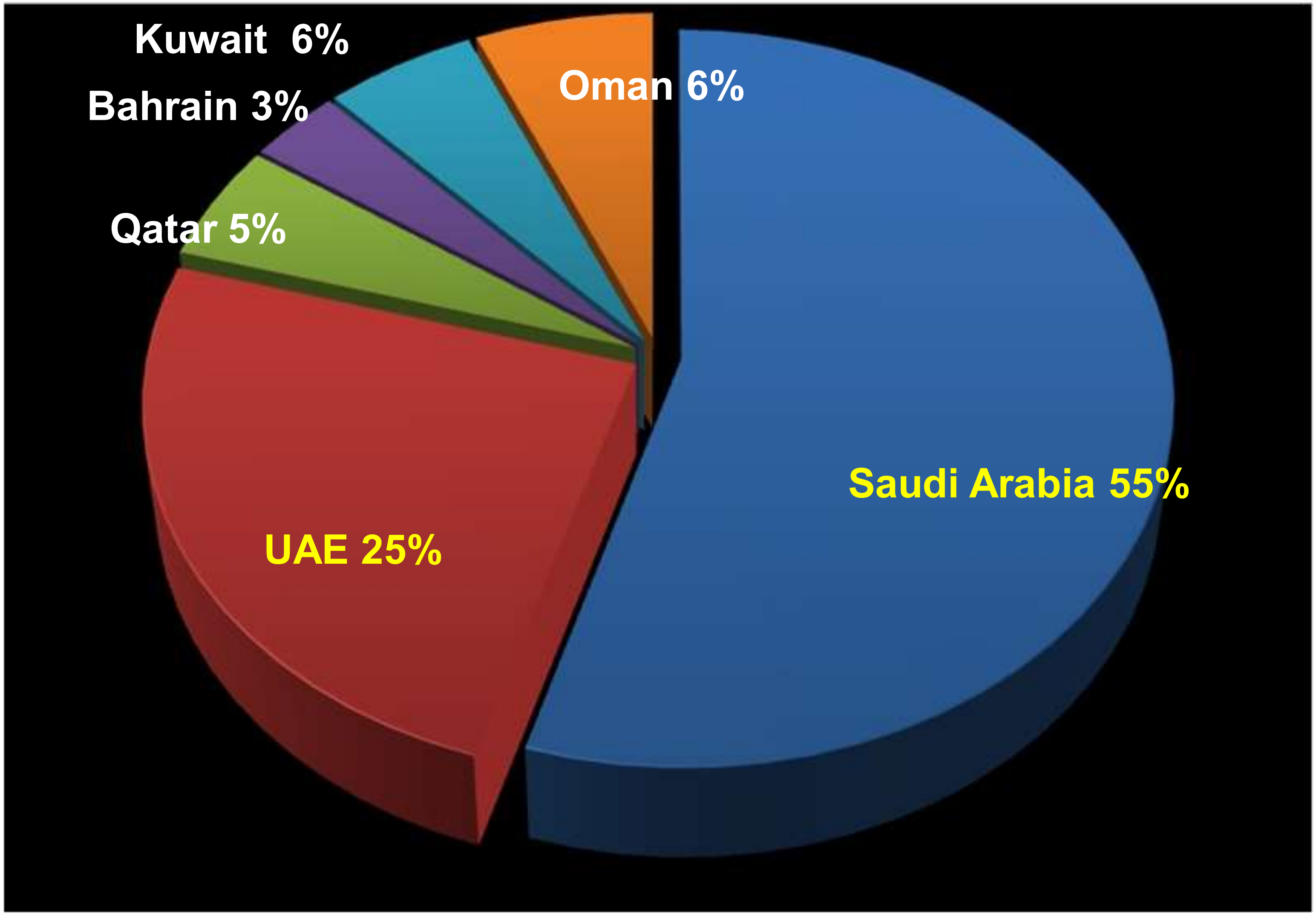
- High levels of investment suggest confidence in market growth

- High levels of investment suggest capacity is not a limitation of plastics processing output

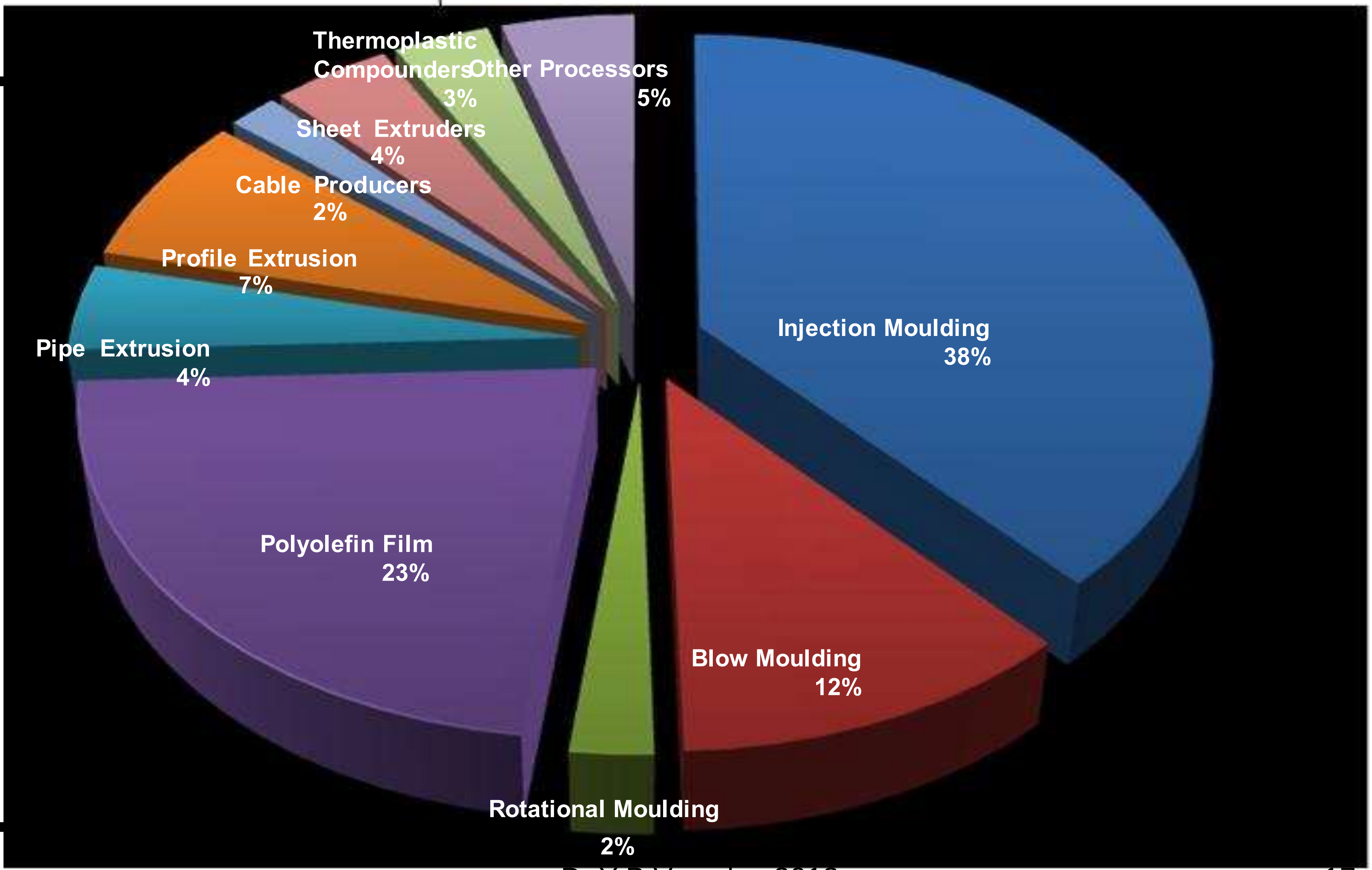
- Investment is predominantly in the best equipment available

•85% of investment is in the Saudi Arabia and the UAE

Distribution of polymer demand in the GCC



Distribution of polymer processors



GCC has 1175 significant plastic processors

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Plastics convertors in the GCC

- 1,175 significant primary convertors
  - 50 largest account for 50% of conversion
  - Largest convertors operate across several sectors
  - Film extruders: 265
  - Injection moulders: 450
  - Blow Moulders: 135
  - Pipe and Profile extruders: 150
- Most investments are made to very high (international) standards
- Export opportunities are significant

Observations - Market overview

- The period 2007-2011 marks a period of significant change in the world plastics industry, the leading geographical epicenters of the

  industry are increasingly China, India and the GCC

  - China is the largest market for polymers and continues to expand rapidly - India is quickly joining China as a world force
  - The GCC is emerging as a leading source of polymer supply

- The traditional centers of demand in Europe and NAFTA are recognizably mature in most areas although they continue to dominate technology and much processing innovation.

Remarks on the world industry

- While the plastics industry has come a long way and continues to grow the greatest challenges it faces are managing the complexity that derives from a global market.
- Management in the plastics industry increasingly have to deal with "uncertainty" in their markets and develop a path that ensures profitability and survival. Among these challenges are:

  - Short term demand fluctuations

  - Raw material availability - Unstable price patters

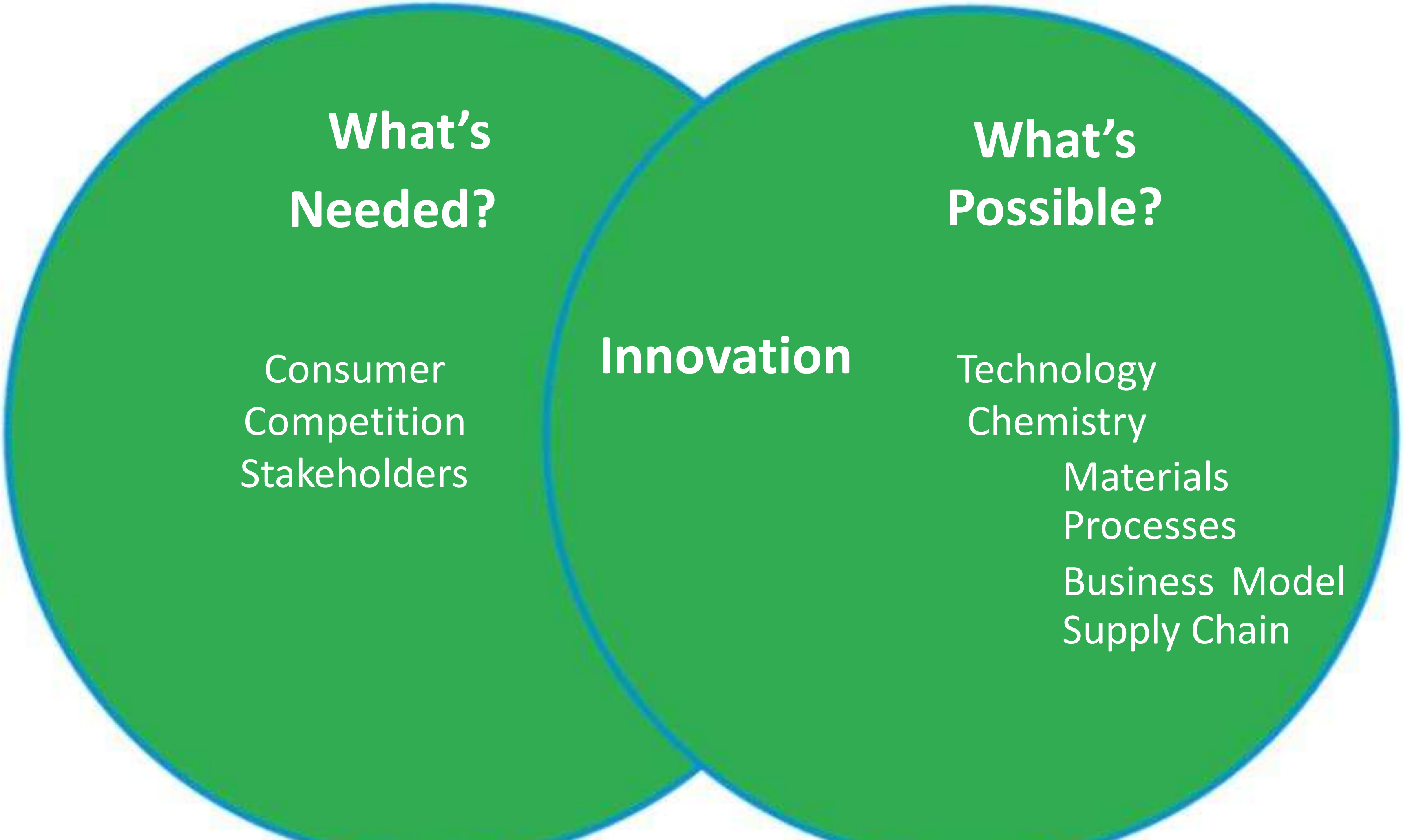
  - A rapidly changing political landscape - Evolving customer intentions

  - An unclear trade dynamic (including logistics)

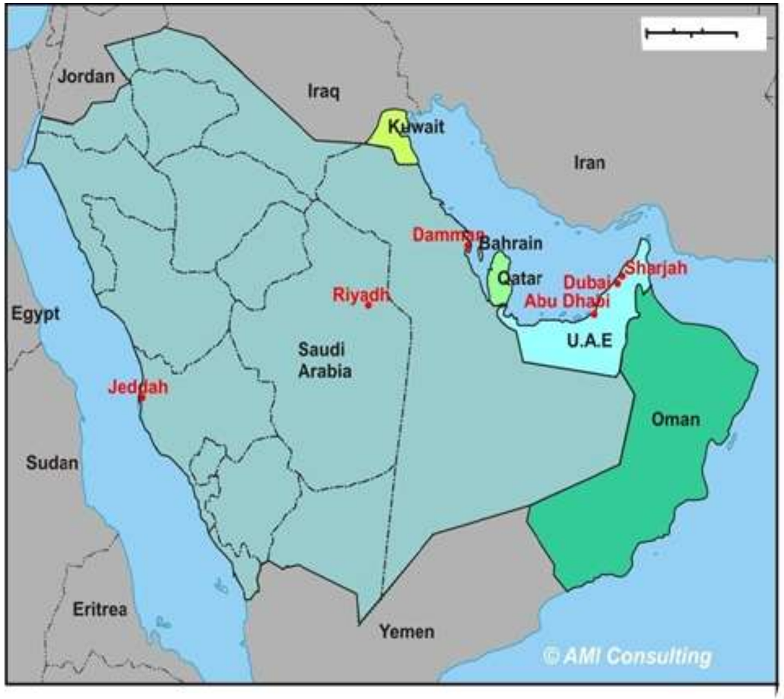
Remarks on the world industry

The successful companies will be those who keep a strong focus on the long term opportunities and customer needs while managing the short term instability increasingly apparent in an interrelated world economy.

What drives plastics innovation



Conclusions



- Wide slate of available resins drives the opportunity
- Plastics processing is geographically concentrated. The major centres are Jeddah, Riyadh and Damman/Al Khobar in Saudi Arabia and Dubai/Sharjah in the UAE which between them account for
  - 60%+ of all plastics processed
  - 70% of the fifty largest processors
- Clusters of plastic processing are appearing around resin producers in other parts of the region e.g. in Oman, Qatar, and Abu Dhabi.

- Oil and derivate wealth drives the local economy
- The population of the whole region is 40 million, of whom 28 million are resident in KSA.
- Wealth is highly concentrated which helps define local end use demand for plastics.

So how do you make money?

The preconditions for success are:

- Defensible business plans •

Robust product propositions

- Clearly defined markets, and channels to provide access to market
- Good execution of the business plan
- Capable management team
- Suitable resources (equipment, feedstock, money, people)
- Equipment, feedstock & money are in principal all available, the availability of suitably trained people can be more difficult
- World class understanding at every level

Thank You