Plastics Industry Overview
Who are we?

**Plastics SA**, the umbrella organisation for the South African plastics industry is registered as a Non Profit Company (NPC), and is funded by membership fees based on sales of locally manufactured plastics raw material, importers; other contributions and sponsorships from industry associations. Most of the income is from own training activities to the Plastics Industry

**Plastics SA** is a Federation of Associations. Together with our industry associations we play an active role in the growth and development of the South African Plastics Industry. We strive to address plastics related issues, influence role players and to make plastics the material of choice for today and the future

**Plastics SA** represents all sectors of the South African Plastics Industry including polymer producers and importers, converters, machine suppliers, fabricators and recyclers
Our Vision

To enable a vibrant and sustainable plastics industry in South Africa:

- Valued and respected by local and international industry, customers, suppliers, government, community and employees;
- Promoting the use of plastics as the material of choice;
- Developing the skills needed through accredited training programmes;
- Supporting environmentally responsible actions that benefit industry and society.
Growth!
Our Focus Areas

Advocacy: accessing and influencing key decision-makers, policies and strategies that affect our industry.

Member Services: are provided to companies who belong to their respective industry associations and pay the membership fees.

Sustainability: in conjunction with the polymer groups, providing strategic leadership to the plastics industry on environmental issues.

Research: acquiring and compiling industry statistics, as well as research of strategic interest to the industry.

Training: developing career paths to meet the needs of the plastics industry, as reflected in the strategic development strategy. Courses are accredited NQF aligned.

Communication: relevant industry issues are shared with industry role players, the media and the general public.
Plastics|SA EXECUTIVE TEAM

- **Sustainability**
  - Anton Hanekom: Executive Director
  - Douw Steyn: Sustainability Director

- **Advocacy**
  - Tobela Tapula: Manager: Corporate and Government Affairs

- **Training**
  - Kirtida Bhana: Training Executive

- **Marketing and Communication**
  - Monya Vermaak: Marketing and Communications Executive
Strategic Objectives

To stimulate and support an environment in which industry can grow and flourish

To develop and nurture Government networks to enable industry discussion forums to leverage industry growth and protection (Advocacy)

To research economic indicators and industry statistics critical to the industry and compile a state of the industry report / dashboard (Research)
Strategic Objectives

To position the South African Plastics Industry as a *vibrant* and *sustainable* industry; and to promote Plastics as the *material of choice* for the 21st century (Marketing)

Plastics | SA and the Sustainability Council will assist and guide the South African Plastics Industry to change the plastics industries *environmental footprint* into *environmental handprints of practice* for a sustainable future – “Zero Plastics to Landfill” (Sustainability)

To **position and transform** the training division into a **high value add, high performance** strategic partner to the industry (Training)
Proposed Initiatives

1. Zero Plastics to Landfill 2030
   - Waste Management
   - Resource Efficiency
   - Education and Awareness
   - Clean-up Campaigns

2. Growth through Exports and Import Replacement
   - Export Readiness
   - Regional Integration
   - International Markets
   - Trade Issues

3. Innovation and Skills Development
   - Cluster Programme
   - Career Guides/Map
   - Research and Development
   - Laboratory / Testing Facilities
   - SMME Business Development
   - Innovation Forums / Knowledge Hub

4. Industry support through Public–Private Partnerships
   - Relationship Building
   - Cross-sector Integration
   - Beneficiation and development of the local manufacturing capacity
Voting Members
3 x Raw Material Producers
2 x Importers
2 x PCA
1 x SAPPMA
1 x ARMSA
1 x EPSASA
1 x SAPRO
1 x PISA
1 x Sustainability Council Chair
1 x Executive Director Plastics | SA
1 x Nominated and Elected Industry Members from AGM
Total: 15 voting members

In Attendance
1 x Training Executive Plastics | SA
1 x Sustainability Executive Plastics | SA
1 x Marketing Manager/Executive Plastics | SA
1 x Manager Governance and Public Affairs - vacant
1 x PA to Executive Director – minute taker
Injection Moulding
Blown Film Extrusion
Blow Moulding

parison

bottle
Rotational Moulding
Plastics Industry Statistics

2013

Plastics | SA
South African Plastics Industry

- Estimated 1800 convertors mainly SMME’s
- Apparent virgin material converted in 2013 is 1 400 000 tons and 280 000 recyclate
- Plastics industry employs > 60 000 people
- Approximately 55% of all polymer goes into packaging
- Market size ex converter is estimated to be around R 50 billion
Plastics Industry Market Sectors - 2011

Europe (2010)
Packaging 39%
Automotive 7.5%
Building 39%
Electrical 5.6%
Other 27.3%
It is worth noting that the GDP multiplier effect of plastics as a growth driver for the economy is approximately 2.7 and the employment multiplier is 3.5.

• There is not an economic sector without plastics
• Plastics contribution to South Africa GDP = 1.6%
• Contribution to Manufacturing = 14.2%
• South African Growth projected at 1.4% for 2014
• Defined as a priority sector by Government

Plastics Industry GDP Contribution

The plastics sector together with steel and cement produces the basic building blocks of the manufacturing sector in the South African developing economy.
Plastics Sector Performance – Value Add

Figure 6: Turning point in the performance of the plastics sector

Source: Quantec
Apparent Consumption of Virgin Plastics Materials – continuous Growth
Imports vs Exports of Plastics Products

Figure 8: Imports versus exports of plastic products (constant 2005 prices)

Source: Quantec Data
SA PLASTICS RECYCLING INDUSTRY

• SA recycles approx. 280 ktpa
• Approx. 230 recycling companies
• Employs 4 510 people formal sector
• Employs 43 500 in informal sector

• Recycling 18,6% of all virgin polymer converted and divert 20% (280 ktpa) from landfill
• Recover 30,1% of all packaging material
• % amongst highest mechanical recycling in the world
• No energy from waste, or
• Fuel from waste commercial activities
Source of recyclable waste in South Africa from 2010 to 2012

Issues:
• Support is needed to ensure a consistent stream of clean waste for recycling
• Diversion from landfill is critical – separation at source is a solution
• Consider structured approaches to energy from waste
• Industry have achieved recycling targets through the Sustainability Council and the Polymer Groups - a voluntary EPR system
• Consumer education important to change mind set on waste and responsibility
Increasingly **scarce natural resources** and **expensive landfill space** are making **recycling** ever more important.

At the end of their service life, plastics are still much too valuable a resource to be simply thrown away. They can be recycled back into their original forms or to produce a new product and where this is not possible used for energy recovery.
recycling

Save natural resources | Save landfill space and reduce litter | Save energy and reduce $CO_2$ emissions | Create sustainable jobs
Sustainability is one of the six core functions of Plastics SA, providing strategic leadership to the industry on sustainability issues.

The Plastics SA Sustainability Council held a strategic workshop on 6 February 2014 to develop a vision and roadmap in terms of plastics waste. The Sustainability Council members to work towards an "aspirational vision" of ‘Zero Plastics to Landfill by 2030’. 

1. Workshop 6 February 2014
2. Strategic Leadership to Industry
3. Vision and Roadmap
4. Zero Plastics to Landfill by 2030
7 key focus areas

1. Effective infrastructure across the **value chain**
2. Research and development into technologies and markets
3. Credible data sources and information across the value chain
4. Consumer behavior around recycling and waste disposal
5. Constructive and effective engagement and collaboration by industry with **government**
6. Skills to enable the technology and infrastructure
7. Industry collaboration towards the vision
The **Key Strategies and Focus areas for the Sustainability Council** is:

1. **Waste Management and Recycling**
2. **Information, Communication and Networking**
3. **Education and Training**
4. **Resource Efficiency**

**Members of the Sustainability Council** determine the programs and projects to embark on, on an annual basis and how to fund these projects. The projects are to be implemented with Plastics|SA as project manager and to provide administrative support (i.e., a secretariat function to the sustainability Council).
Clean-up and Recycle
berg2beach 2014

250 000 bags sponsored
8 500 plastics pencil cases sponsored
120 000+ volunteers
18 years sponsored and managed by Plastics SA


Clean-up SA Week
15-20 September 2014
www.cleanup-sa.co.za

Recycling Day SA
19 September 2014
www.recyclingday-sa.co.za

International Coastal Clean-up Day
20 September 2014
www.cleanup-sa.co.za
Clean-up and Recycle

Big Sporting Events

100 people employed per event to assist

- Cape Argus Momentum
- Pick n Pay Cycle Race
- MTB Challenge
- Burger Fietstoer
- Old Mutual Two Oceans Marathon
Education and Training

To educate the society about the benefits of plastics and the effect it has on the environment and to initiate plastics awareness and educational programs with specific focus areas, target groups and projects.

Plastics Exhibitions and Workshops

- Boat and Dive Show
- Sustainable Living Expo

60 000+ educators, learners and public reached

Sasol TechnoX Scifest
Sustainability Week

Waste Managers
Collectors
Co-ops Buy-back Centres
Recycling Training

800 delegates trained
Resource Efficiency

To assist the plastics industry to develop strategies

- Conserve energy
- Reduce emissions
- To develop scientifically-based, cost-effective and energy-efficient recommendations

Due to the rising energy cost and decreasing energy supply, Plastics|SA, in collaboration with the National Cleaner Production Centre (NCPC) and NBI (National Business Initiative) hosted four workshops for the plastics industry on Energy Management, Air Quality and Water Management.

The outcomes and objectives is to assist the plastics industry to achieve energy cost reduction and reduce carbon emissions through implementation of an effective Energy Management System (EnMS).
Plastics|SA’s Advocacy Division focuses on promoting the plastics industry in all spheres of government and making input into policy development of government, developing relationships with various different corporates in order to share best practices, pertinent to issues affecting the industry.
The Advocacy Division has embarked on a number of critical initiatives and activities with relevant stakeholders to deal with issues such as:

- strategic stakeholder engagement;
- trade and investment;
- reference pricing;
- review of tariff codes;
- downstream beneficiation;
- develop incentives for the industry;
- import and export matters.
Brand SA

In collaboration with Brand South Africa, we are creating a platform between government and the plastics industry to discuss innovative ways of supporting and sustaining the industry, through increased exports, customised incentives schemes and popularising the work that the plastics industry is doing.
STAKEHOLDER ENGAGEMENT

Chairpersons of Portfolio Committees

Discussions are on-going

with the following

Chairpersons of Portfolio Committees

in Parliament.

- Trade and Industry
- Environmental Affairs
- Small Business Development
- Economic Development regarding the formulation of strategies and how we can work together to grow the industry
- to tackle triple challenges of poverty, unemployment and inequalities.

The proposals and recommendations that Plastics|SA presented in Parliament will form part of the issues that will be adopted by Cabinet.
Plastics|SA's Training Division is making an impact on the skills landscape in the Plastics Industry through its engagement with key strategic partners and processes.
Learnerships and Skills Programmes

Plastics|SA’s Learnerships and Skills Programmes are all geared toward making organisations more competitive through filling major skills gaps that exist in the workforce in our industry.

Plastics Manufacturing Setter Qualification registered as a Trade

The completed curriculum is awaiting registration at the South African Qualifications Authority (SAQA). The Occupational Trades developed through the Quality Council for Trades and Occupations (QCTO) is the new way of developing Occupational Qualifications. The process seems to be delayed as a result of a lack of shared understandings. The OFO Code is being recommended in the new amendment to fall under manufacturing machine setter plastics manufacturing (OFO Code 653311).

Only once the Trade is registered at SAQA will the Trade Tests be developed through NAMB’s (National Artisan Moderation Body) facilitation.

New Product Development

The following new programmes were developed:

Welding
- Thermoplastic Fabrication NQF L3 and NQF L4
- Overlap Welding NQF L2
- Thermoplastic Welding Inspection (Non-NQF)
- Polymer Compound Manufacturing NQF L2 (Industrial Rubber)

Continuous Professional Development (CPD) Points for Engineers

Plastics|SA has acquired CPD points for 3 of its product offerings viz.:
- Plastics Materials and Processes Overview – 3 CPD points
- Injection Moulding Fault Identification and Rectification – 3 CPD Points
- Injection Moulding Overview for Managers – 2CPD Points

Technical Staff Training Development

- 2 Trainers were trained at SKZ in Dubai on the Welding Processes
- 1 Trainer was trained at SKZ in Dubai on Overlap Welding
- 2 Staff Members from the Training Division attended the K-Show in Germany
New Marketing material

Our core Offerings
- Accredited Plastics Manufacturing Process Programmes
- Accredited Supervision Programme (Manufacturing and Assembly Operations)
- Polymer Composite Fabrication
- Thermoplastics Fabrication
- Welding Programmes

Plastics|SA
Training
www.plasticsinfo.co.za

A Career in the Plastics Industry?
We can help!

Plastics|SA
Training
www.plasticsinfo.co.za

Marketing folder with Training Division Inserts

Open banner
Open banner
Training Statistics July 2013 - June 2014

Total number of Learners

- 2010: 2,570
- 2011: 2,819
- 2012: 2,574
- 2013: 3,055
- 2014: 2,522

Gauteng Province: 1,321
KwaZulu Natal: 767
Western Cape: 434

Total Number of Learners for 2014: 2,522
Plastics|SA’s Marketing and Communication Division focused on managing the Plastics|SA brand and the plastics industry’s reputation, sharing relevant industry issues with industry role players and disseminating industry news to the media and the general public to clarify misconceptions and to tell the plastic story.

Plastics|SA
Imagine life without Plastics …
TV Commercial – Story of Hope
Every day, plastics help make our lives better and safer in COUNTLESS WAYS.

PLASTICS TOO VALUABLE TO WASTE

<table>
<thead>
<tr>
<th>Polymer code</th>
<th>Product</th>
<th>Description</th>
<th>Recycled into</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 PET</td>
<td>Bottles for coolant, milk, detergent, juice, mineral water and food containers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 PE-HD</td>
<td>Bottles for milk, juice and shampoo, bags, household containers, film and crates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 PVC</td>
<td>Clear packaging: toiletries, food, medication bottles and cling film</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 PE-LD</td>
<td>Bags for frozen vegetables, food, garbage and retail, milk sachets and soft bottles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 PP</td>
<td>Bottle tops and closures, yoghurt cups, margarine tubs and ice cream containers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 PS</td>
<td>Yoghurt cups, clamshells, food trays (meat, fruit, vegetables) and cups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 OTHER</td>
<td>In packaging, it could be multi-layer materials: crisps and chocolate wrappers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FAST FACTS: about plastics PACKAGING

- Keeps food fresher for longer
- Saves energy
- Lightweight
- Resource efficient
- Safe
- Reusable
- Recyclable

www.cleanup-sa.co.za www.mywaste.co.za www.plasticsinfo.co.za

SAFES. REUSABLE. RECYCLABLE.
Challenges
Challenges
Some of the identified downstream challenges/issues that are deterring the growth of the plastics sector are:-

• Customised incentive programmes for the industry needed – industry do not benefit from incentive programmes, need similar programme to clothing and textiles

• Cost of input material – should not be seen in isolation

• Preferential procurement not currently assisting plastics industry to grow – plastics intermediate product

• Compliance cost – creates uneven playing field with international competitors

• Specifications used as protectionism – (e.g. local plastics no specified in APDP)
Challenges

• Limited level of export readiness - support in specific exhibitions, trade missions and SMME’s development
• Strong competition from imports and economic crises – why can we not compete? Imports subsidized?
• The slow pace of technological upgrading – need customised incentive programmes, market very small
• Shortage of infrastructure and logistics costs – cost more from Johannesburg to Durban than Durban to Hong Kong, unavailability and unreliability of rail
• No or limited machine manufacturers in South Africa – all equipment imported at huge cost, maintenance and tooling cost high
Challenges

- Tooling sector weak in South Africa and mainly maintenance orientated
- Relatively small local and regional market – many mould changes and short runs,
- Long distance from attractive export markets - infrastructure
- Inland location of production facilities in the case of exports
- Develop special economic zones for manufacturing beneficiation that are, for example, duty-free, VAT-free and have tailor-made infrastructure - do not duplicate existing facilities but integrate value chain and produce complementary or import replacement products
Challenges

- Trade Agreement – not supporting local manufacturers – forced to reduce tariff of critical lines
- Cost of Labour - linked to large sectors (metal), strikes impact due to cross-sector integration
- Productivity – unable to compete internationally
- Cost of electricity and reliability of electricity supply – not comparable with light industry, huge waste and delays in start-up after power black outs
- Skills shortage – technologists/technical management
- Innovation – need entrepreneurs
- Limited Research and Development - support with cluster
- Weak Rand undermines competitiveness – 2 sided sword
On the job training to develop new skills and procedures

Development of global testing benchmarks

Improved efficiencies of equipment use

Reliable skilled operations to maintain standards

Plastics Industry Skills Development and Innovation Cluster
Integrated Approach to Industry Growth