



ASTEC

Astec LifeSciences Limited

Corporate Presentation

September 2014

The presentation contains certain forward looking statements concerning future business prospects and business profitability of Astec LifeSciences Limited and its subsidiaries and affiliates, which are subject to number of risks and uncertainties that could cause actual results to differ materially from those in such forward looking statements.

The risks and uncertainties relating to these statements include, but not limited to, risks and uncertainties regarding fluctuation in earnings, our ability to manage growth, competition (both domestic and international), economic growth in India and the target countries for exports, ability to attract and retain skilled professionals, time and cost overruns on projects, our ability to manage our international operations, government policies in action with respect to investments, fiscal deficits, regulations, etc., interests and other fiscal costs generally prevailing in the economy.

The company does not undertake to make any announcements in case these forward looking statements become materially incorrect in future or update any forward looking statements made from time to time by or on behalf of the company.



Company Overview

Business Highlights

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Outlook

About Astec LifeSciences Ltd

Company Overview



About the Company

- Established in 1994, Astec LifeSciences ("Astec" or the "Company") is an Indian manufacturer of agrochemical active ingredients, formulations and intermediate products.
- Astec is a leader in Triazole fungicides and has a portfolio of fungicide and herbicide technical products for Indian and global markets.
- The Company has 214 product registrations across 32 countries including 139 product registrations in India.
- Astec also offers contract manufacturing services and has long-standing preferred partner relationships with global customers.
- Through its 100% subsidiary Astec Crop Care Pvt. Ltd, the Company markets and distributes branded agrochemical formulations in India
- The Company has 2 multiproduct plants in Mahad, Maharashtra and an R&D site, manufacturing and pilot plant in Dombivli near Mumbai.
- The sites are certified to ISO 9001 (Quality), ISO 14001 (Environment) and OHSAS 18001 (Safety) standards.
- The Company is a signatory to the International Council of Chemical Association's Responsible Care Initiative for standards in Quality, Safety and Environment parameters.
- Astec's well equipped R&D facility has a team of scientists and chemists focused on product development and process optimization.
- Astec employs 391 people and is a public company listed on the Bombay Stock Exchange and National Stock Exchange of India.

Summary Income Statement (INR Million)			
YE 31 March	2012	2013	2014
Revenue	1,128	1,748	2,070
% growth	3%	55%	18%
EBITDA	161	280	354
% margin	14%	16%	17%
Net Income	13	59	87
% margin	1%	3%	4%

Note: Revenue and EBITDA excludes Other Income

Revenue streams

Enterprise sales

- Sale of active ingredients and bulk formulations to leading agrochemical companies worldwide

Contract Manufacturing Operations

- Outsourced manufacturing services of key herbicide and fungicide for global companies

Branded formulations

- Sale of branded formulations in India through its subsidiary Astec Crop Care Private Limited

Indian agrochemical sector is poised for significant growth

- The Indian Agrochemical Industry is estimated at INR 263 billion (~USD 4.4 billion) in 2014 and is expected to grow at a CAGR of 12% between 2014 and 2019.
- Improving agricultural yields and reducing avoidable crop losses are key to meeting rising food demand given that area under cultivation is not increasing.
- At 0.6kg/ha, India's consumption of crop protection chemicals is among the lowest in the world and offers tremendous growth potential.
- Fungicides and herbicides are expected to drive future growth due to rapidly growing demand for fruits and vegetables and rising cost of agricultural labor.

Astec is a pioneer in Triazole fungicides with a strong product portfolio and global customer base

- Comprehensive portfolio of Triazole fungicides for foliar and seed treatment of a wide range of crops including paddy, cereals, plantation crops, fruits and vegetables
- Pioneered Triazole fungicides in India and continues to be a leader in this segment in India.
- Downstream integration into branded formulations to capitalize on strong product capabilities and cost advantage
- Long-standing customer relationships with Indian and global agrochemical majors:
 - Exclusive supplier of Triazole fungicides to a number of companies
 - Supplies to a leading multinational company for its global requirement of a herbicide product
 - Exploring similar partnerships with other leading companies

State-of-the-art manufacturing facilities supported by robust R&D capabilities

- World class, multi-product manufacturing facilities certified to global quality and safety standards and approved by global customers.
- Cost leadership in manufacturing of key products as compared to Indian and Chinese peers, due to proprietary processes developed in-house and high backward integration.
- Efficiently designed production facilities with substantial scope for capacity expansion within existing premises.

Experienced team and high governance standards

- Promoters have over 35 years of experience in the Agrochemical sector and have successfully built a profitable, fast growing agrochemical business with proven execution credentials.
- A public company listed on the stock exchanges in India, Astec maintains high standards of corporate governance, financial reporting and compliance.

Agrochemicals

Tebuconazole

Cyproconazole

Propiconazole

Flutriafol

Hexaconazole

Tricyclazole

Difenoconazole

Metalaxyl

Epoxiconazole

Lambda Cyhalothrin

Intermediates

2',4'-
Dichloroacetophenone

2-Chloro-4'-fluoro
acetophenone

4-Methyl phthalic
anhydride

Thio bis-4-chloro thymol

Product Portfolio

Branded formulation products



Branded Business – Astec Crop Care Private Limited

- Established in December 2010, Astec Crop Care (ACC) is a wholly owned subsidiary of the Company involved in sales of branded formulations
- ACC has a product portfolio of more than 30 formulations
- Astec Crop Care has a dealership network of ~800 dealers across 6 states in India.

Major products		
Fungicides	Herbicides	Insecticides
Hexaconazole	Glyphosate	Acephate
Propiconazole	Pendimethlin	Acetamiprid
Tebuconazole	Paraquat Dichloride	Buprofezin
Difenconazole	Glyphosate	Thiomethoxam
Tricyclazole	Metribuzin	Fipronil
Metalaxyl	Oxyfluorfen	Imidacloprid

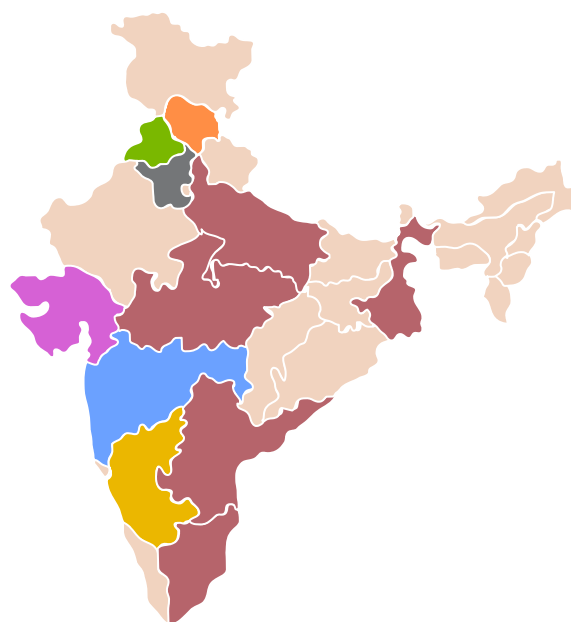
Key Brands



Astec Crop Care financials

Summary Income Statement (INR million)			
YE 31 March	2012	2013	2014
Revenue	33	91	174
% growth		171%	92%
EBITDA	(7)	9	12
% margin	-22%	9%	7%

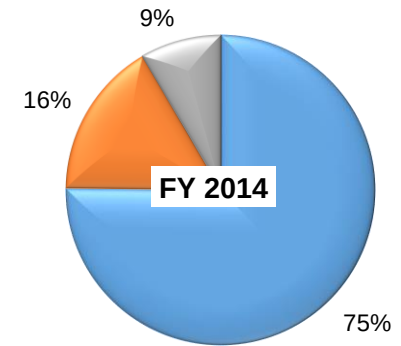
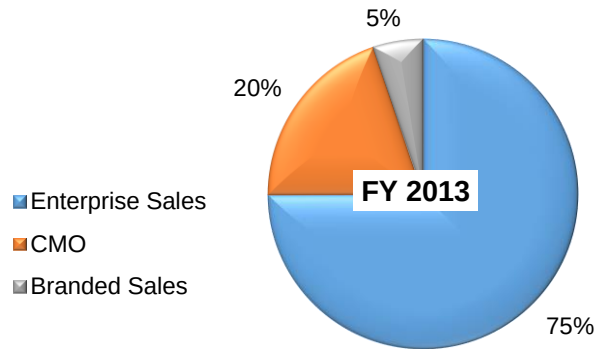
Dealership Network



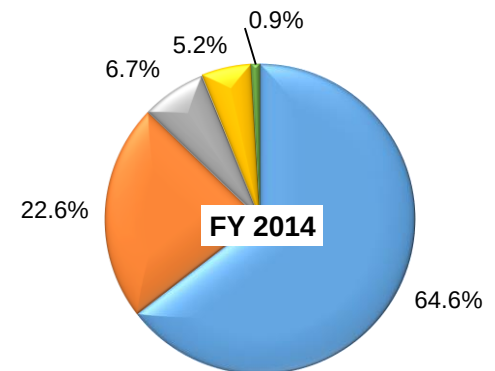
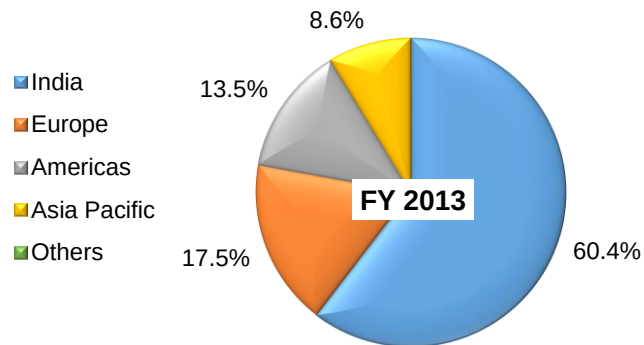
State	No. of dealers
Gujarat	225
Karnataka	187
Haryana	125
Punjab	122
Maharashtra	78
Himachal Pradesh	9

Areas of expansion

Revenue by product group



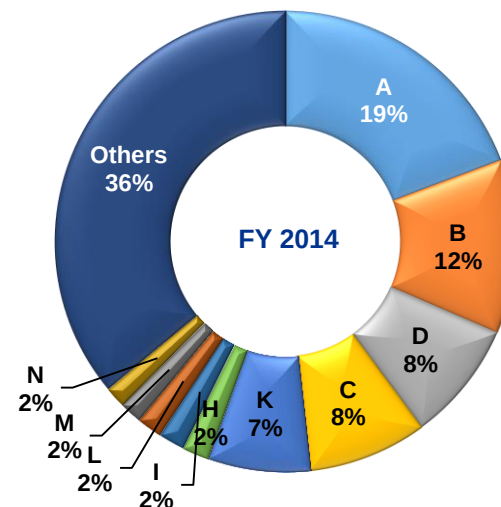
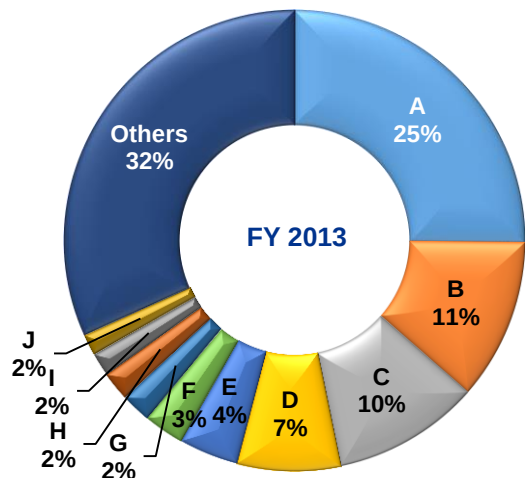
Revenue by Geography



Note: Others includes Africa and Middle East

Longstanding relationships with reducing dependence on individual customers

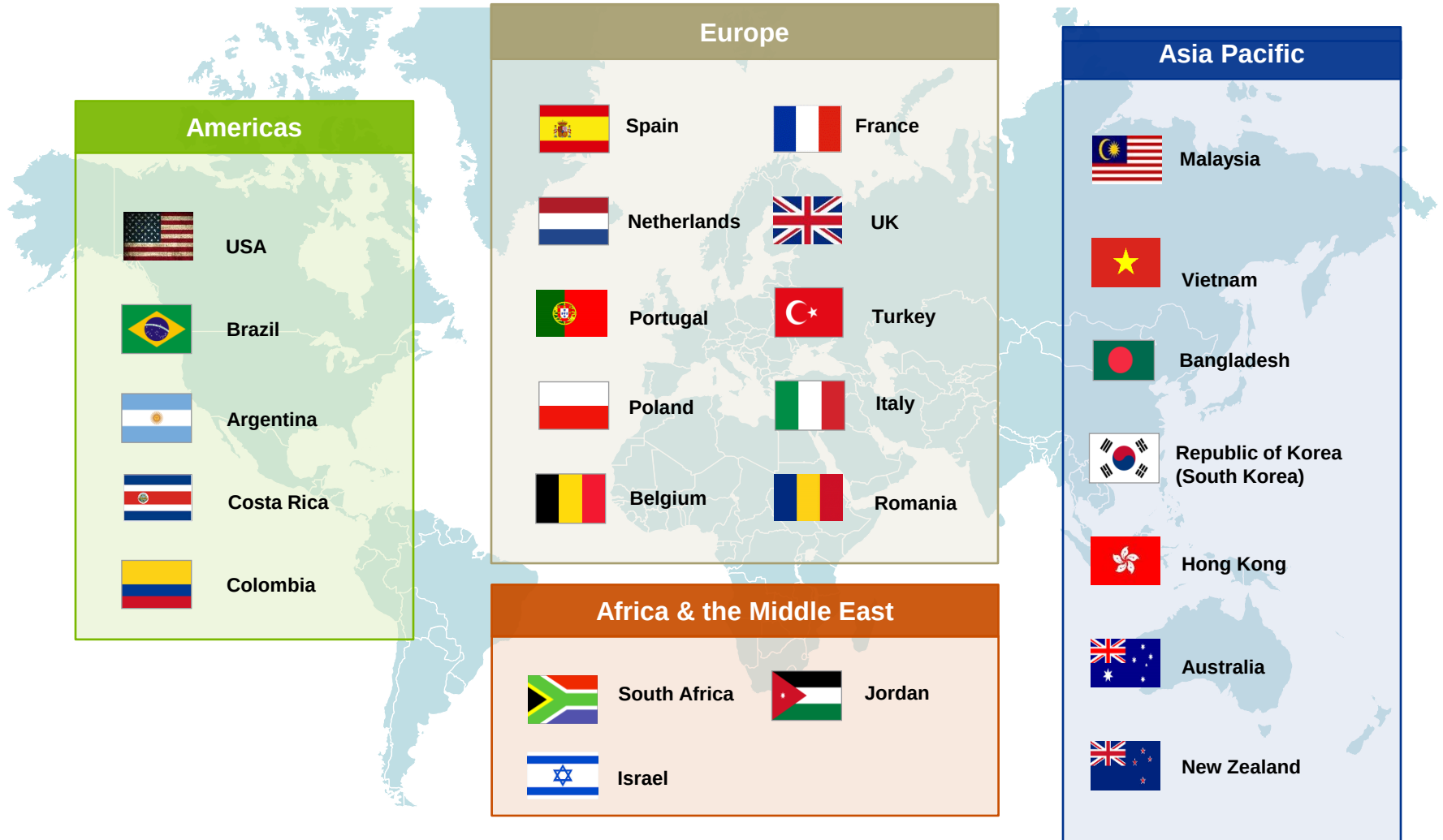
Revenue from Top 10 customers



- Astec has successfully built strong relationships with its clients, resulting in significant new customer addition and revenue growth across customer accounts.
- The Company has a track record of 100% customer retention since inception
- The largest customer accounted for approximately 19% of revenue in FY 2014.
- Share of the top 10 customers in total revenue reduced from 68% in FY 2013 to 64% in FY 2014.

Customers

Global customer base spanning 5 continents



Manufacturing facilities

Overview

Company overview	Mahad I	Mahad II	Dombivli
Established	2005	2012	1994
Products	■ Fungicides and intermediates	■ Herbicides	■ Intermediates and pilot plant
Infrastructure	Reaction capabilities ■ Size: 2,000 to 20,000 liters Distillation capabilities ■ Fractionating columns with 10 to 45 theoretical plates	Reaction capabilities ■ Size: 10,000 to 20,000 liters Other equipment ■ Agitated filter driers ■ Powder packing systems ■ Rotary vacuum paddle driers	Reaction capabilities ■ Size: 2,000 to 10,000 liters Distillation capabilities ■ Fractionating columns upto 50 theoretical plates
Certifications	ISO 9001 ISO 14001 OHSAS 18001 Responsible Care	ISO 9001 ISO 14001 OHSAS 18001 Responsible Care	ISO 9001 ISO 14001 OHSAS 18001 Responsible Care





Overview

- Commenced operations in 2005
- The site is currently utilized for manufacture of fungicides and intermediates
- Capable of various reactions including Grignards, Halogenation, Friedel Craft, Condensation, Isomerisation, Epoxidation and Etherification among others
- Express feeder for electricity installed to eliminate dependence on diesel generator
- Primary and secondary waste treatment carried out in-house
- Certified to ISO 9001, ISO 14001 and OHSAS 18001 standards

Other Plant and Equipment Details

- SS reactors ranging from 2,000 liters to 20,000 liters
- Fractionating columns with 10 to 45 theoretical plates
- Rotary vacuum driers
- Fluid bed drier
- Gas scrubbers
- Suspension Concentrate formulation plant (12 kl per day)
- Emulsifiable Concentrate manufacturing plant



Overview

- Commenced operations in 2012
- Site currently utilized for manufacture of herbicides
- Express feeder for electricity installed to eliminate dependence on diesel generator
- Certified to ISO 9001, ISO 14001 and OHSAS 18001 standards

Other Plant and Equipment Details

- SS reactors ranging from 10,000 liters to 20,000 liters
- Rotary vacuum paddle driers
- Powder packing systems
- Nauta Mixers
- Solvent tank farm
- Gas storage tank farm

- ✓ **The land for Mahad – II site was acquired considering the future demand. Approximately 70% of the area (7 acres) is available for expansion.**



Other Plant and Equipment Details

- MS reactors ranging from 2,000 liters to 10,000 liters
- Glass lined reactors from 6,000 liters to 12,000 liters
- Fractionating columns upto 50 theoretical plates
- Static crystallizers 3,000 to 10,000 liters

Overview

- Commenced operations in 1994
- The site is utilized for manufacturing intermediates and carrying out R&D activities
- Houses a pilot plant with reactors ranging from 10 liters to 500 liters enabling scale up from gram scale to several hundred kilos
- Certified to ISO 9001, ISO 14001 and OHSAS 18001 standards

Pilot Plant Infrastructure

Key Equipment	Capacity	Specification
Pressure reaction cum distillation setup	100 liters	SS
SS reaction cum distillation setup	100 liters	SS
Glass reaction cum distillation setup	50, 100, 200 liters	Glass
Distillation setup	50 liters	Glass
Centrifuge	5 Kg	SS
Scrubber system	3 HP	PPFRP
Solvent transfer pump	2 HP	SS

Manufacturing facilities

Comprehensive quality assurance processes and infrastructure



Key equipment in Quality Assurance and Control

Key Equipment	Make
Gas Chromatographs	Shimadzu
High Performance Liquid Chromatographs	Shimadzu
Gas Chromatograph Mass Spectrometer	Agilent
Karl Fischer Apparatus	Analab
pH Meter	SCR
Contech Balance	Content
Precisa Balance	Precisa
Bulk Density Apparatus	Meta Lab
Sonicator	Ganesh Scientific
Melting Point Apparatus	Ganesh Scientific
C.O.D. Digestor	Spectralab

Management and Employees

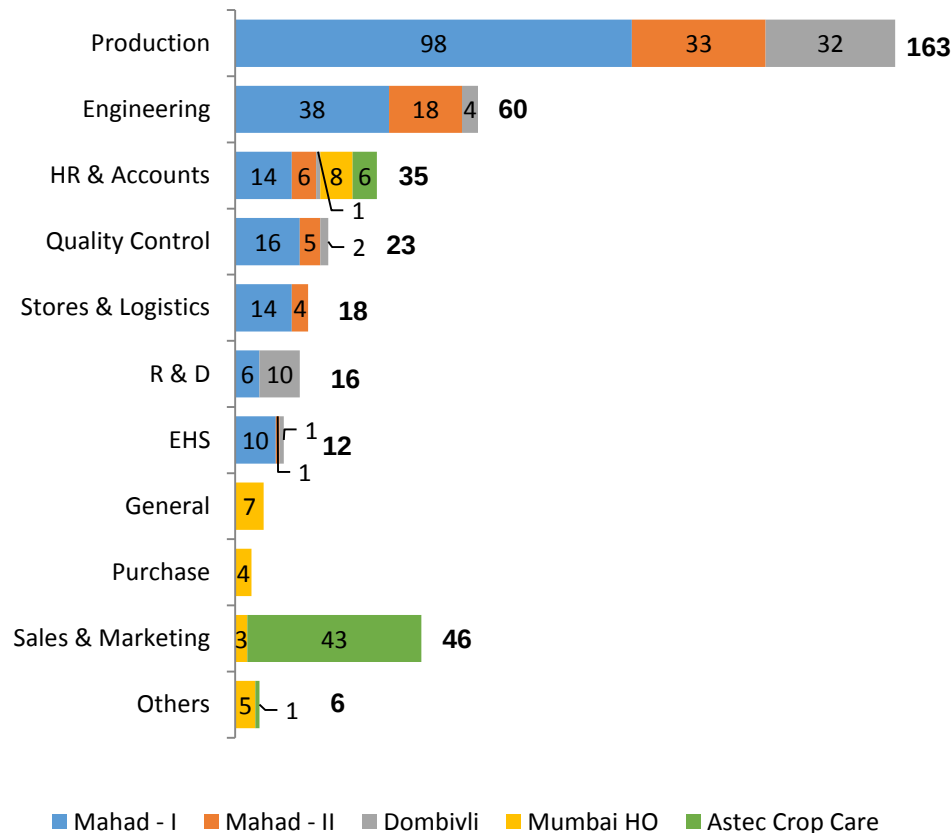
Organization structure



Management and Employees

Summary of employee base

Headcount by location



Headcount summary

	Total
Mahad – I	196
Mahad – II	67
Dombivli	50
Mumbai HO	28
Astec Crop Care	50
Total	391

Source: Company

- The Company has 391 employees across its plants in Mahad, Dombivli, head-office in Mumbai and for brand sales in Astec Crop Care. These include:
 - Over 90 Graduate and Post Graduate degree holders
- Astec has established policies and systems with respect to the recruitment and training of personnel, establishment of compensation guidelines and monitoring of performance.
- The Company enjoys a good rapport with its employees



R&D overview

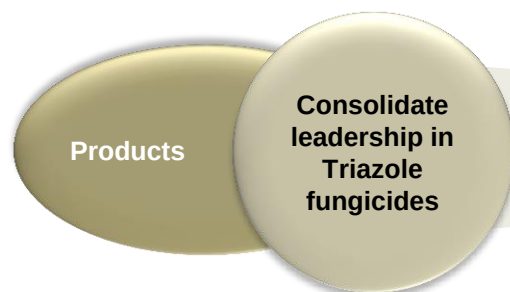
- Astec's R&D center was established in 2000 and is located in Dombivli, with an additional facility in Mahad. The R&D team comprises 16 members
- Dombivli R&D center is equipped with:
 - 6 Fume Hoods and 10 Mechanical Stirring Motors
 - 16 Heating mantles with capacities ranging from 1 liter to 20 liters
 - 4 Water baths with capacities ranging from 2 liters to 5 liters
 - 1 UV chamber

Laboratory facilities

- Reactions at -78 degrees to 250 degrees at 50ml to 10 liters scale
- Parr autoclave: 2 liters up to 140 bar
- Fractionation of close boiling liquids
- 10 liters glass reactor to study agitation + mass transfer
- Low pressure glass autoclave

Analytical facilities

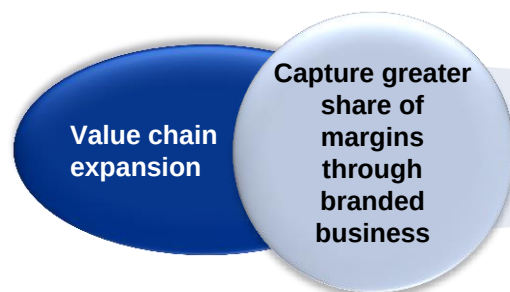
- GC's with capillary columns
- HPLC
- GC-MS
- Other testing equipment



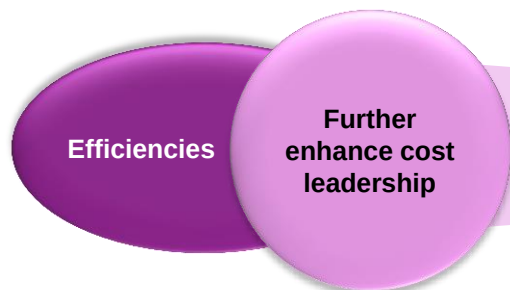
- Astec pioneered Triazole fungicides in India and continues to be the pre-eminent source of these products in the country.
- The Company will continue to focus on this product group, and seeks to be the supplier of choice for Triazole products to leading Indian and global players.
- Astec has a strong pipeline of products under development and intends to launch 2 – 3 new products annually with an emphasis on process innovation and IP generation to create a sustainable advantage and deliver strong revenue growth.
- The Company's product selection strategy is geared towards new generation, high growth molecules which present a large market opportunity in India and overseas territories.



- Astec's strong multi-year relationships with its customers are testament to the high degree of customer satisfaction enjoyed by the Company. The company has not lost a customer since inception and all customer relationships have grown consistently over the years.
- The Company has identified Europe and Latin America as key growth markets and is building product registrations and seeking new customers to drive revenues in these regions.
- As a strategic manufacturing partner to global agrochemical companies, Astec delivers efficient, reliable and scalable manufacturing capabilities as an extension of the partners' business.
- Astec has entered into exclusive product supply agreements with global customers which provide committed volumes and high visibility on future revenue.



- Astec entered the branded formulations segment in India in 2010 to harness the fast growing domestic agrochemicals market and expand margins through integration across the value chain.
- Astec Crop Care – the Company's branded products business is rapidly building a reputation for high quality agrochemical products with a focus on fungicides.
- Astec seeks to introduce new products and create brand leadership in select segments.
- The Company's products are presently retailed in the states of Gujarat, Maharashtra, Karnataka, Himachal, Punjab and Haryana.
- Astec has identified the states of Andhra Pradesh, Telangana, Uttar Pradesh and Madhya Pradesh for the next phase of growth.



- Astec leverages its strong R&D capabilities to drive process optimization and create cost efficiencies, enhancing value to its customers and contract manufacturing partners.
- By focusing on backward integration for its products, Astec seeks to continuously improve cost competitiveness across the product life cycle.
- Astec's new facility at Mahad (launched in 2012) has potential for significant capacity expansion and offers flexibility to rapidly add product lines.
- With its multi-product manufacturing plants, Astec seeks to build and maintain economies of scale across its focus products.

Consolidated Balance Sheet and Income Statement

Consolidated Balance Sheet (INR lakhs)		
As on 31 March	2013	2014
Equity and liabilities		
Share Capital	1,846	1,853
Reserves and surplus	8,729	9,496
Minority Interest	13	4
Long-term borrowings	2,246	2,519
Deferred tax liabilities	389	413
Other long term liabilities and provisions	2,755	3,197
Current liabilities		
Short-term borrowings	4,715	5,758
Trade payables	4,609	4,565
Other current liabilities and provisions	807	688
Total Current liabilities	10,131	11,011
Total Liabilities	26,108	28,494
Assets		
Tangible / Intangible Assets (net)	12,073	13,223
Capital work-in-progress	1,307	584
Non-current investments	8	1
Deferred tax asset	-	48
Long-term loans and advances	864	1,148
Current assets		
Current investments	2	7
Inventories	5,066	7,659
Trade receivables	6,265	5,139
Cash and bank balances	514	447
Short-term loans and advances	9	237
Total Assets	26,108	28,494

Consolidated Income Statement (INR lakhs)		
Year ending 31 March	2013	2014
Revenue from operations (Net)	17,477	20,697
<i>% growth</i>	55%	18%
Operating Expenses		
Raw materials and components	11,468	14,434
Utilities & Consumption of stores and spare parts	394	621
Power, Fuel & Water Charges	545	690
Cost of materials consumed	12,407	15,745
Changes in inventories of finished goods, work-in-progress and traded goods	312	(1,185)
Employee benefit expenses	873	1,138
Other expenses	1,089	1,461
Operating EBITDA	2,796	3,537
<i>% margin</i>	16%	17%
Depreciation and amortisation expense	1,187	1,477
EBIT	1,608	2,061
<i>% margin</i>	9%	10%
Other income	106	37
Finance costs	748	925
Extraordinary / Prior Period Items	95	57
Profit Before Tax	871	1,115
<i>% margin</i>	5%	5%
Tax expense	281	250
Less: Minority Interest	(5)	(2)
Profit After Tax (Net Income)	595	868
<i>% margin</i>	3%	4%

- Our product selection strategy will remain geared towards new generation, high growth molecules which we believe present a large opportunity for us in India and overseas territories.
- Astec aims to add 2 new products to its portfolio each year, with 5 – 6 new products slated for commercialization over the next 2 years, including products under exclusive arrangement with specific customers.
- Exports contribute approximately 35% of consolidated revenue and Europe and the Americas are our key markets. We expect Europe and Latin America to continue to be growth markets for Astec and we have incorporated subsidiary companies in Belgium and Colombia for managing our product registrations in these territories.
- For our branded formulations business, we have identified the states of Andhra Pradesh, Telangana, Uttar Pradesh and Madhya Pradesh for the next phase of growth. We continuously seek to introduce new products and create brand leadership in select segments.
- We expect consolidated revenue to grow at a CAGR of approximately 25% over the coming 5 years.
- Our contract manufacturing business is expected to contribute 25 to 30% of consolidated revenue going forward.
- Our fast growing branded formulations business is expected to contribute 14 to 15% of annual revenue in 5 years.
- We expect operating profit margins (before depreciation, finance costs and taxes) to be in the range of 23 to 25% of revenue, being driven by:
 - Introduction of new high margin products;
 - Cost optimization efforts on our key products;
 - Growth of our branded formulations business; and
 - Greater operating leverage on our fixed costs.
- Astec's newest production site at Mahad, opened in 2012, is spread over 10 acres and has substantial potential for expansion with investment in utilities and support infrastructure already in place.
- The Company expects to invest between INR 500 and 550 million over the next 3 years on expanding capacity to support our fast growing business. These investments shall be funded largely through internal accruals and long term financing.

Thank You

Astec LifeSciences Limited

Elite Square, 7th Floor,
274, Perin Nariman Street,
Fort, Mumbai 400001
India

Tel: +91-22-61205600

Fax: +91-22-22618289

investors@astecls.com

<http://www.astecls.com/investors.html>