

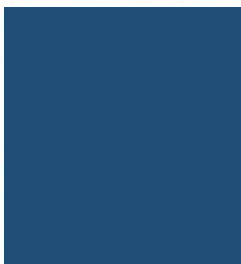
# Teva's Global OPEX (Operational Excellence) Journey

**David Lustig**

**Senior Vice President**

Head of Israel & Respiratory Operations,  
Teva Global Operations

**November 2016**



# Agenda

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- Introduction – Teva & Teva Global Operations
- What is OPEX (Operational Excellence)?
- The story of OPEX in Teva
- OPEX in Teva Israel Operations
- Q&A

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- **Introduction – Teva & Teva Global Operations**
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# About Teva



**+110**  
years of experience



Among the **10** top  
pharma companies



**Leading** Generic  
Company in the world



More than **58,000**  
employees



**86**  
production sites



2015 Revenue -  
**\$19.7B**



**80** countries  
**100** markets



A strong **specialty**  
medicines portfolio



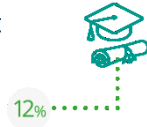
# Teva, Pride of Israel

We are deeply rooted in Israel and it's culture for over **115 years**

**25%** of Teva's global **sales** originate from an Israeli manufacturing



Teva's **academic royalties** payments account for **12%** of national high education budget



Over **\$4B investment** in **R&D** and Innovation in the last decade



Teva is the leading company in Israel, contributing **14B** ILS a year to the **GNP**



Teva is creating more than **21,000** direct and indirect **jobs**



Teva is responsible for **15%** of the industrial **export of Israel**



The **only Israeli company** included in the list of 500 largest companies in the world -

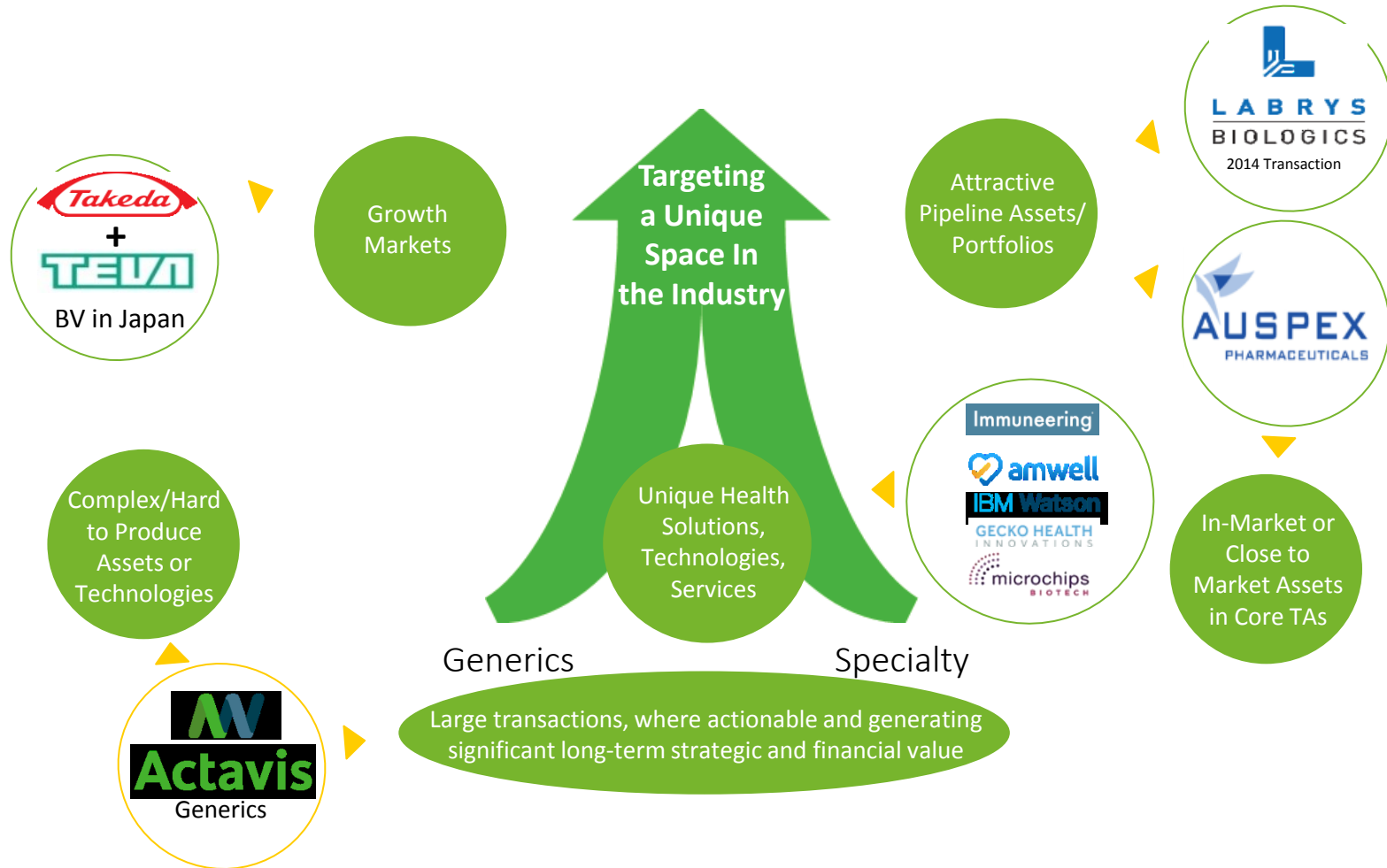
**Fortune 500**



**1 of 5** prescriptions in Israel are for a Teva medicine

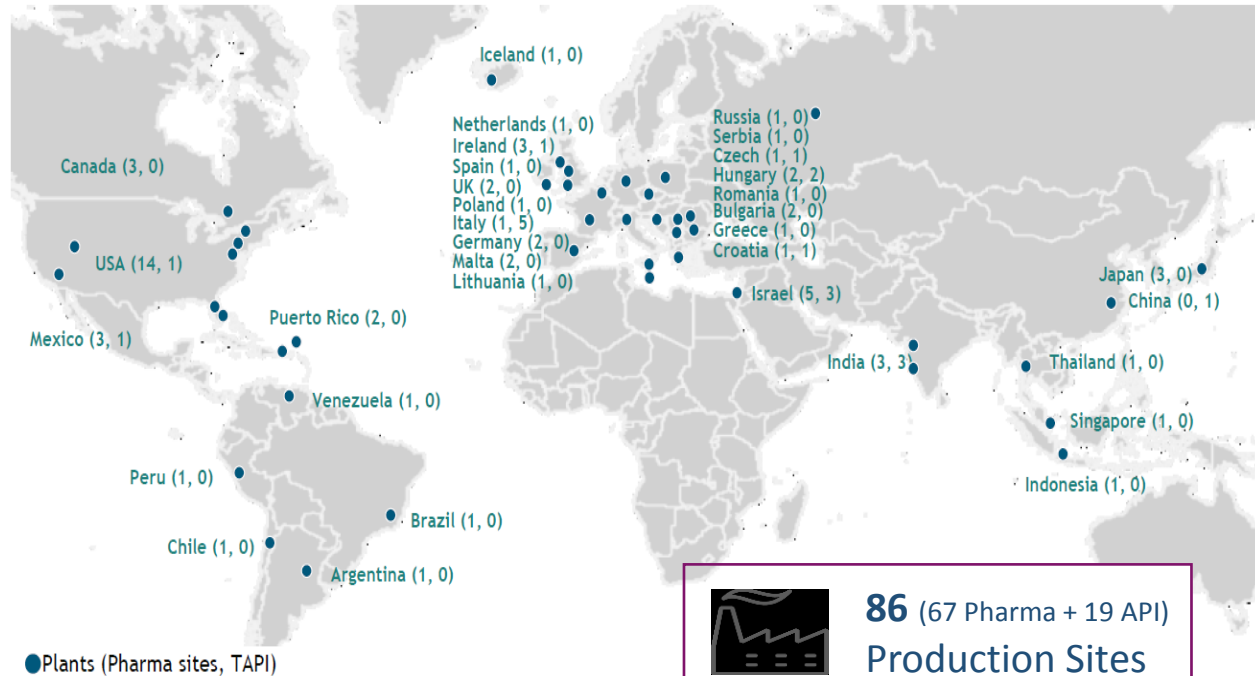


# Teva's business model, Targeting a Unique Space In The Industry



# Teva Global Operations

The largest and most competitive fully integrated manufacturing and supply chain network in the industry



**86** (67 Pharma + 19 API)

**Production Sites**



**32,500**  
employees



**34**  
Countries



**100**  
Markets



**3500**  
Drugs



**50,000**  
SKUs



# Teva Global Operations Objectives

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- 1 To be the **Best** fully **Integrated & Flexible** global Operational network (Pharma & API)
- 2 Emphasis on **Quality** in all aspects – core competitive competency
- 3 One of the most **Cost Competitive** Operational networks in the industry, through **Operational Excellence** implementation
- 4 Fully prepared **Infrastructure and Capabilities** to address new era in the industry, as well as support Teva's growth and expansion
- 5 **People Above All** – Safety, Health, Careers and Wellbeing



# Agenda

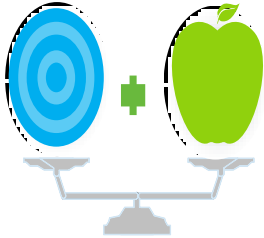
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# What is OPERational EXcellence?

**Program** with the goal of delivering a **sustainable step change** in our operational **performance** on all dimensions

Performance    Health



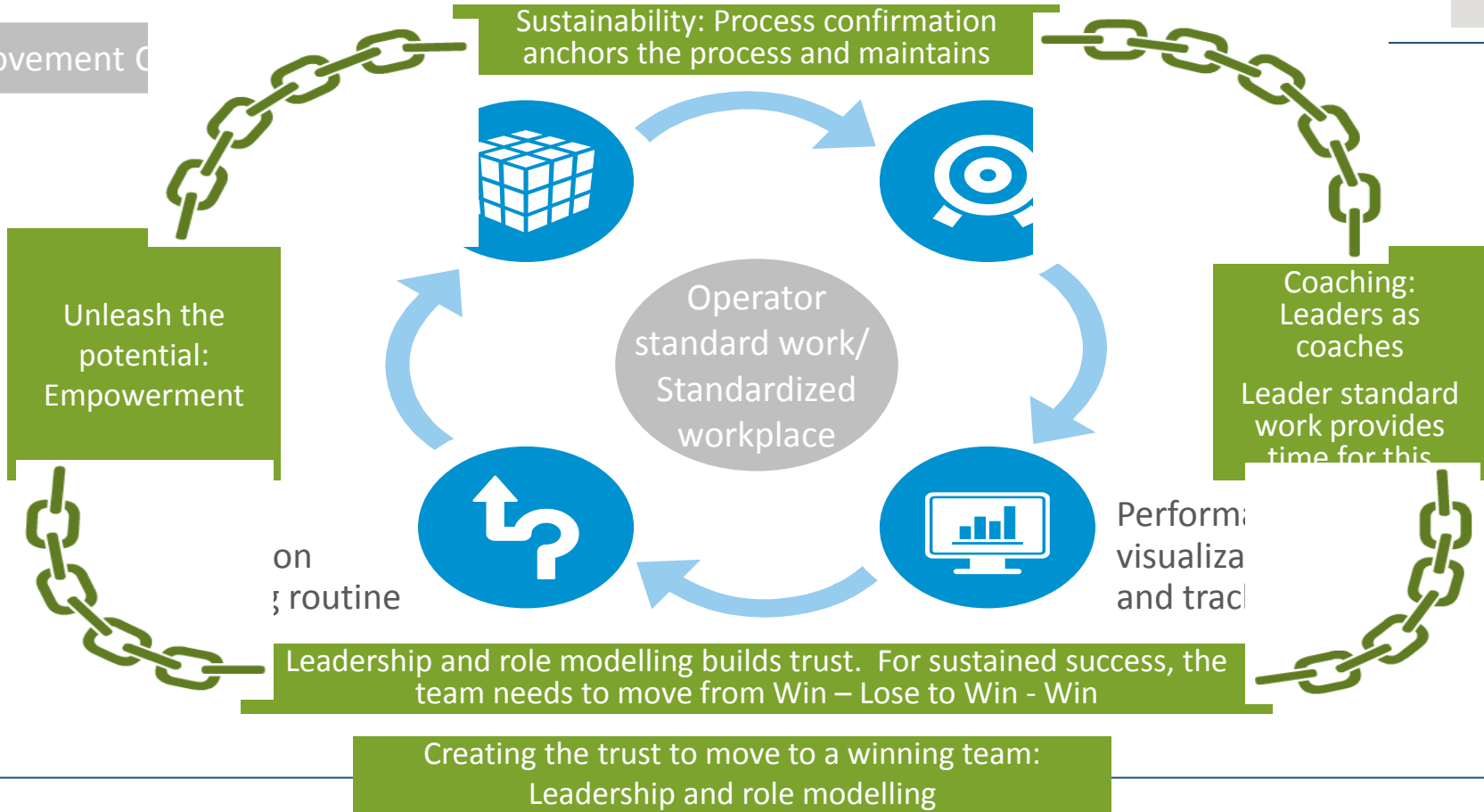
- ✓ Safety
- ✓ Quality
- ✓ Service
- ✓ Cost competitiveness

We do this by deploying our own **Production System** across our entire **network** that is focused on:

- **Best in class systems**, tools and processes
- Employee **engagement and empowerment**
- A mindset and culture of **continuous improvement**
- Creating our **new way of working**

# How It Fits Together: OPEX

Improvement C

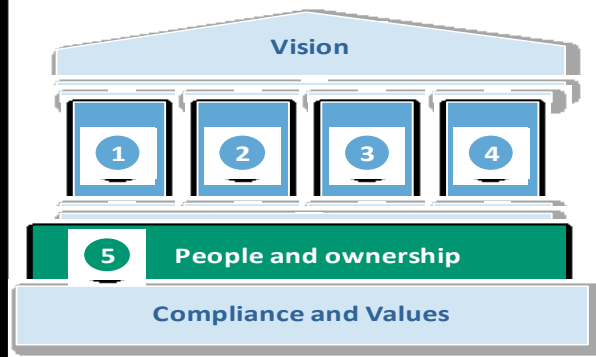


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# Teva Production System – 5 pillars to drive the way we operate



### 1 Standard work

Workplace organization

Operator standard work

Process confirmation

Leader standard work

### 3 Agile Flow

Cycle time reduction

Inventory reduction

Planning

### 2 Performance Management

KPIs / Metrics / Targets

Performance visualization

Daily routines

Problem solving

### 5 People and Ownership

Round tables

Zero loss culture

Ownership

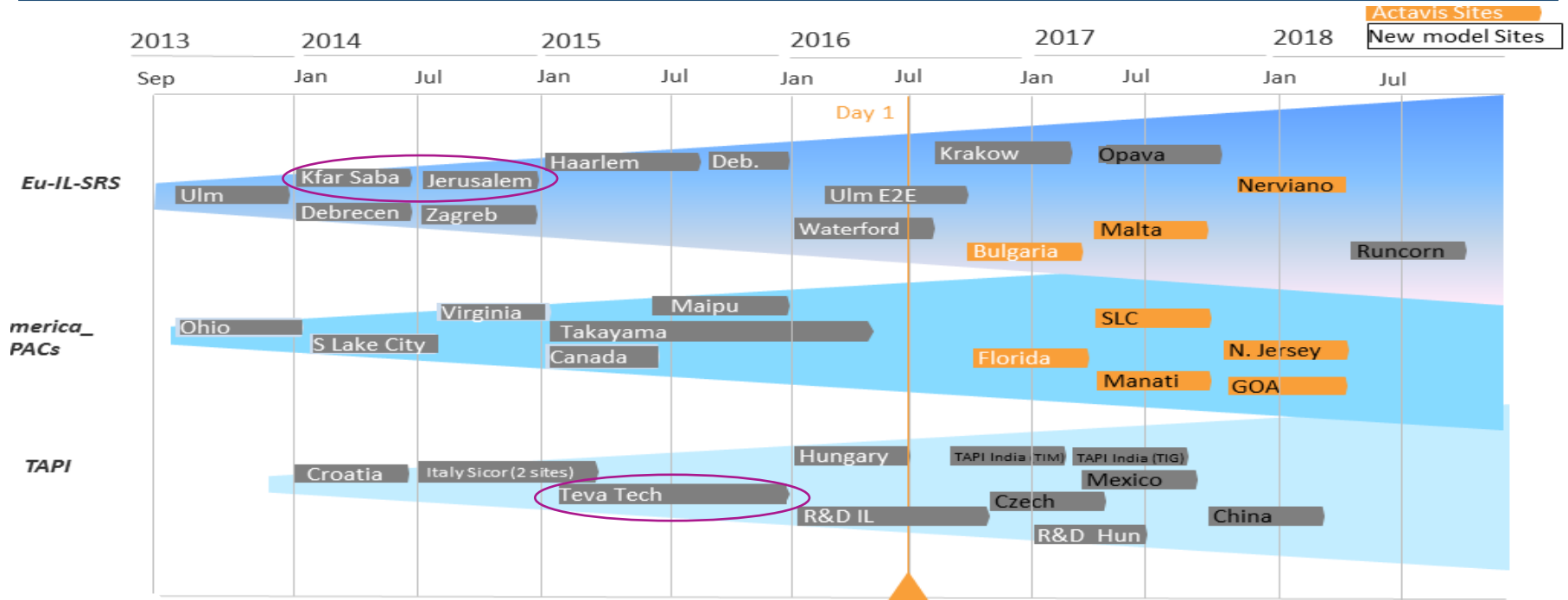
### 4 Equipment care

Cleaning, inspection and lubrication

Maintenance delivery

Equipment settings

# Original Roll out plan, with 7 new Actavis sites included



## Required Enablers throughout roll out plan

### Sustainability Enablers:

Transformation methodology, M&B training and leadership coaching

### Governance & Control

PMO (transformation tracking, program communications, transformation governance, etc..)

# OPEX is growing, shaping our future culture and our competitive edge - **Key achievements to date:**



- **More and more sites** are part of the journey and sharing, helping each other
- OPEX mindset of leadership on site and across regions is stronger and stronger, **new generation of leaders** getting groomed to take it to another level



- **OPEX Academies** are **boosting capabilities building** all over the world and generating the army of problem solvers we need – soon **OPEX M&B coaching** will add to this effort

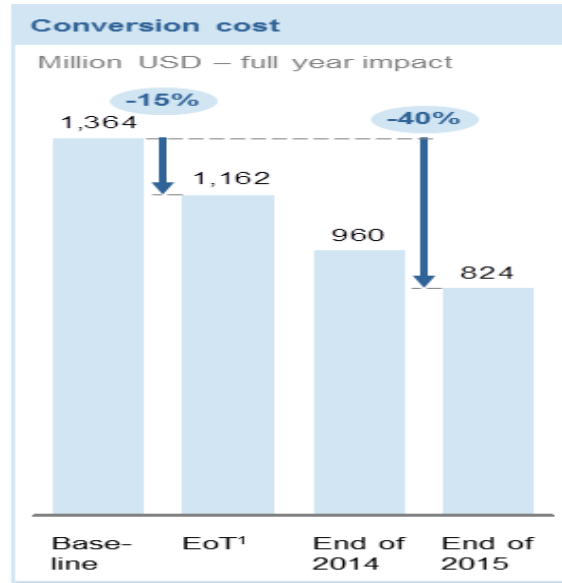
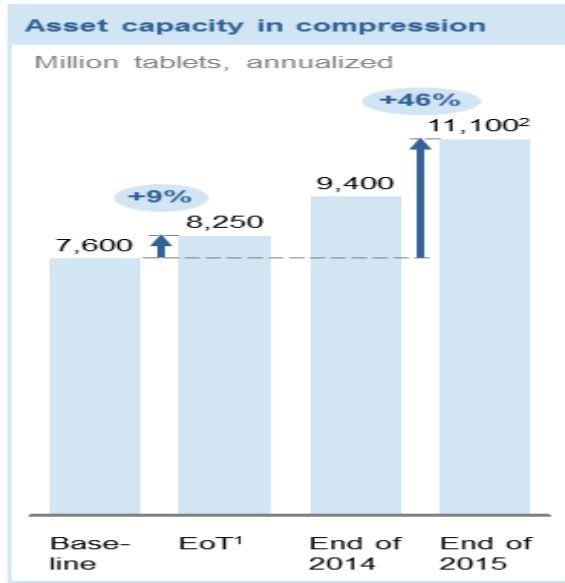


- OLT see more than ever **OPEX as a strategic enabler** to reach **Teva north star** and our competitive advantage in **Supply chain Excellence by 2021**



# Second wave sites have shown great improvement as well - Debrecen

- Positive mindset motivates people to participate actively and drive changes forward
- A significant impact on productivity, efficiency and competitiveness





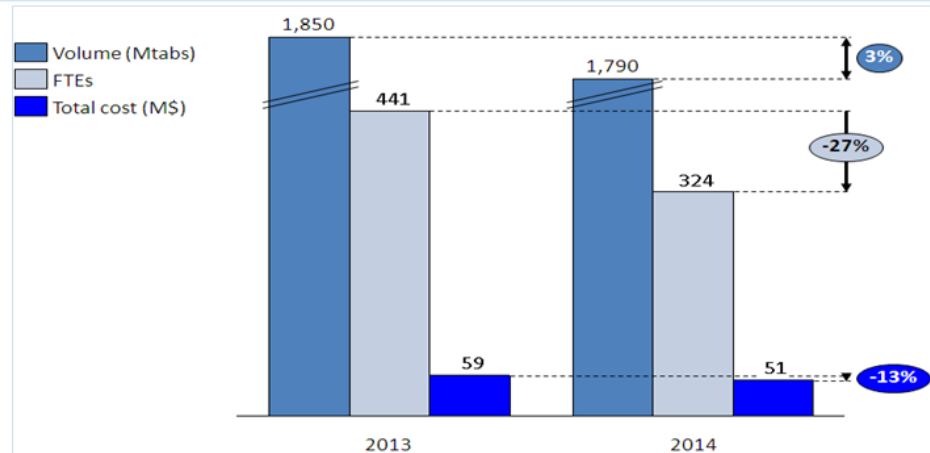
# OPEX stories - In Ohio, significant impact

While notable double digit bottom line gains made, the Ohio OPEX *transformation* is much more than a cost savings initiative:

- **Employees** – proud, energized and engaged work force
- **Quality** - despite reduction in resources on all fronts, improved quality profile
- **Site Viability** – making Ohio a more competitive site and challenging landscape



## Productivity and OEE improvements



# Agenda

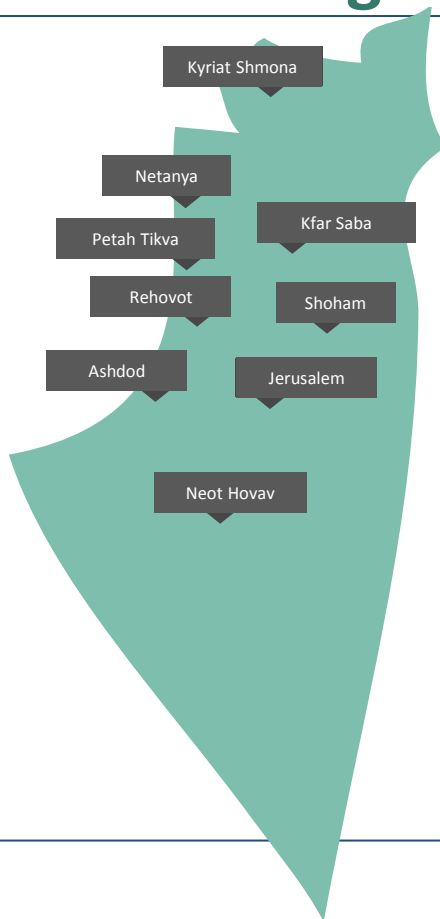
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# Teva Israel Operations – Creating Value

## Creating value – approx. 25% of Teva sales

- Copaxone
- Azilect
- Inhalers
- Biological Products



**2,000  
Products**



**4,400  
Employees**



**9 sites  
6 production sites**



**Supply to 60  
markets**

## Variety of technologies:

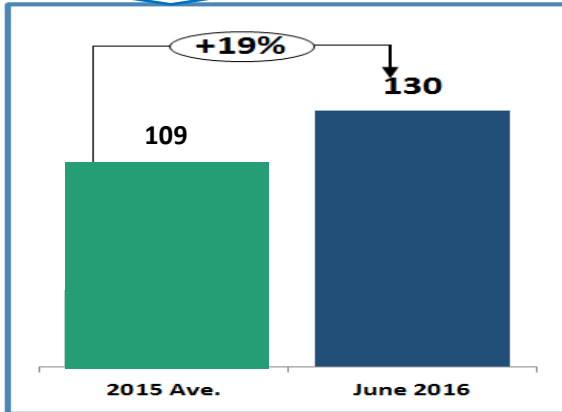
- Solids and capsules
- Sterile
- Inhalers
- API
- Medical Device
- Syrups



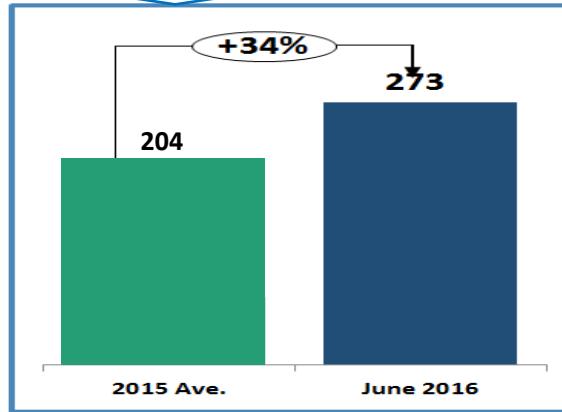
# OPEX achievements in Kfar Saba

- Managers embrace OPEX as a way of life, they 'Walk the Talk'
- Performance Boards, standards and Routines implemented
- Professional capability building
- Wide implementation of round table routines

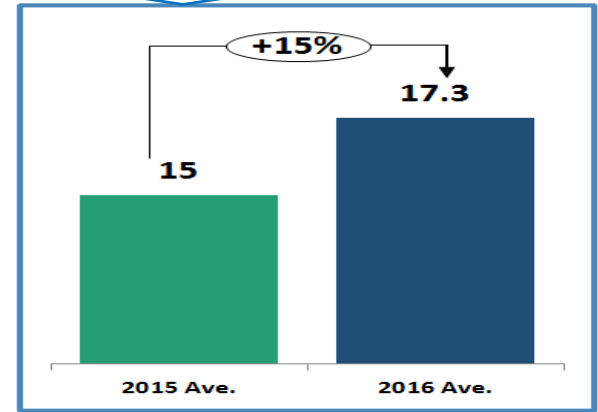
Blister packaging production (M units)



Bottle packaging production (M units)



Labs – Ave. released batches per employee, per month



# OPEX achievements in Jerusalem

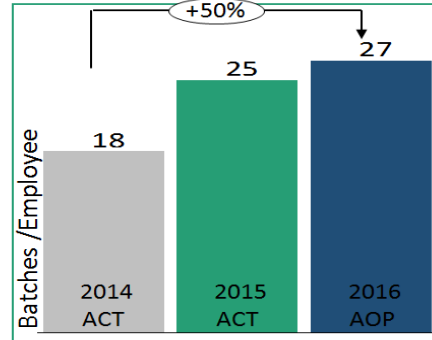
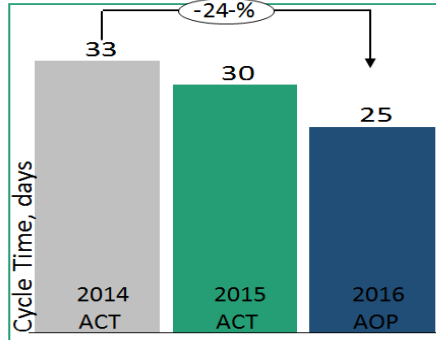
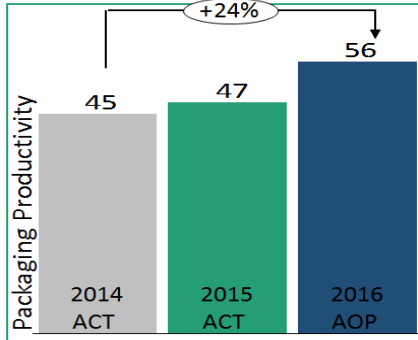
- Amazing things are happening at the Jerusalem site. Productivity is up in specific areas, Cycle time is down and employees are more energized than ever
- What sparked the changes? Operational Excellence (OPEX) and our employees' determination to be the best they can be

K annual packed tablets per employee

Ave. batch production time

RM lab - Ave. released batches per employee, per month

גיא נוי, עובד מצטיין ארצי

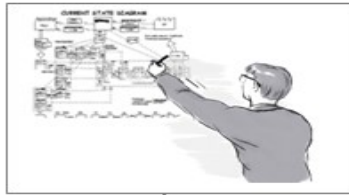


# What does this look and feel like in a site?

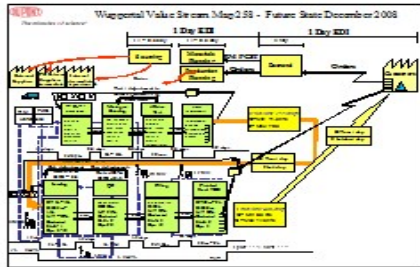


← Total of 4-6 months →

## Operating processes



## Target VSM\*



## Management system



## Use of performance boards



## Capabilities



5S, Gemba walks, problem solving, Std work, SMED, PC



## Mindset and behaviors



## Team and individual coaching



**Engaging shopfloor**

# Q&A



# Thank You

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# Back Up

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# What is different about OPEX transformation?

	Typical Plant Improvement Approach	OPEX Transformation
1 Aspiration	<ul style="list-style-type: none"><li>Evolutionary kaizen approach</li><li>3% to 5% improvement annually</li><li>Not always linked to business targets</li></ul>	<ul style="list-style-type: none"><li><b>Radical initial step-change</b> of ~30% followed by incremental improvement</li><li>Direct link to business goals – 3 C's (Customer, Compliance, Cost/ cash flow)</li></ul>
2 Focus	<ul style="list-style-type: none"><li>Main focus is on process excellence tools (6 Sigma, Lean etc.)</li></ul>	<ul style="list-style-type: none"><li><b>Integrated and holistic</b><ul style="list-style-type: none"><li>Operating system</li><li>Management infrastructure</li><li>Mindsets and behaviors</li></ul></li></ul>
3 Implementation approach	<ul style="list-style-type: none"><li>Many independent smaller kaizens</li></ul>	<ul style="list-style-type: none"><li><b>Mini-Transformations</b> – focused and deep; 16 weeks, one value stream, ~100 FTEs max.</li></ul>
4 Scalable around the production system	<ul style="list-style-type: none"><li>Approaches vary across network</li><li>Inconsistent support resources</li></ul>	<ul style="list-style-type: none"><li><b>Scalable building blocks</b> –<ul style="list-style-type: none"><li>repeatable mini-t methodology</li><li>“multipliers” - change agents, pull forwards</li><li>Common playbook</li></ul></li></ul>
5 Sustainable capability building	<ul style="list-style-type: none"><li>People training and certification – typically project based (eg. Process Excellence Belts)</li></ul>	<ul style="list-style-type: none"><li><b>Building change leaders</b><ul style="list-style-type: none"><li>All levels</li><li>Technical and leadership development</li><li>Expectation to drive performance and make changes sustainable</li></ul></li></ul>

# e.g :Ohio Site, beyond the numbers

**Beyond the numbers, OPEX has allowed us to “give back” to the Packaging work force – a higher quality of life!**

- Consolidation to a single “nights” shift on Aug 4 (4 days/week x 10 hrs/day)
- Effectively plan for a transition to a single “days” shift (4 x 10) early in 2015

While notable double digit bottom line gains have been made, the Ohio OPEX *transformation* is much more than a cost savings initiative:

- **Employees** – proud, energized and **engaged work force!**
- **Quality** - despite reduction in resources on all fronts, **improved quality profile**
- **Teva Production System (TPS)** – a standardized and tiered **road map to excellence** in Operations
- **Site Viability** – making Ohio a **more competitive** site and **challenging landscape**