



Total Productive Maintenance

PT Sanghiang Perkasa (Kalbe Nutritionals)



Chapter : Chapter 1

Company Profile

Presented by : Yuswa Slamet





Chapter 1

Company Profile

1.1 Company Profile

1.1.1. Location

1.1.2. History

1.1.3. Organizations

1.1.4. Plant Layout

1.1.5. Size of Business

1.2 Productions System (Business Process)

1.3 Main Products and Production Processes

1.4 Market Share

1.5 TPM Inauguration

1.1 Company Profile

1.1.1 Location



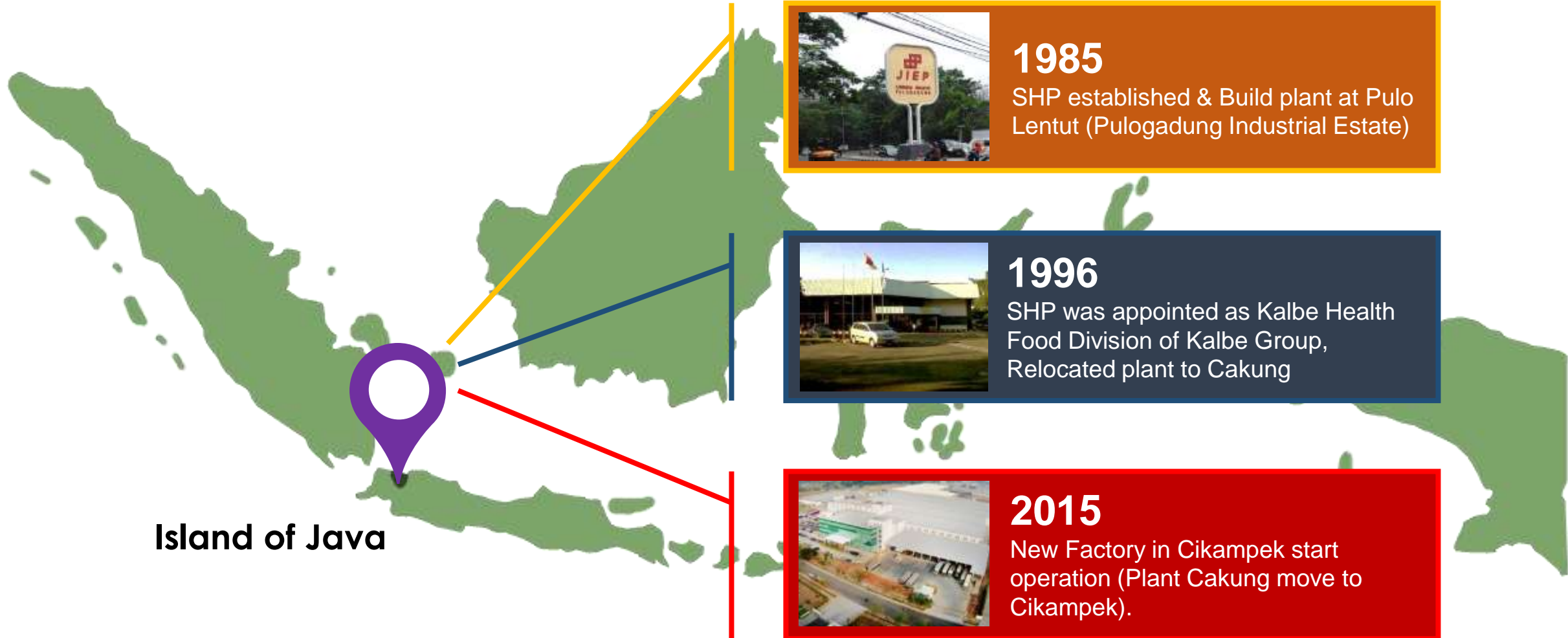
PT SANGHIANG PERKASA (KALBE NUTRITIONALS)

Location

Kawasan Industri Indotaisei
Sektor 1A Blok Q2 Kota Bukit Indah Cikampek, Karawang
Jawa Barat

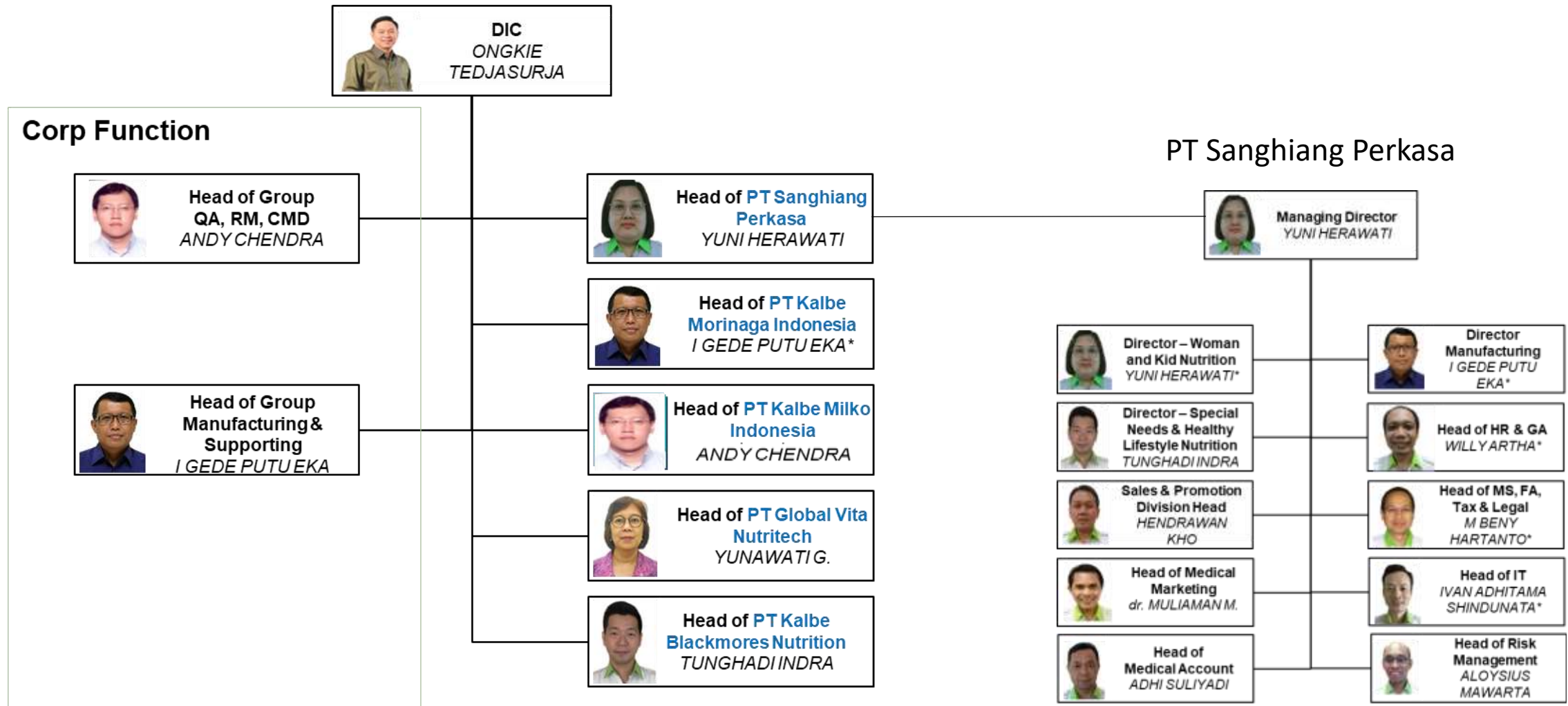
1.1 Company Profile

1.1.2 History



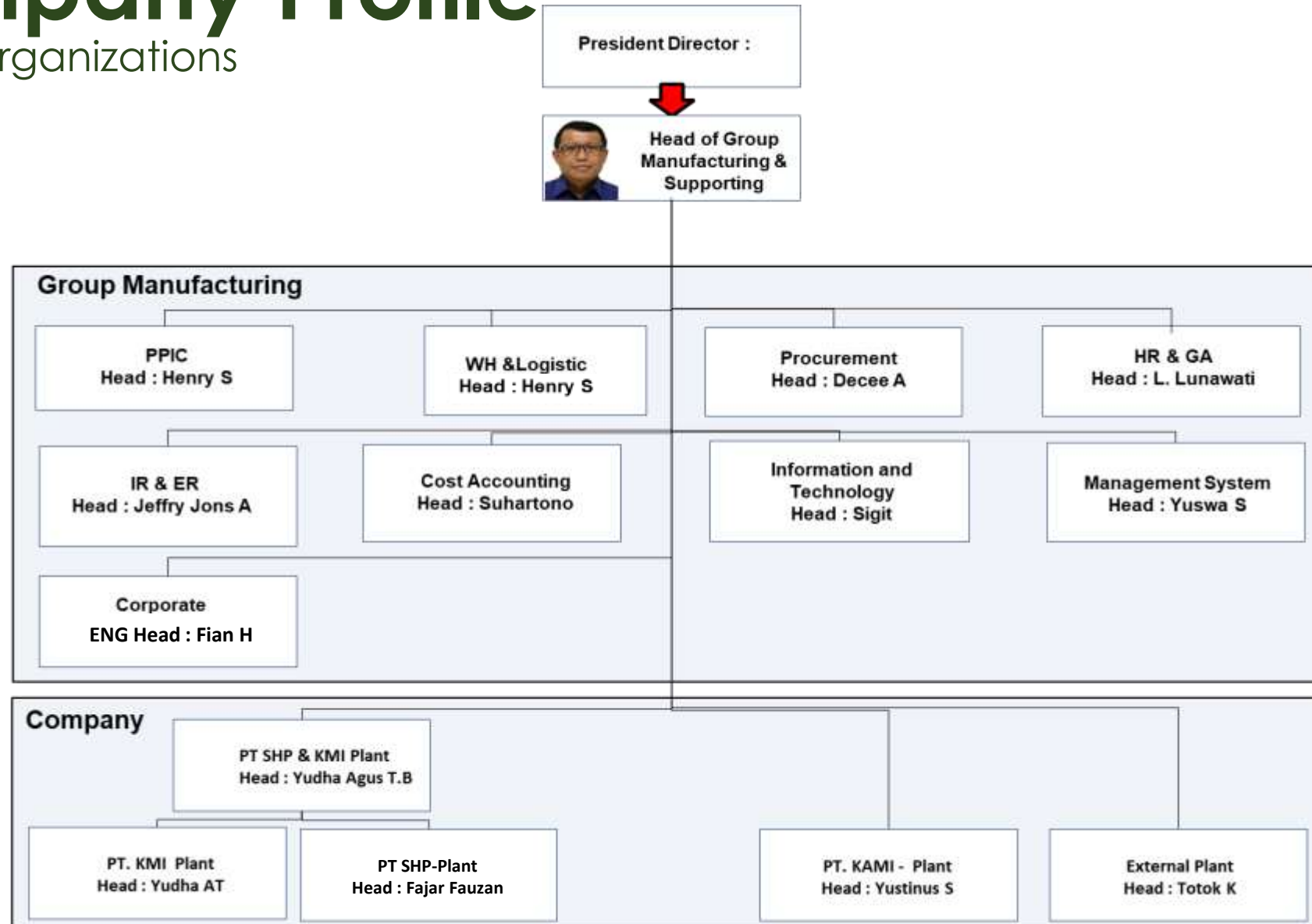
1.1 Company Profile

1.1.3 Organizations



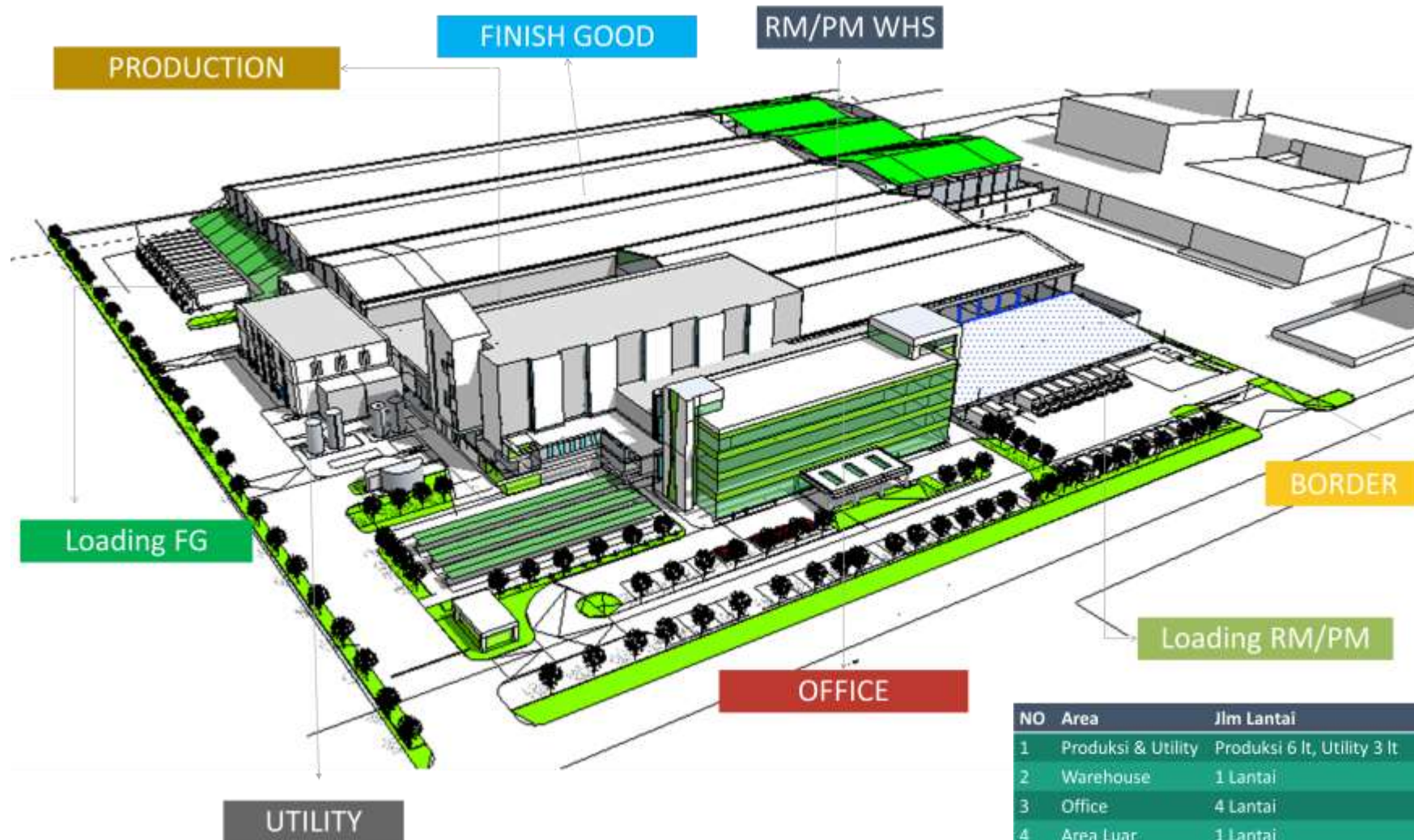
1.1 Company Profile

1.1.3 Organizations



1.1 Company Profile

1.1.4 Plant Layout



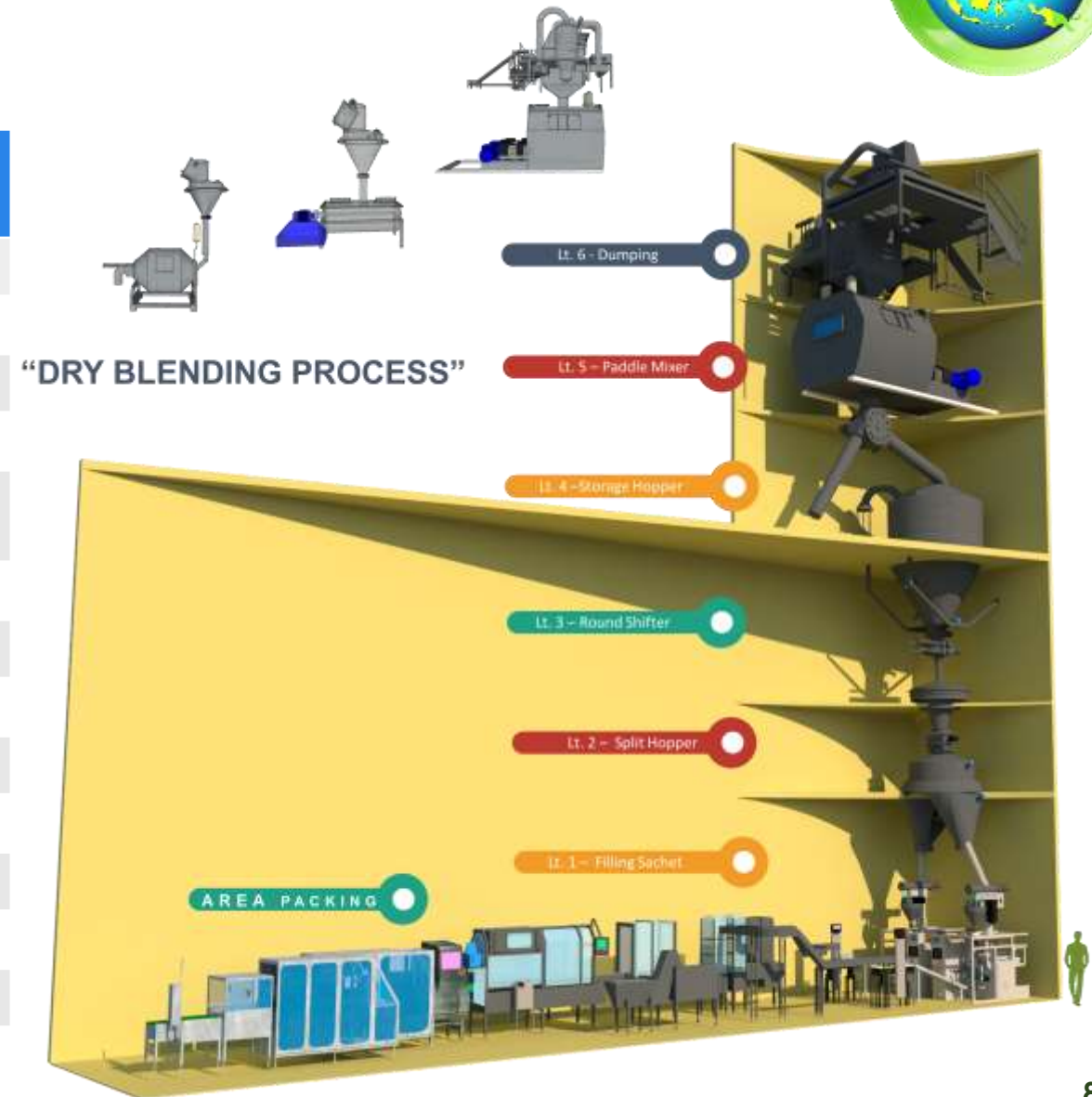
NO	Area	Jlm Lantai	Luas(M2)	%
1	Produksi & Utility	Produksi 6 lt, Utility 3 lt	17.673	27,35%
2	Warehouse	1 Lantai	27.250	42,17%
3	Office	4 Lantai	6.480	10,03%
4	Area Luar	1 Lantai	13.220	20,46%
Total			64.623	100%

1.1 Company Profile

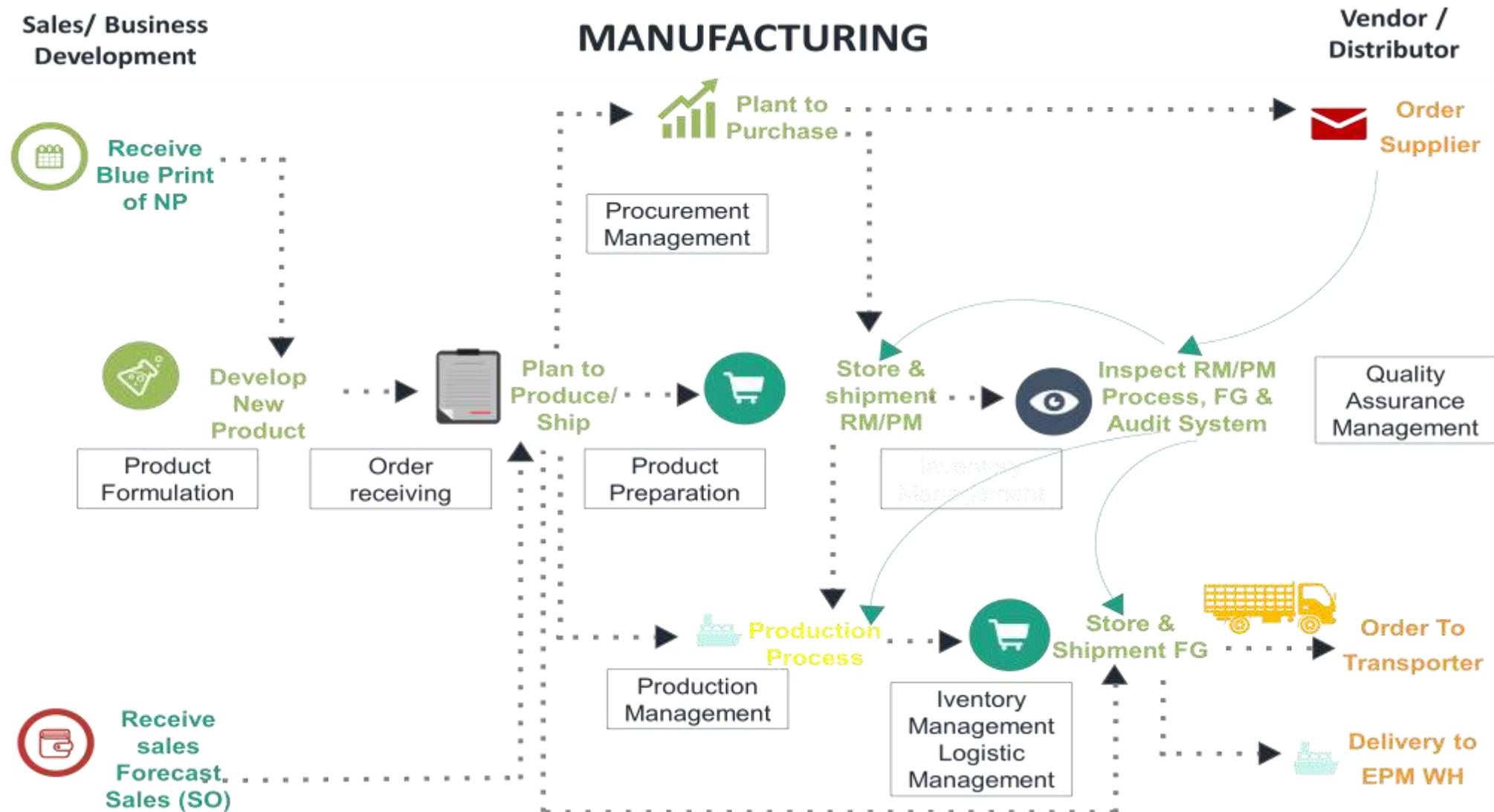
1.1.5 Size of Business



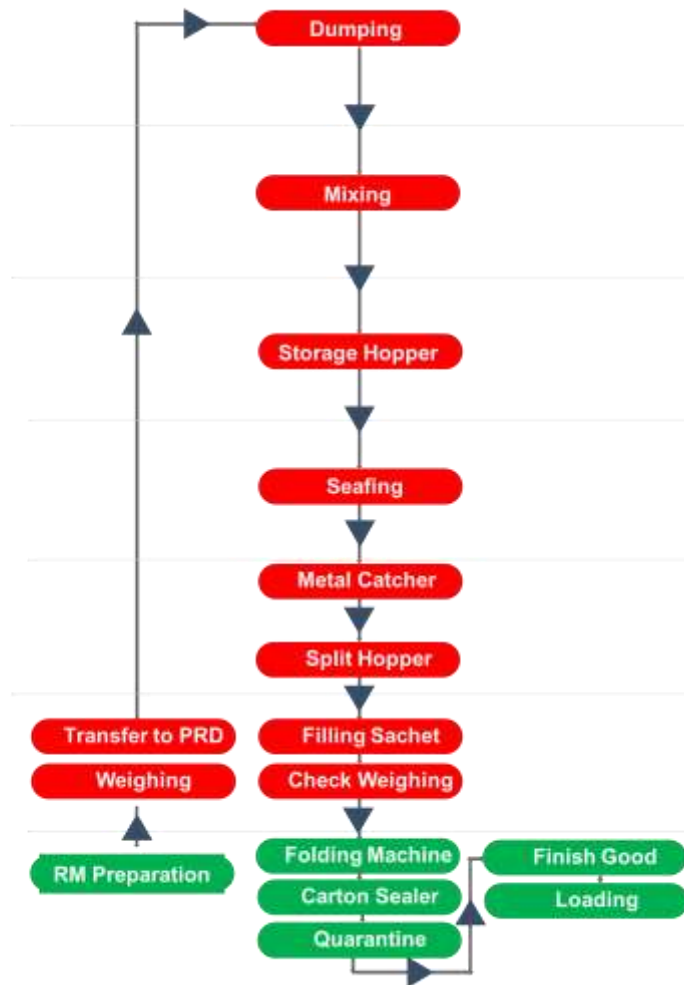
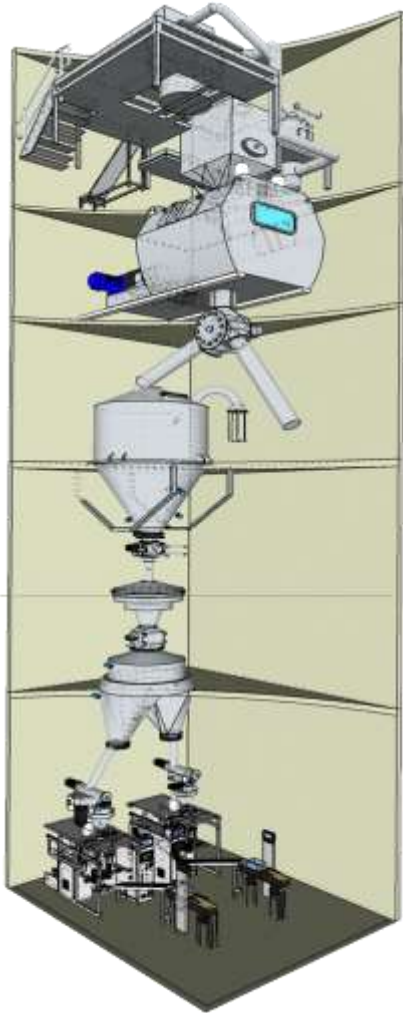
No	Line	Circle	Dept.	Area	Capacity (ton/month)
1	A	AUTOBOT	Production	Blender,filling ,packing	450,39
2	B	BEAUTY	Production	Blender,filling ,packing	278,26
3	C	CHAMPION	Production	Blender,filling ,packing	92,75
4	D1	D ONE	Production	Blender,filling ,packing	113,61
5	D2	DIAMOND - DINAMITE	Production	Blender,filling ,packing	222,11
6	E	ELECTRA	Production	Blender,filling ,packing	441,14
7	F1	FUNTASTIC	Production	Blender,filling ,packing	26,36
8	G1	GENIOUS	Production	Blender,filling ,packing	260,61
9	H1	Dinicho	Production	Blender,filling ,packing	17,49
10	H2	HERO	Production	Blender,filling ,packing	7,40
11	I	ISTIMEWA	Production	Blender,filling ,packing	6,94
12	J	JOSS	Production	Blender,filling ,packing	225,07
13		UTILITY	Engineering	AHU	
14		ROBOTIC	Production	Robotic Palletizing	



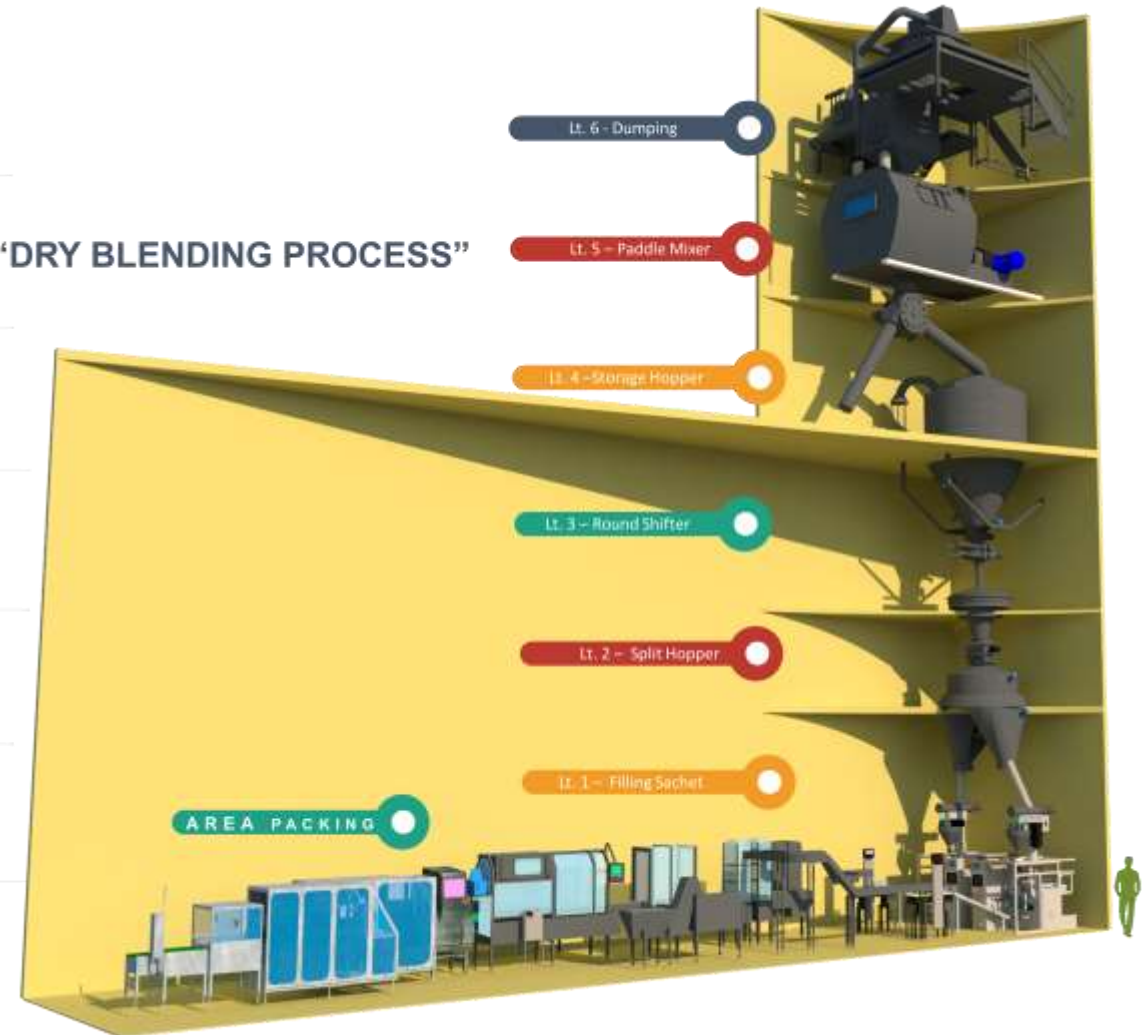
1.2 Productions System (Business Process)



1.3 Main Products & Productions Processes



“DRY BLENDING PROCESS”



1.3 Main Products & Productions Processes





1.4 Market Share

Indonesia Urban (Vol % & Val % Share)

Total Powder Milk Market Growth

	Volume	Value
MAT Grw	-1.7	-0.4
YTD Grw	-1.7	-0.4

Growth VS Previous Period

	NOV20	DEC20	PP Grw
Vol	16.813.220	17.407.294	3,5
Val	1.980.868	2.051.719	3,6

Indonesia Urban Vol % Share	DEC20	Gap Share vs PP	Growth vs PP	Growth vs MAT	Growth vs YTD
PT 1111	30,6	-0,6	1,5	-7,4	-7.4
PT 2222	28,9	-0,1	3,3	-0,7	-0.7
PT 3333	9,3	-0,4	-0,5	-0,3	0.0
SHP	8,3	0,1	4,8	-6,9	-6.9
PT 444	7,8	0,3	8,0	5,6	5.6
PT 555	7,2	0,3	7,0	32,7	32.7
PT 666	3,2	0,2	11,4	3,0	3.0
PT 777	1,4	0,1	9,8	-15,4	-15.4
PT 888	0,9	0,0	4,5	-2,8	-2.8
PT 9999	0,9	0,1	9,1	10,7	10.7

Indonesia Urban Val % Share	DEC20	Gap Share vs PP	Growth vs PP	Growth vs MAT	Growth vs YTD
PT 1111	27,1	0,0	3,3	0,4	0.4
PT 2222	23,8	-0,4	1,7	-5,5	-5.5
PT 3333	13,0	-0,5	-0,3	0,2	0.2
SHP	13,0	0,2	4,6	-4,5	-4.5
PT 444	7,0	0,3	7,8	8,1	8.1
PT 555	4,1	0,1	6,1	33,7	33.7
PT 666	3,8	0,3	10,6	5,4	5.4
PT 777	2,5	0,1	8,9	14,5	14.5
PT 888	2,2	0,0	4,8	0,9	0.9
PT 9999	1,8	0,1	8,7	-14,9	-14.9

1.5 TPM Inauguration



Management Decision to implement TPM





Chapter 2



TPM Policy & Goals

2.1 Why SHP Choose TPM

2.2 Company Policy

2.2.1 Vision & Mission

2.2.2 SHP Balance Score Card

2.2.3 Initiatives KN_Operations

2.3 TPM Policy

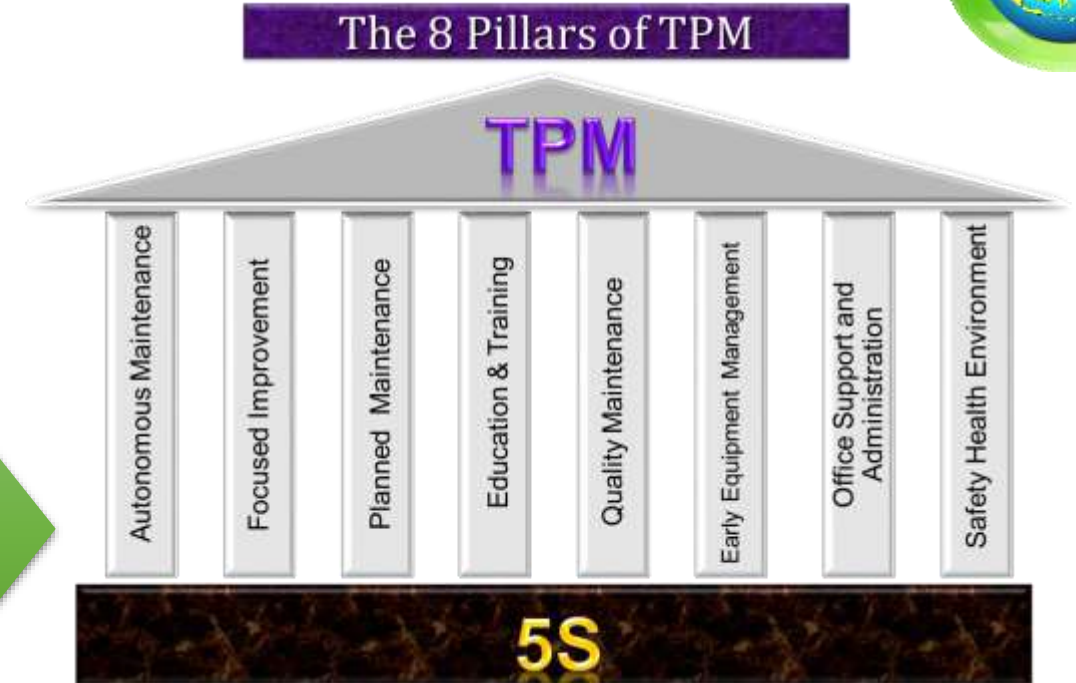
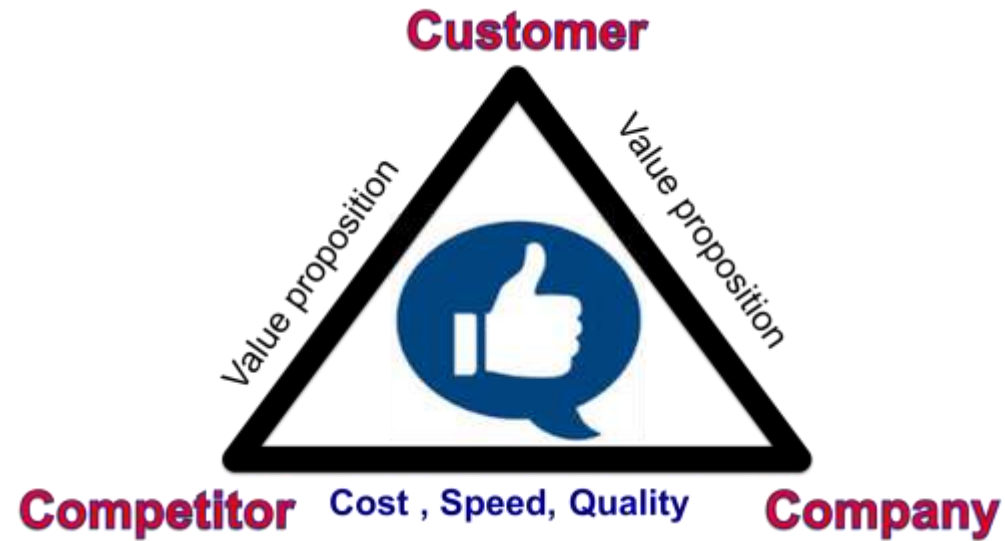
2.3.1 Objective & Strategies

2.3.2 Road Map

2.3.3 TPM Master Plan

2.4 TPM Target (KPI)

2.1 WHY SHP CHOOSE TPM



We Believed that TPM implementation will guide our process to be the best...
Best in Quality, Best Cost, Best Speed



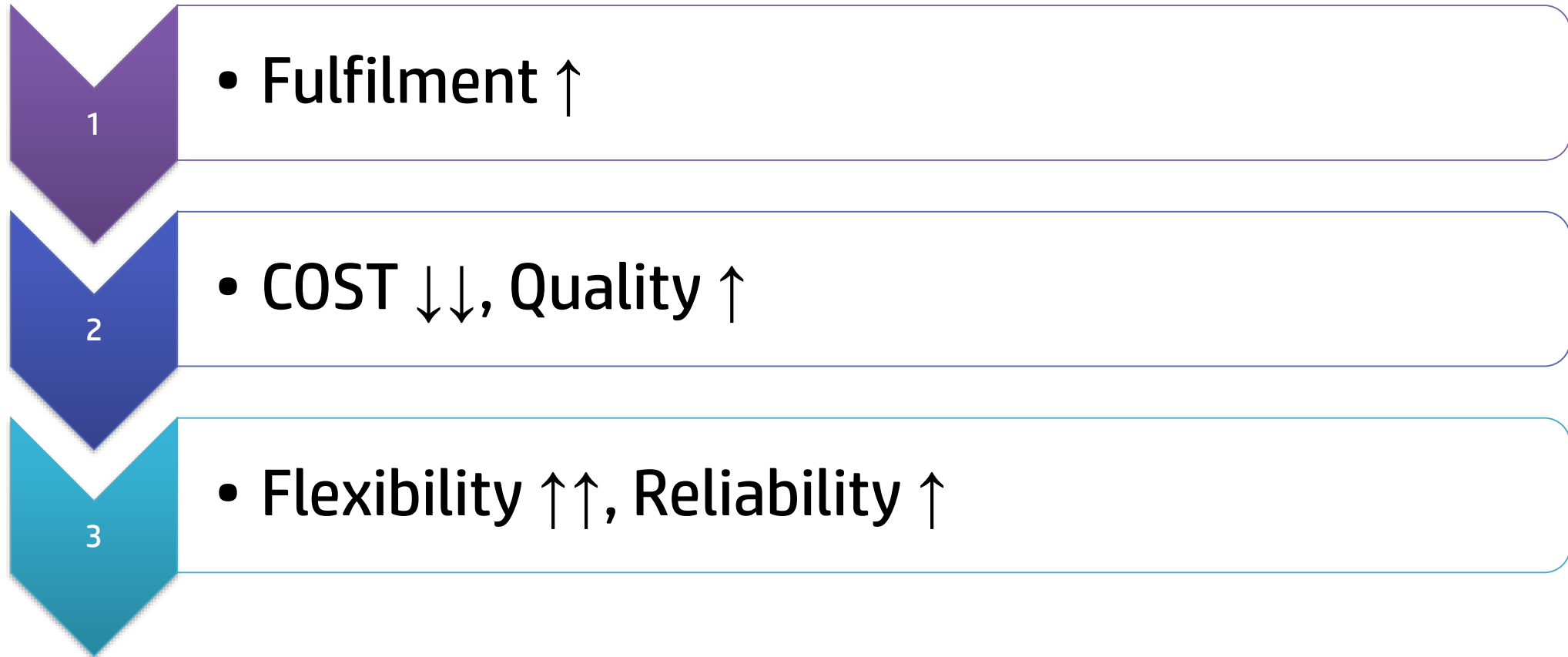
2.2 COMPANY POLICY

2.2.1 Vision & Mission

1	What Business Are We In	Nutrition Solutions in Every Stage Of Human Life Cycle
2	Vision	Leading Global Nutrition Company Driven by Innovation, Strong Brands & Excellent Management
3	Mission	Providing Best Nutrition Solution for a Better Life
4	Motto	Nutrition for Life
5	Value KALBE Panca Sradha	Trust is the Glue of Life Mindfulness is the Foundation of Our Action Innovation is the Key to Our Success Strive to be the Best Interconnectedness is a Universal Way of Life

2.2 COMPANY POLICY

2.2.3 Initiatives KN Operation



2.3 TPM POLICY

2.3.1 Objective & Strategies



OBJECTIVE

**To Be World Class Manufacturing by Zero Losses, Flexibility
Process and Competitive Operation Cost**

STRATEGY

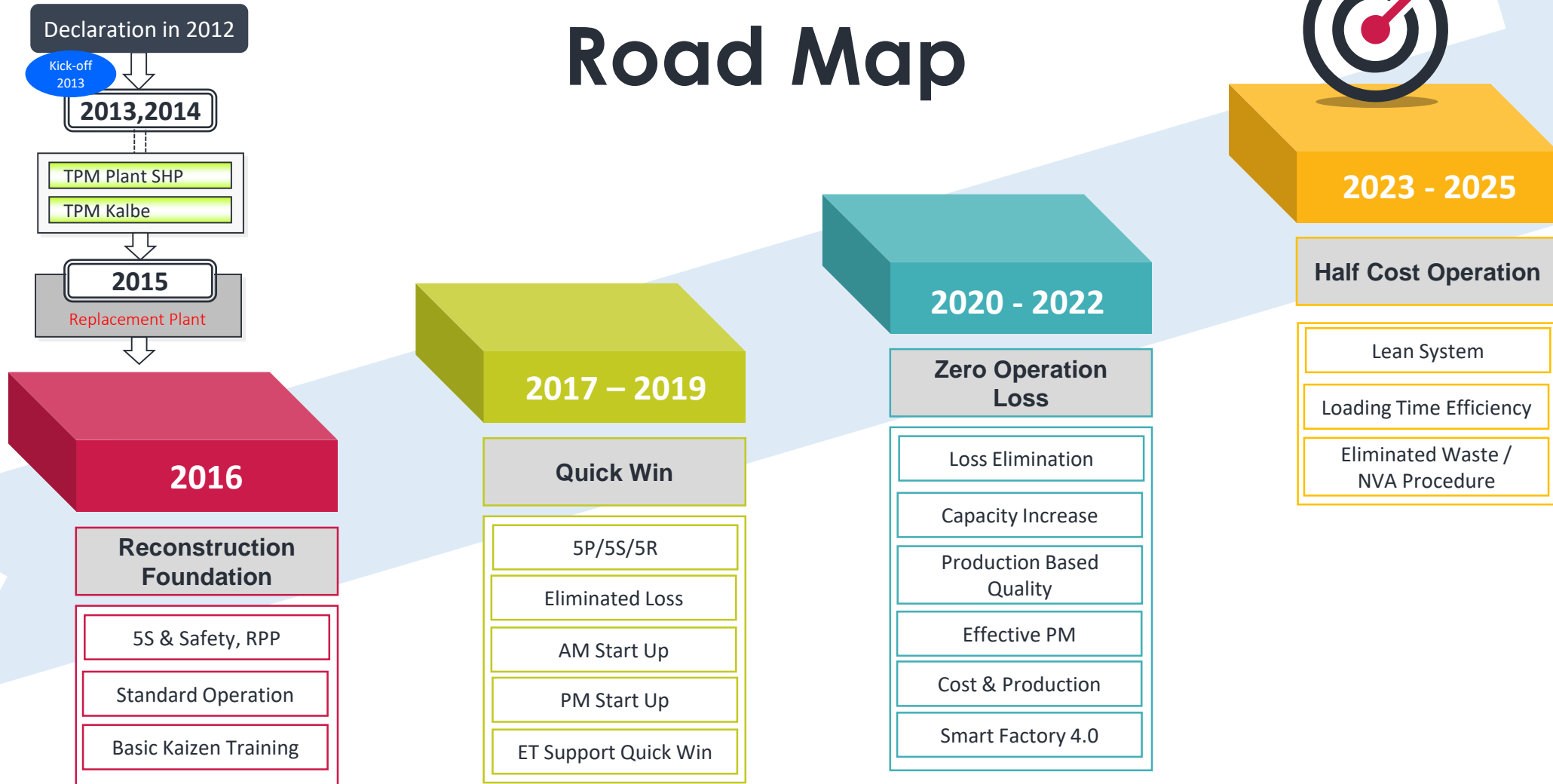
- 1. Maintain Excellent and Flexible Machine**
- 2. Quick Win Process Improvement**
- 3. Improve People Competency**
- 4. Improve / Reduce Cost With Automation**

2.3 TPM POLICY

2.3.2 Road Map

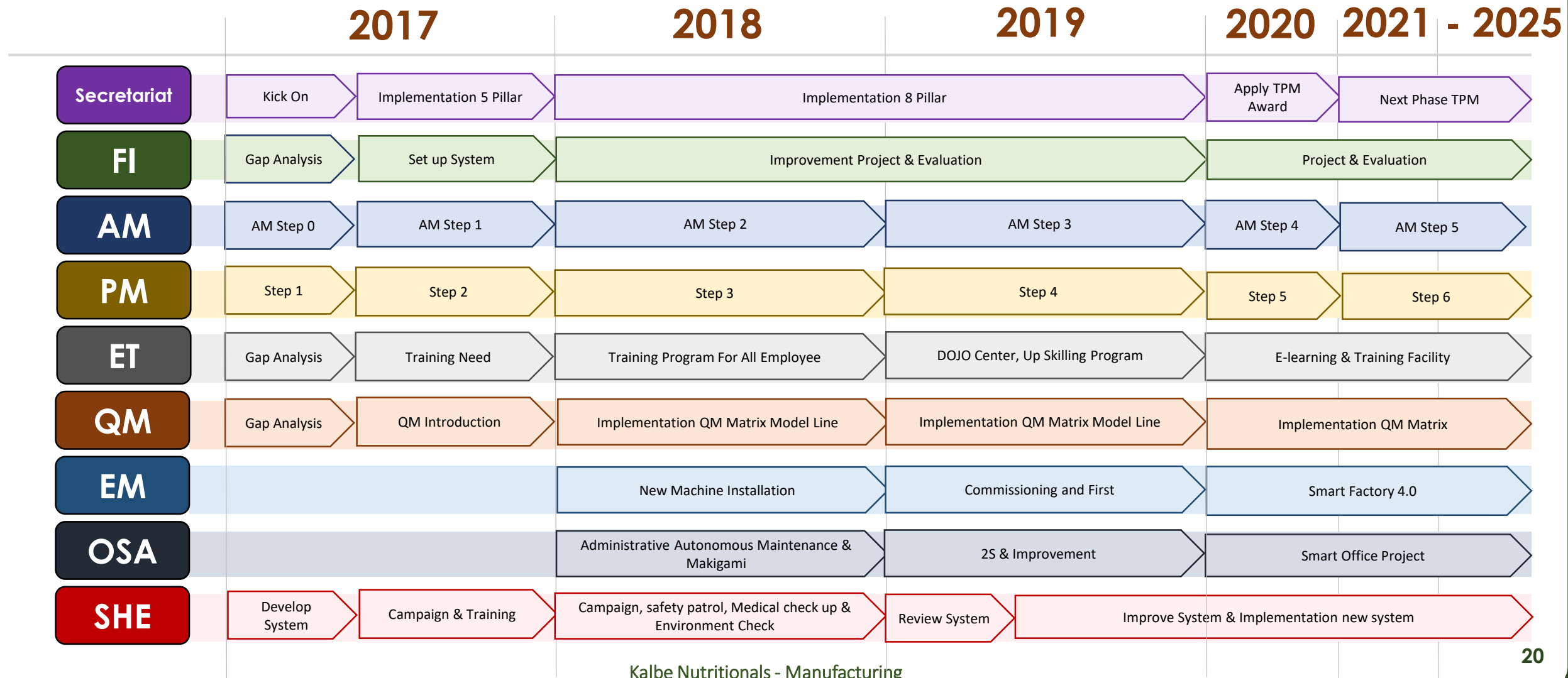


Road Map



2.3 TPM POLICY

2.3.3 TPM Master Plan 2017 - 2020



2.4 TPM TARGET (KPI)



TARGET KPI TPM PT SANGHIANG PERKASA

	ITEM	Unit	BM 2017	BU 2018	BU 2019	BU 2020	BU 2021	BU 2022	BU 2023	BU 2024	BU 2025
C	Conversion Cost	Rp/Kg	5778	6850	7100	7350	7070	6820	6570	6320	6070
P	Order Fulfilement	%	99.1%	99.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P	POE (%)	% OEE	74%	80%	80%	85%	85%	85%	> 85%	> 85%	> 85%
P	Yield	%	99,8%	99,8%	99,8%	99,8%	100.0%	100.0%	100.0%	100.0%	100.0%
D	NOF	Number	3909	2932	2199	1099	550	275	206	155	116
D	NMS	Number	5961	5318	3989	2992	2244	1683	1262	947	710
Q	CUSTOMER COMPLAIN	ppm	0,27	0,23	0,19	0,15	0,13	0,11	0,10	0,09	0,08
S	Number Major Accident (LTI & MTI)	Number / Year	8	0	0	0	0	0	0	0	0
M	Internal Trainer	Number of Internal Trainer	19	25	33	43	47	47	47	47	47



Chapter 3



TPM Organizations & Activities

3.1 Structure for TPM Implementation

3.1.1. TPM Organizational Structure

3.1.2. Distribution of members in the Pillars by area

3.1.3. TPM Governance

3.2 TPM Implementations

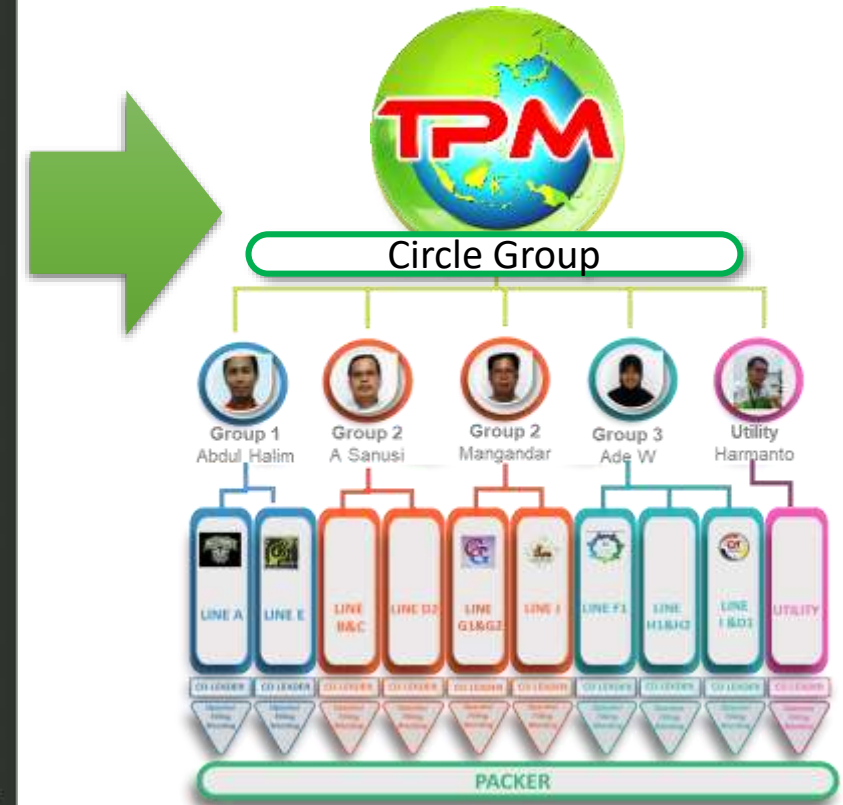
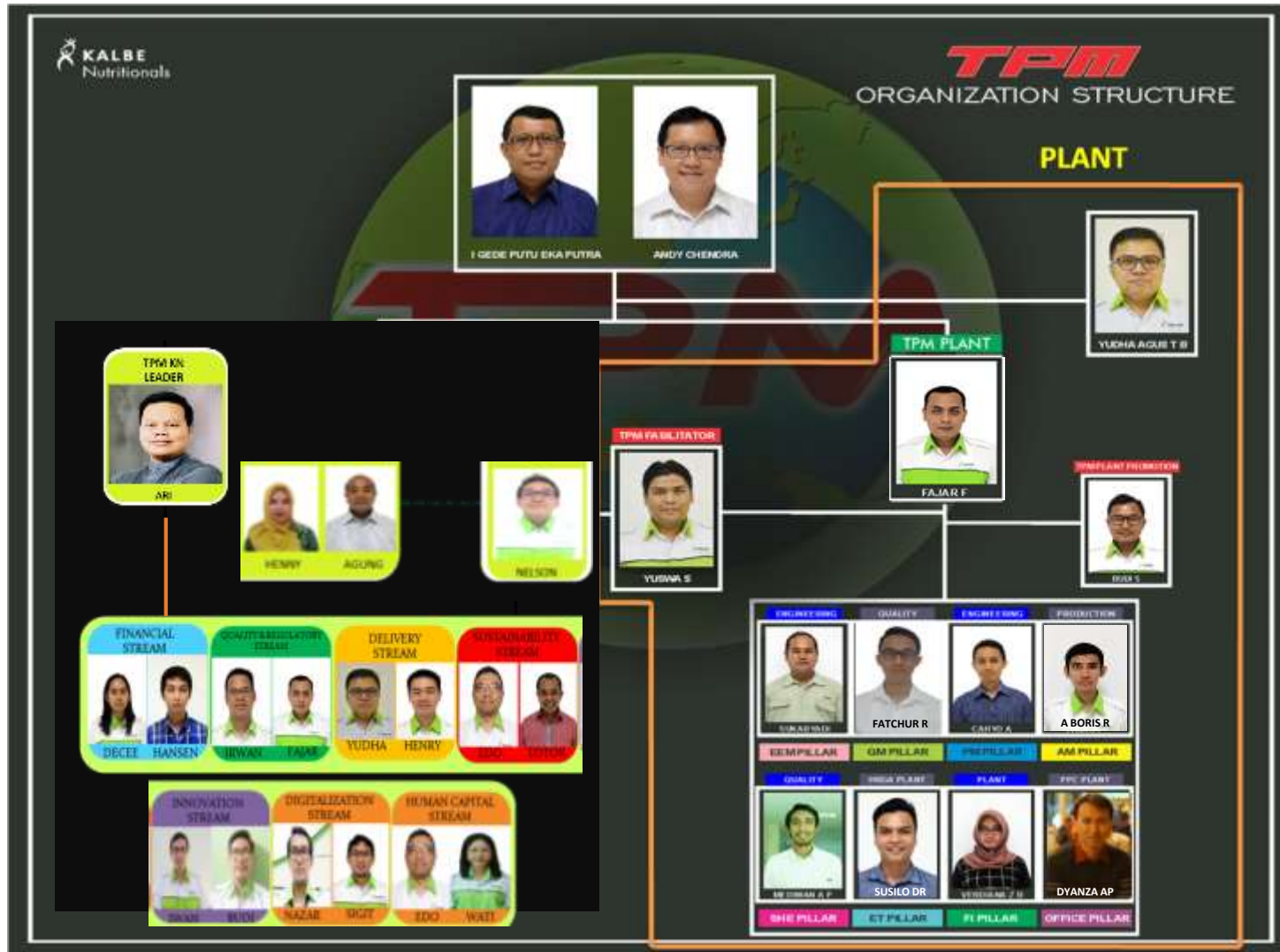
3.2.1 TPM Milestones

3.2.2 TPM Promotion Activities

3.1 STRUCTURE FOR TPM IMPLEMENTATION



3.1.1 TPM Organizational Structure



3.1 STRUCTURE FOR TPM IMPLEMENTATION



3.1.4 Distribution of members in the Pillars by area

Pillar	Production		Engineering		Quality		Planning Control		Human Resource		Process Improvement		Safety, Health & Environment	
	Leader	Member	Leader	Member	Leader	Member	Leader	Member	Leader	Member	Leader	Member	Leader	Member
AUTONOMOUS MAINTENANCE	★			●		●				●				
FOCUS IMPROVEMENT		●		●		●		●		●	★			
PLANNED MAINTENANCE		●	★			●								
EDUCATION & TRAINING		●		●		●			★					
QUALITY MAINTENANCE		●		●	★									
EARLY MANAGEMENT		●	★			●						●		●
OFFICE & ADMINISTRATION		●		●		●	★			●				
SAFETY HEALTH & ENVIRONMENT		●		●		●		●		●		●	★	

★ = Leader

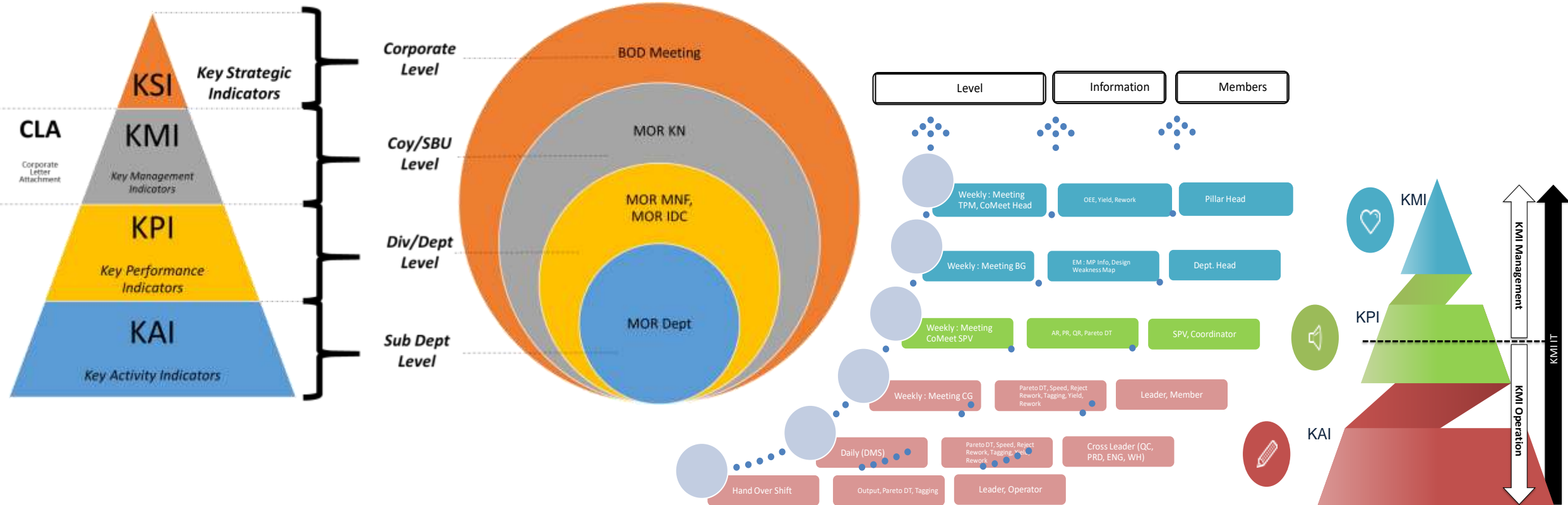
● = Member

3.1 STRUCTURE FOR TPM IMPLEMENTATION

3.1.5 TPM Governance



Review Scheme for 2021



3.1 STRUCTURE FOR TPM IMPLEMENTATION

3.1.5 TPM Governance



DMS Activity

1. Review 8 Big Losses & OEE
2. Follow up Outstanding item
3. Yield Monitoring
4. Kaizen & Kobetsu Kaizen
5. Safety and 5P

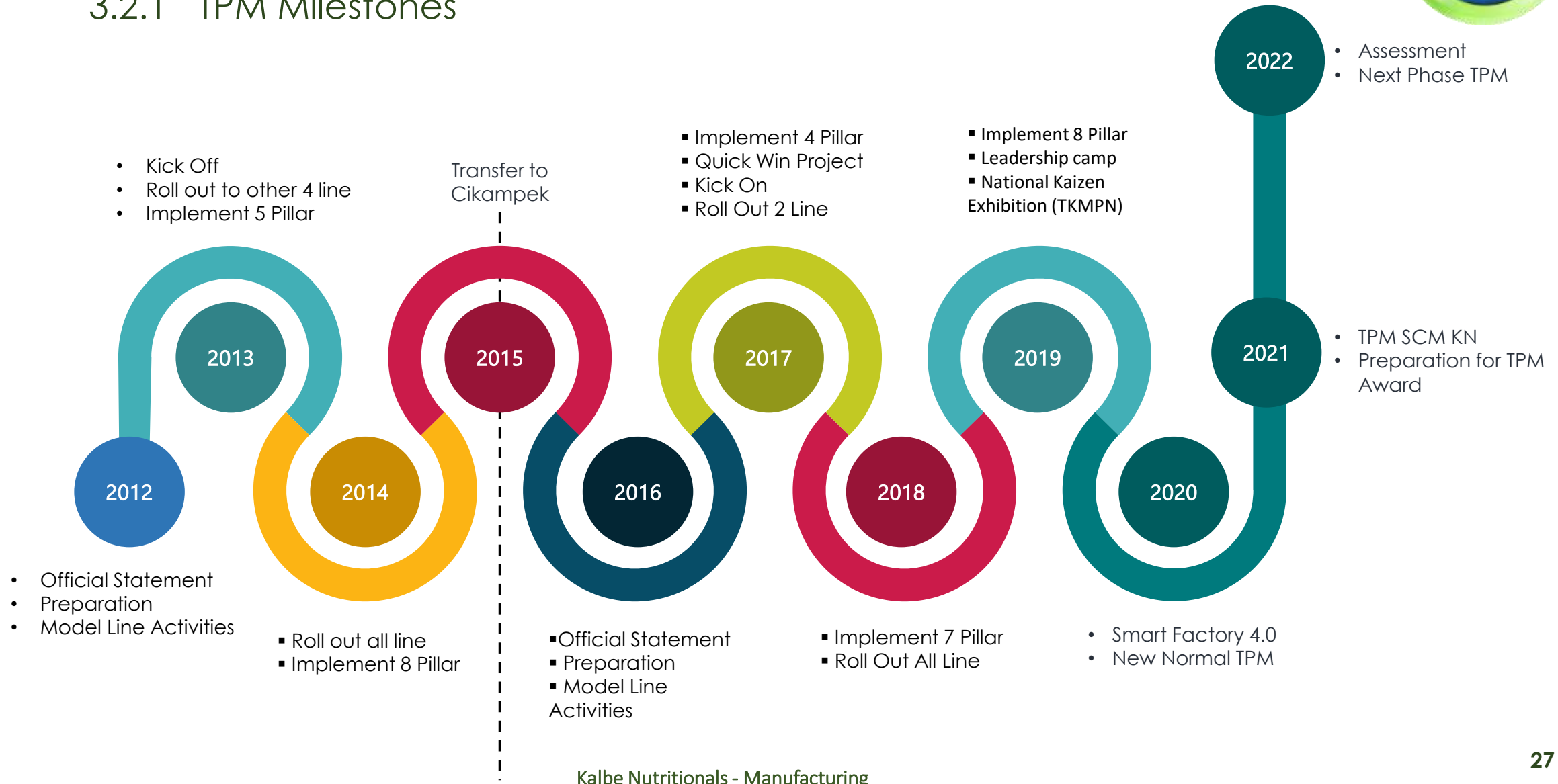
DMS Member

1. Circle Group Leader
2. Shift/Group Leader
3. Supervisor
4. Mechanic/Maintenance
5. QC Inline



3.2 TPM IMPLEMENTATION

3.2.1 TPM Milestones



3.2 TPM IMPLEMENTATION

3.2.1 TPM Promotion Activities



Participant

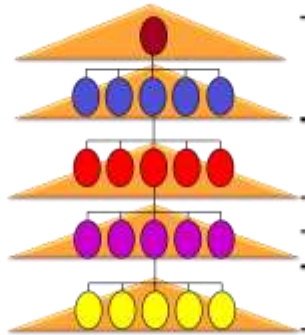
Director

Manager

Supervisor

Group leader

Operator (circle group)



Meeting

- Health Check TPM
- Annual Review TPM
- Monthly Review Plant
- Weekly Review Plant
- Weekly Review TPM
- DMS Manager & Supervisor
- DMS Leader
- Review Circle Group
- DMS Circle Group
- Shift Handover



Material Presentation upload on **Youtube**



Pillar FI | Optimization Change Over Line D2
- Ahmad Sanusi
Health Check TPM PT. Sanghiang Perkasa -
youtube.com

https://www.youtube.com/watch?v=s6fUu_3utzc

14:40



3.2 TPM IMPLEMENTATION

3.2.3 TPM Promotion Activities



Leadership Camp



Move to Great Award





Chapter 12



Effect & Result

12.1 Tangible Effect

12.1.1. TPM Effect in Production (Plant Effectiveness)

12.1.2. TPM Effect in Quality

12.1.3. TPM Effect in Cost

12.1.4. TPM Effect in Delivery

12.1.5. TPM Effect in Safety

12.1.6. TPM Effect in Morale

12.1.7. TPM Effect in Environment and Energy

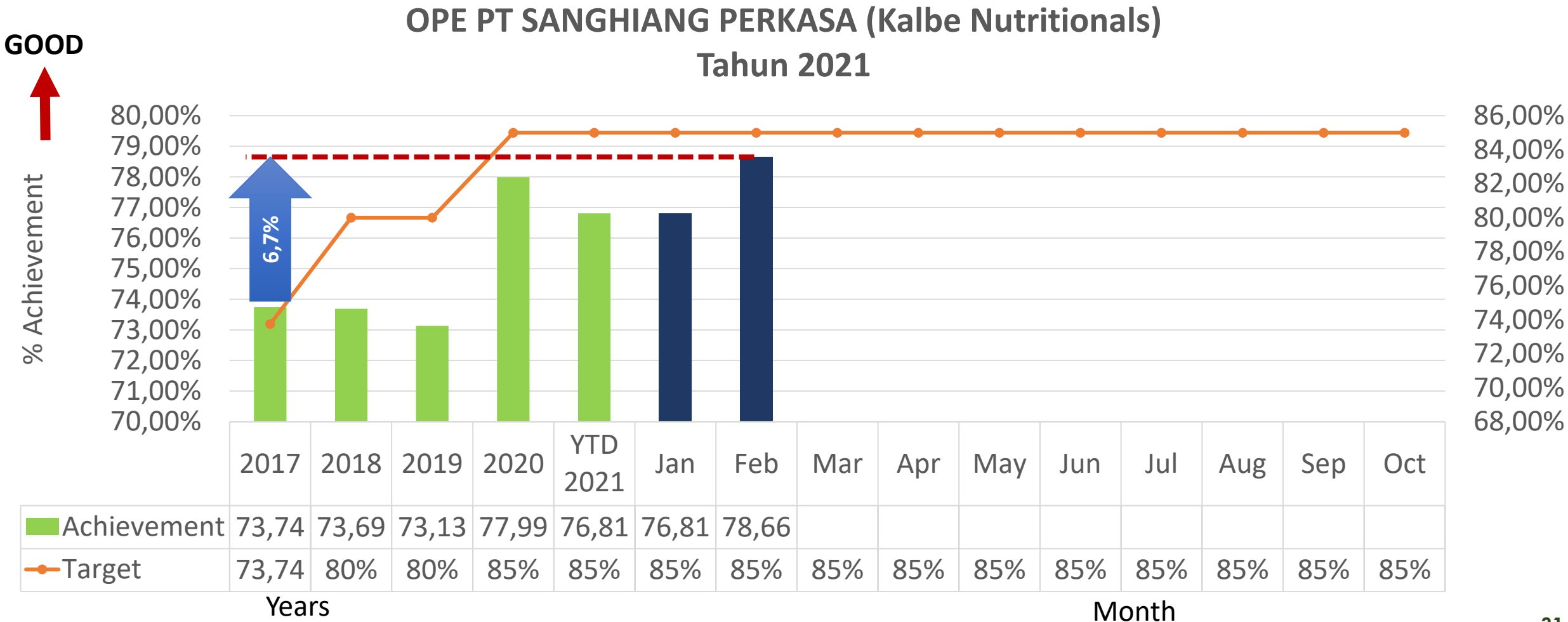
12.2 Intangible Effect

12.3 Future Plan



12.1 TANGIBLE EFFECT

12.1.1 TPM Effect in Production (Plant Effectiveness)





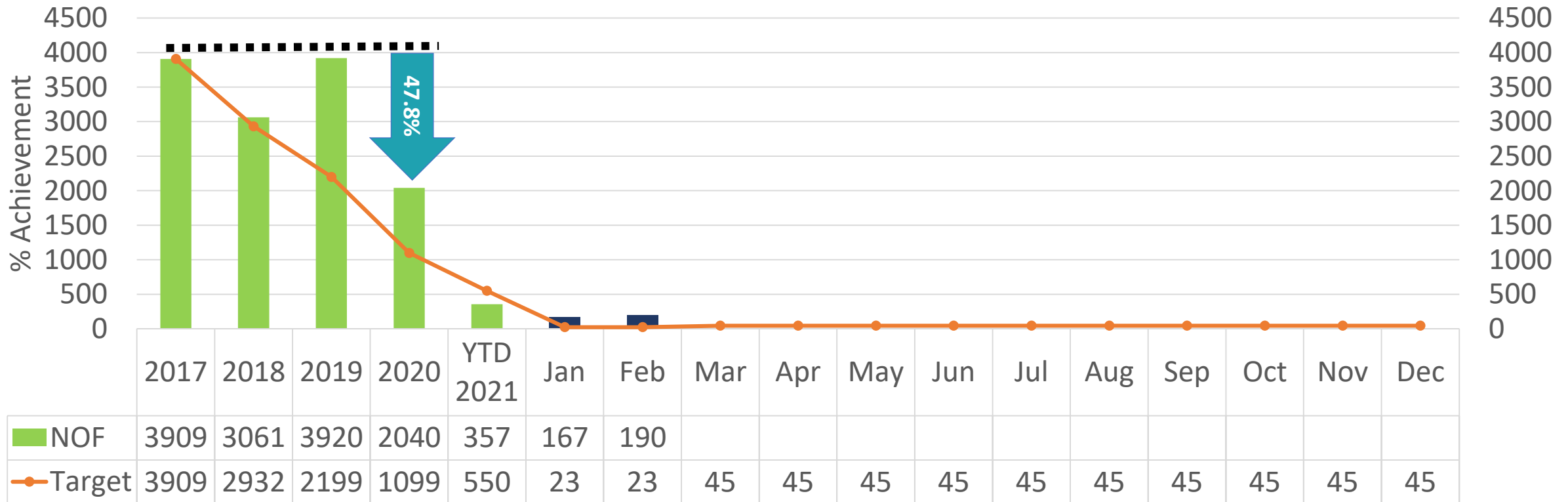
12.1 TANGIBLE EFFECT

12.1.1 TPM Effect in Production (Plant Effectiveness)



GOOD

NOF PT SANGHIANG PERKASA (Kalbe Nutritionals) 2021



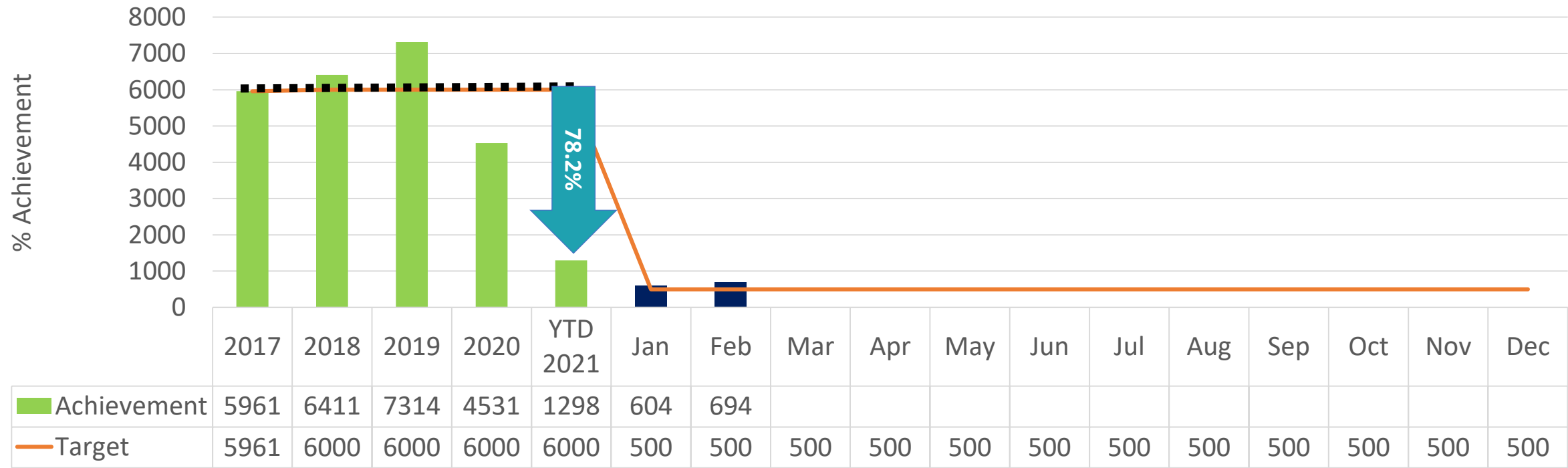


12.1 TANGIBLE EFFECT

12.1.1 TPM Effect in Production (Plant Effectiveness)

↓
GOOD

NMS PT SANGHIANG PERKASA (Kalbe Nutritionals) 2021



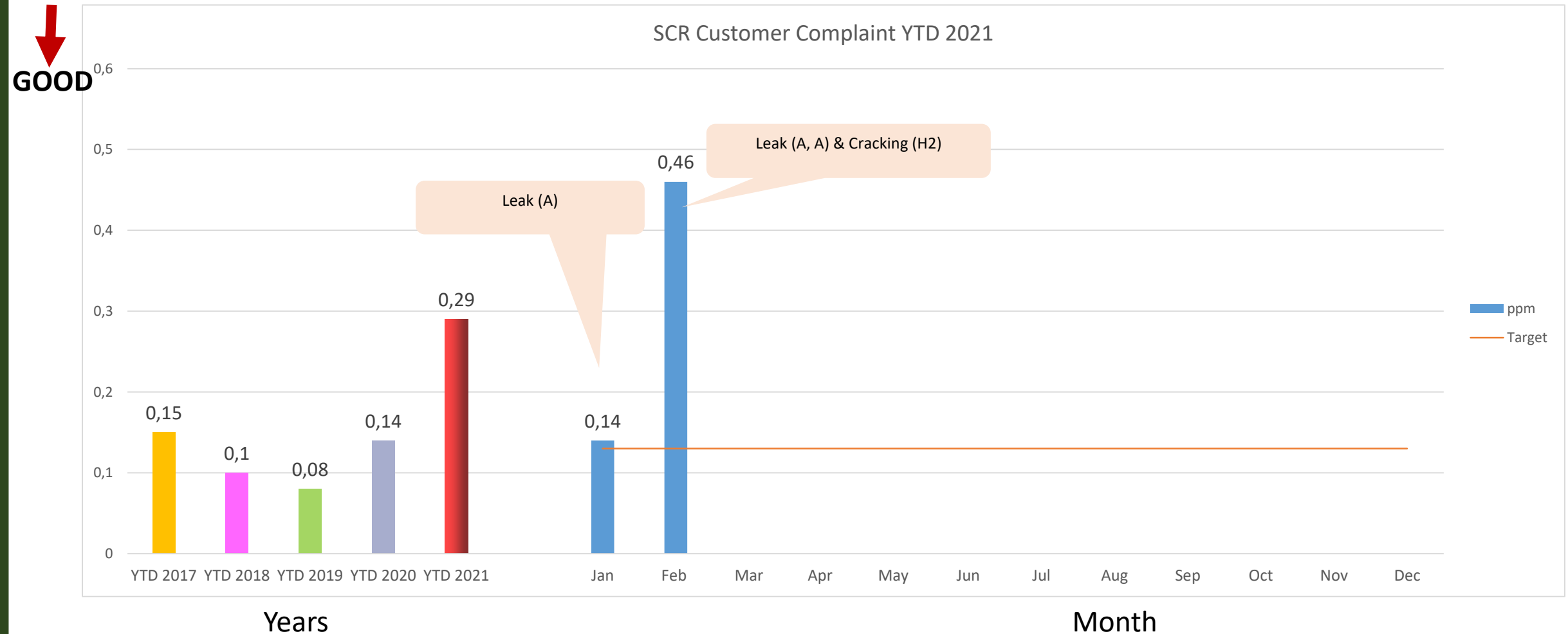
Years

Month



12.1 TANGIBLE EFFECT

12.1.1 TPM Effect in Production (Plant Effectiveness)



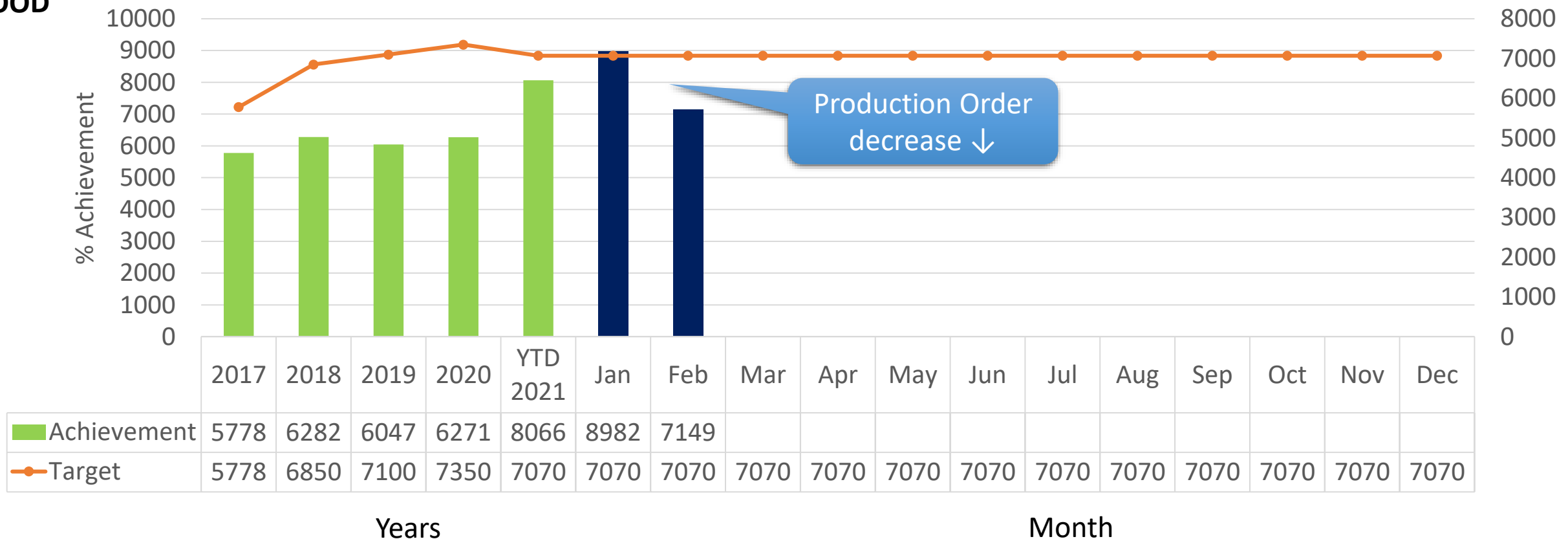


12.1 TANGIBLE EFFECT

12.1.3 TPM Effect in Cost

↓
GOOD

CONVERSION COST PT SANGHIANG PERKASA (Kalbe Nutritionals) 2020

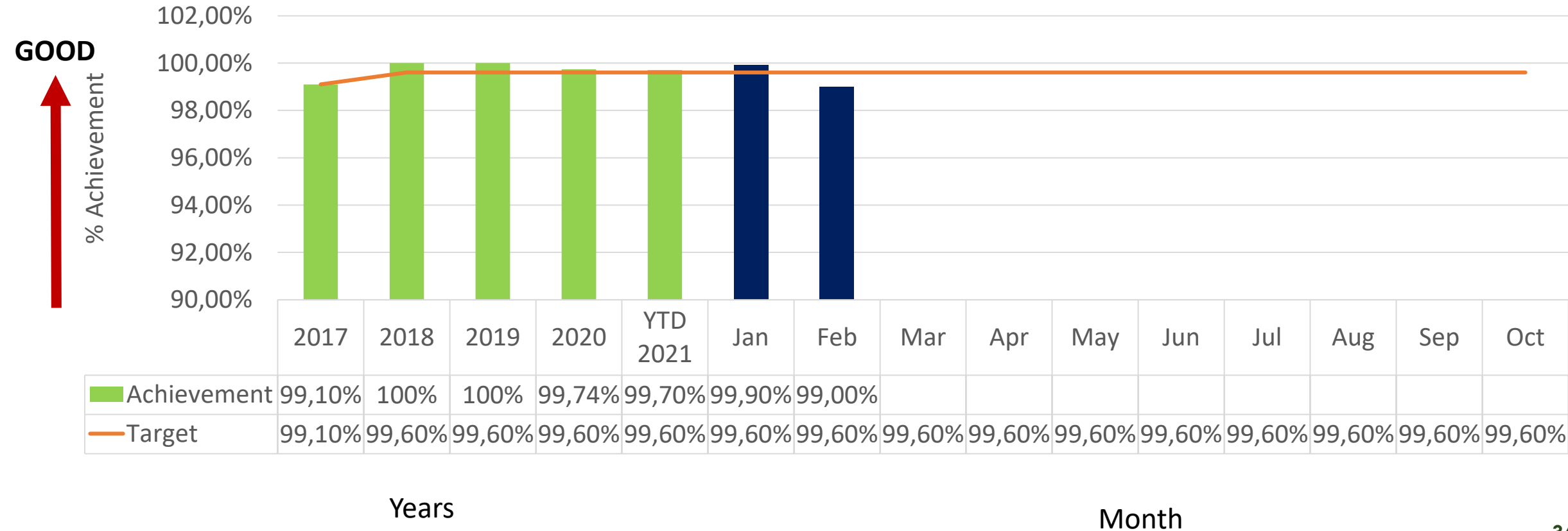


12.1 TANGIBLE EFFECT

12.1.4 TPM Effect in Delivery



OF PT SANGHIANG PERKASA (Kalbe Nutritionals) 2021

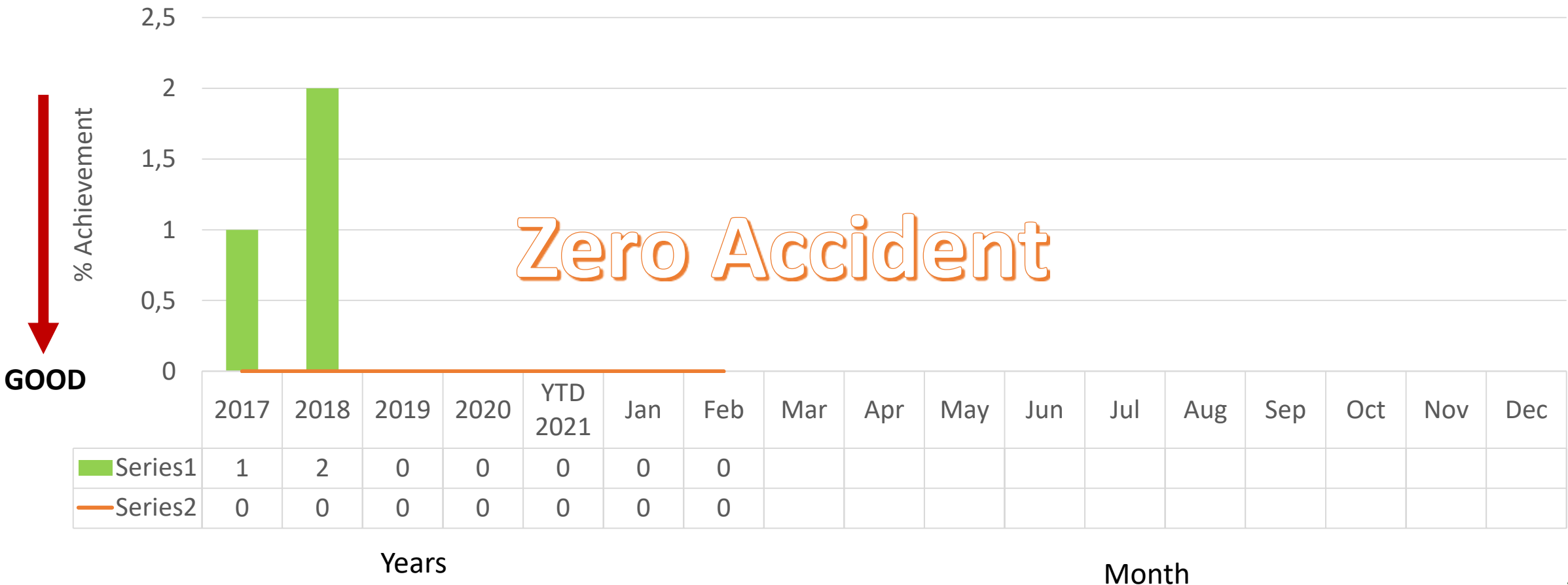




12.1 TANGIBLE EFFECT

12.1.5 TPM Effect in Safety

LTI PT SANGHIANG PERKASA (Kalbe Nutritionals) 2021

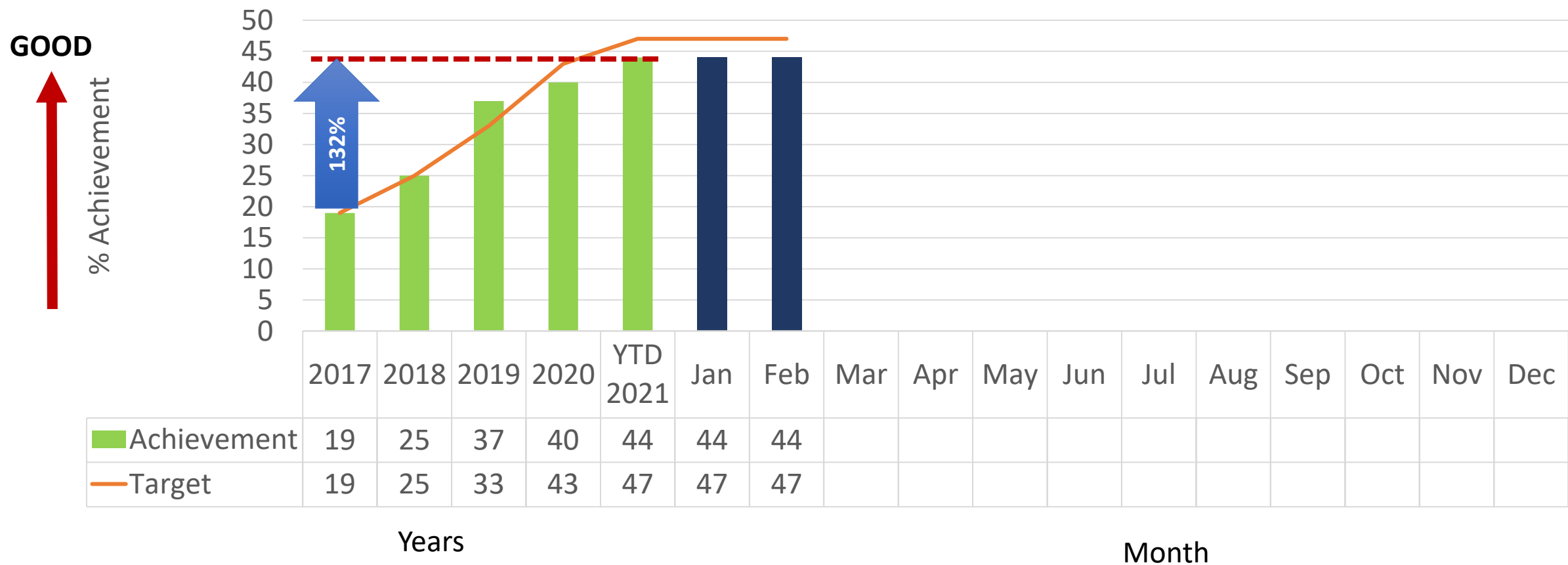




12.1 TANGIBLE EFFECT

12.1.6 TPM Effect in Morale

No. Of Trainer PT SANGHIANG PERKASA (Kalbe Nutritionals) 2021



12.2 INTANGIBLE EFFECT



Benchmarking 5P
from others Company to SHP

PT Indolakto



PT Nestle



PT Kalbe International

12.2 INTANGIBLE EFFECT



SHP Team
Achieved GOLD Category
@ TKMPN XXIII SOLO
(National Kaizen Exhibition)



SHP Team @
TKMPN XXIV
(National Kaizen
Exhibition)
1st Online Format
Virtual Exhibition

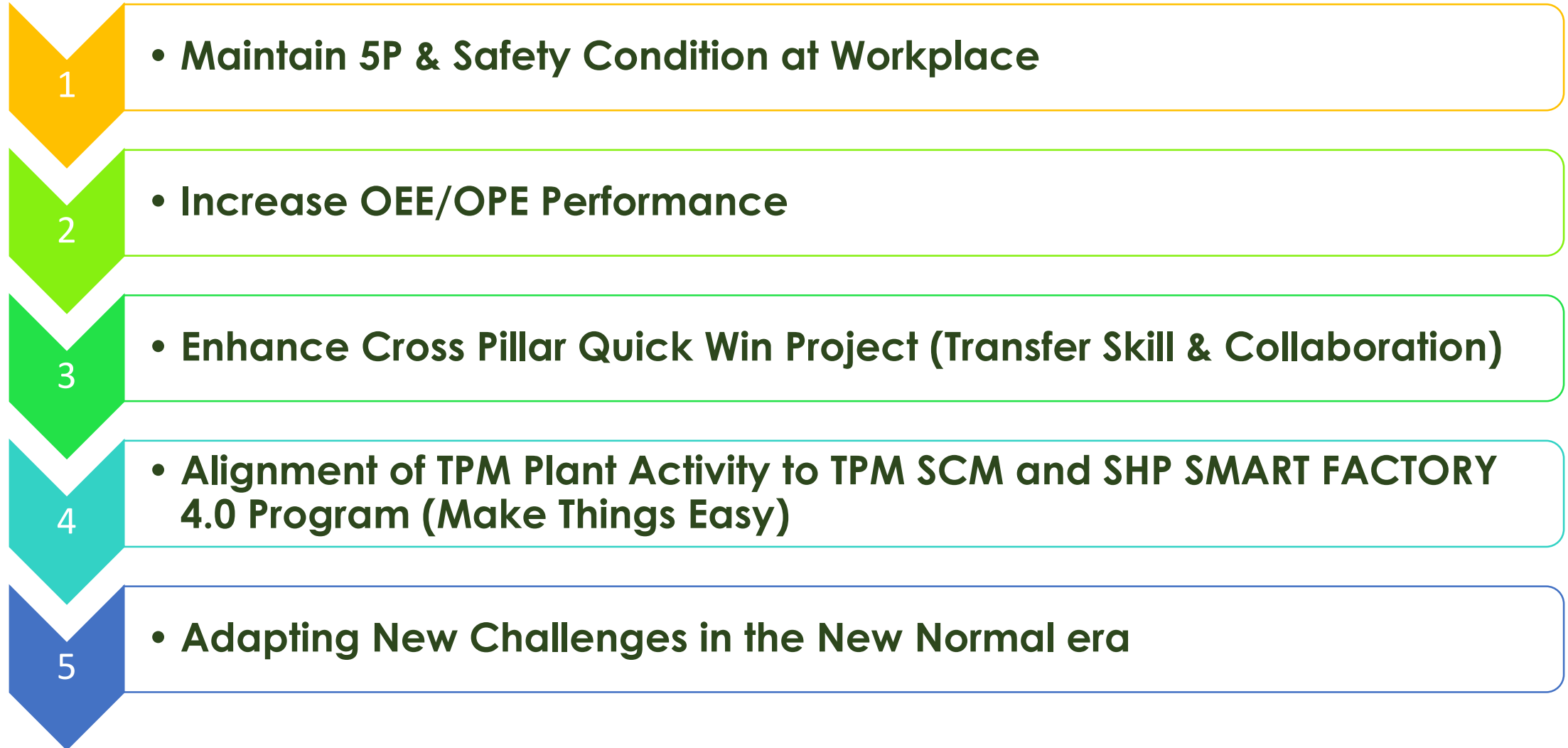
12.2 INTANGIBLE EFFECT



SHP PLANT CIKAMPEK
**Certified for ISO Quality Management System, Food Safety Management System,
Safety Management System and Environment Management System**



12.2 FUTURE PLAN




Maintain 5P & Safety Condition at Workplace



Finding	Percentage Audit (%)	MAR	CONCLUSION
≤ 25	≥ 80%	5	Excellent
26 - 39	69% - 79%	4	Satisfactory - acceptable performance
40 - 53	58% - 68%	3	Average - Needs further improvement in certain area
54 - 67	57% - 47%	2	Not Satisfactory - Needs improvement in many areas
≥ 68	> 47%	1	Poor Performance and not acceptable

Doc No :

Revision :



CHECKLIST AUDIT GM5P

Area / Dept : Line F

Hari/Tanggal : Selasa, 2 Feb 2021

Auditor : Beny & Lintang

No	Parameter Audit GM5P	Jumlah Pasal	Point Temuan
1	Konstruksi dan Lokasi Bangunan	8	13
2	Layout Ruangan dan Ruangan Area Kerja	13	0
3	Kesesuaian Peralatan, Pembersihan, Perawatan	7	11
4	Pemantauan pencegahan (Monitoring) kontaminasi silang	14	5
5	Personal Hygiene	15	0
6	Food defense, kewaspadaan dan terorisme biologis	4	1
7	Kompetensi Personel	5	0
8	Dokumentasi & Laporan Penggunaan	9	1
9	Identitas & Labeling	11	1
10	Pengendalian Operasional	4	2
11	Penyimpanan dan Security	22	0
12	Pengelolaan Limbah	15	0
Standard Nilai		127	
Total Temuan		34	
Percentage Total Score		73,23%	

Sub Area :

1

2

3

4

5



02/02/2021





Enhance Cross Pillar Quick Win Project (Transfer Skill & Collaboration)

Total Productive Maintenance
PT Sanghiang Perkasa (Kalbe Nutritional)



Quick Win Pillar PM
Eliminate Spoon Crash At Star Wheel Problem At Cartoning Line A.
Presented by : Joko Suprianto



Kalbe Nutritional - Manufacturing

Total Productive Maintenance
PT Sanghiang Perkasa (Kalbe Nutritional)



Quick Win Pillar OSA
ONE BATCH ORDER ONE LOT
Presented by : WACHID SADALI



Kalbe Nutritional - Manufacturing

Total Productive Maintenance
PT Sanghiang Perkasa (Kalbe Nutritional)



Quick Win Pillar Quality Management
REDUCE LEAD TIME RO INSPECTION
Presented by : Adi Sofyan



Kalbe Nutritional - Manufacturing

Total Productive Maintenance
PT Sanghiang Perkasa (Kalbe Nutritional)



Quick Win Pillar FI
Optimize Flexible Line G
Presented by : Priyo Anarkie Yusaphya



Kalbe Nutritional - Manufacturing

Collaboratin
Pillar



Adapting New Challenges in the New Normal era

Touchless Activity



Other Activity



Arigatōgozaimashita

ありがとうございました

Terima Kasih

Thank You



Kalbe Nutritionals - Manufacturing