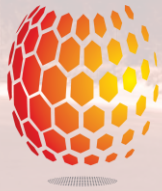


Line Leaders are the most effective advocates for PSM in your business

**Kent Mahon
(Refining NZ)**



REFINING NZ
Your Energy Hive

**Siva
Supramaniam
(DSS)**

**DuPont
Sustainable
Solutions**

Outline

- Introductions
 - Who are we and what we do in NZ
- Looking back to PSM performance in 2015
 - Some observations
 - Assessment findings
- Our improvement programme
 - Activities
 - Challenges
 - Results and next steps
- Q&A



Introduction to Refining NZ



Only oil refinery in New Zealand

Established 1961

390 employees

265 contractors

NZX

with a market capitalisation of ~NZ\$635m

Operates the **multi-product Pipeline** supplying Auckland

Processes crude oil on behalf of **BP, Mobil and Z Energy** (who are shareholders) to produce petrol, diesel, jet fuel, bitumen and other by-products (a “tolling” operation); and to import some finished product



A conversation in the field



PROCESS SAFETY ASSESSMENT FINDINGS

PSM
PURVIEW OF
TECHNICAL
SMEs

4000 + SOPs

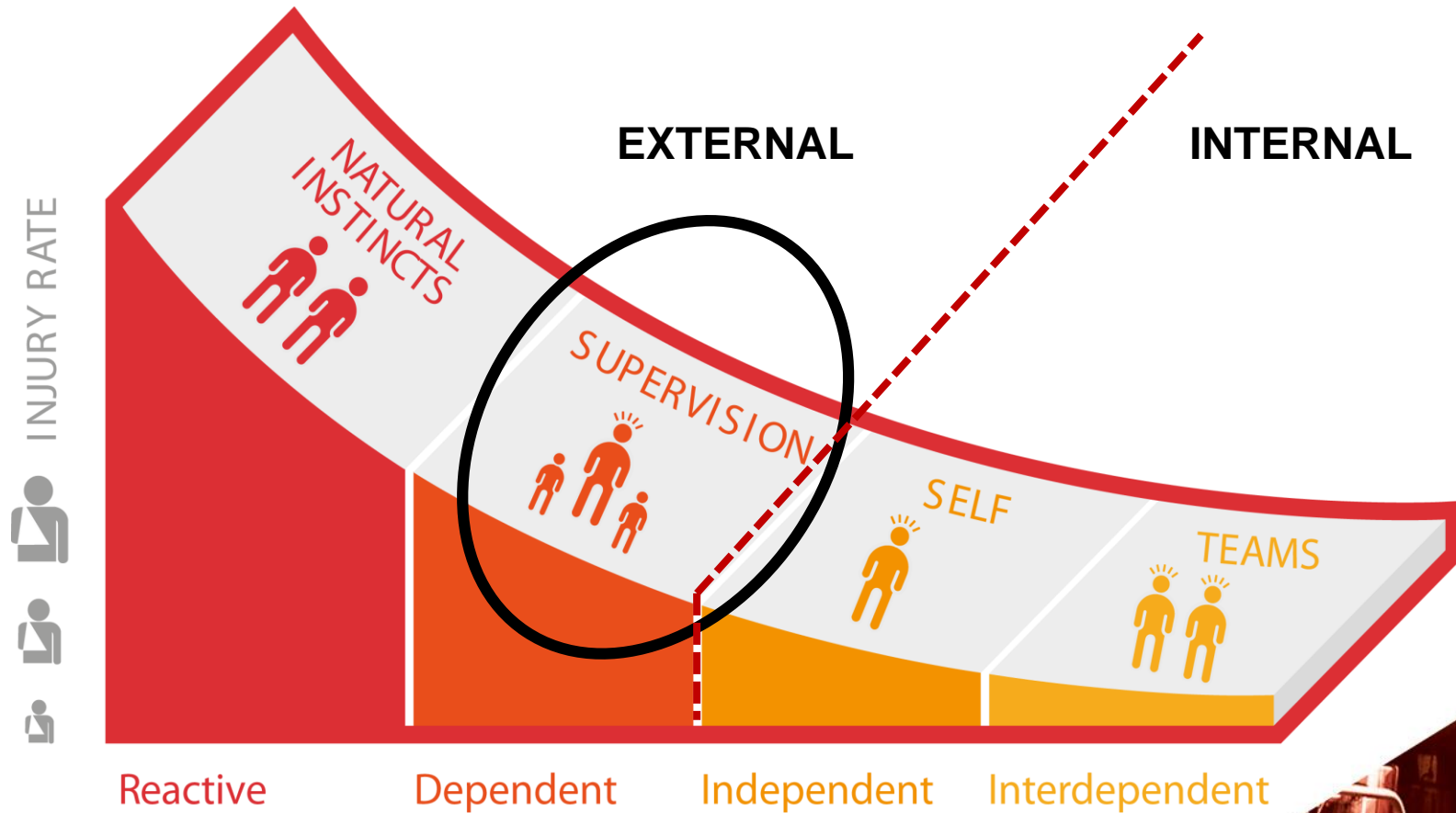
SITE SENIOR
LEADERS SAFETY
WALKS

LAGGING PS
KPIs
REPORTED
TO LEADERS

PSM
SYSTEMS and
PROCESSES
USED

LINE
MANAGEMENT
DID NOT CHECK,
VERIFY OR AUDIT
SMS

External Motivation – PSM Compliance



PSM Framework



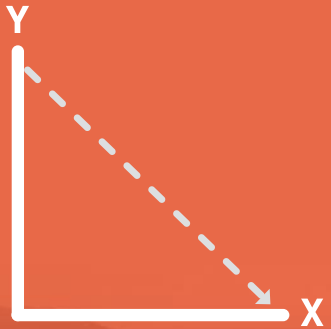
Zeroth Law of Asset Productivity©

The productivity of any facility drops immediately to zero if it:

- Blows up
- Burns down
- Impacts the community
- Is shut down for violating regulations



Results



PS Culture assessed –
shifted to internally
motivation



Better visibility in reporting
and investigation



Clear felt leadership from
senior leadership team –

**I don't only see and
hear process safety,
I also feel it.**



Safety Committee led by
Board member to show
leadership commitment

KPIs reported to line leadership team

2015	
1	Tier 1
2	Tier 2
3	Process Safety Incidents per million hours worked
4	Relief Valve Fail to Danger

2019	
1	Tier 1
2	Tier 2
3	Process Safety Incidents per million hours
4	Relief Valve Fail to Danger
5	Trip testing Fail to Danger
6	Overdue Inspections
7	Deferrals
8	Critical SOP breach
9	Average Alarms / hour
10	Number of Overrides
11	Number of Disabled Alarms
12	Overdue Critical Training
	and more.....



Next Steps

Improving
Operational
Discipline

Frontline
Leadership
Development

Risk based
approach

**2022
Business
Goals**

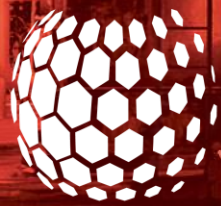
Some take-aways

1. **Visible Management Commitment**
2. **Role accountability – line led PSM**
3. **PSM is essential for business**





ANY QUESTIONS?



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THANK YOU!



E TU TANGATA