

# Scorecard

Our maintenance management system supports continuous improvements towards operational excellence, aims at improving OEE (Overall Equipment Effectiveness) and optimizing maintenance costs.

The Maintenance Scorecard is a tool to measure the efficiency of this system.

Those metrics are calculated and uploaded manually in the maintenance scorecard at site perimeter on a yearly basis.

### Three main objectives:

- Verification of the effectiveness of maintenance processes
- Comparisons between plants independently from the business
- Comparisons with external organizations

Thus, the Maintenance scorecard is a management tool to:

- **Plant managers and Maintenance managers**, to check the effectiveness of SolMaX as continuous improvement management system
- **Cash unit managers**, to measure the economic performance of the maintenance of their value streams
- **Industrial directors**, to carry out economical comparisons between Solvay plants and with external benchmark

Each metric of the scorecard are explained in the following documentation.

## QlikView layout

KPI Code	KPI Label	Unit	2014	2015	2016	Ref. Low	Ref. High	Trend	Trend vs Y-1
1.1.	Maintenance costs per ton of good production	KE/TO	0	0	0	0	0		
1.2.	Direct impact of maintenance on industrial performance	TO	17 536	14 320	21 480	600	1 000		
1.3.	Maintenance costs versus replacement asset value	€	0	0	0	0	0		
1.4.	Structure of maintenance costs	%				-	-		
	% Labor	%	-	-	-	-	-		
	% MRO (spare parts and materials)	%	-	-	-	-	-		
	% Major works (shutdowns/turnarounds/maintenance CAPEX)	%	-	-	-	-	-		
1.5.	% Solvay maintenance headcount versus Solvay plant headcount	%	NA	NA	NA	NA	NA		NA
1.6.	Structure of maintenance labor	%	NA	NA	NA	NA	NA		NA
1.7.	Cost by type of activity	%				-	-		
	% Corrective maintenance	%	-	-	-	30.0%	40.0%		
	% Preventive maintenance	%	-	-	-	30.0%	50.0%		
	% Improvement maintenance	%	-	-	-	15.0%	30.0%		
1.8.	Importance of MRO (spare parts)	%				-	-		
	Value of stores MRO versus replacement value	%	0.8%	0.8%	-	0.8%	1.2%		
	Store turns	%	24.0%	44.0%	-	30.0%	50.0%		
1.9.	% Works that must be started immediately or within 24h	%	-	-	-	15.0%	25.0%		
1.10.	Spend versus budget	%	-	-483886009.1%	-	-	-		
1.11.	CAPEX investments	€	1 396	1 902	0	0	0		