Overview and Tools for Early on the Journey

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"Delivering Energy to Improve Lives and Create a Better World"
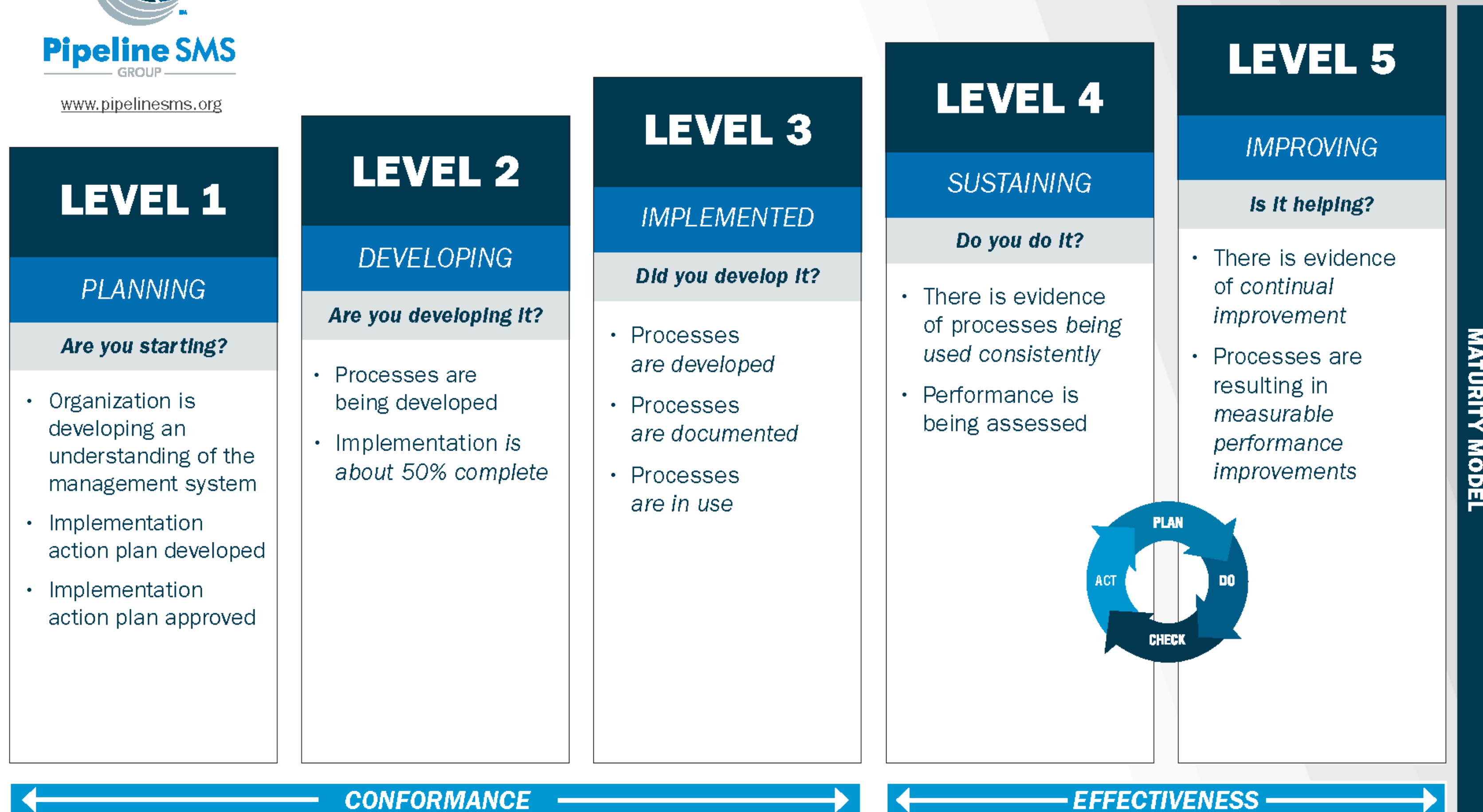

Pipeline SMS

PSMS Tools Overview

- Tools are voluntary and are meant to help operators develop a Pipeline SMS
- Each company may use the tools and answer the questions differently – and that is OK.
- An opportunity to track and compare your level of implementation and maturity.
- The objective is improved performance (is your PSMS helping?), not how many tools you have completed or how you rate yourself.

Pipeline SMS Maturity Model and Tools

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www.pipelinesms.org

LEVEL 1

PLANNING

Are you starting?

- Organization is developing an understanding of the management system
- Implementation action plan developed
- Implementation action plan approved

LEVEL 2

DEVELOPING

Are you developing it?

- Processes are being developed
- Implementation is about 50% complete

LEVEL 3

IMPLEMENTED

Did you develop it?

- Processes are developed
- Processes are documented
- Processes are in use

LEVEL 4

SUSTAINING

Do you do it?

- There is evidence of processes being used consistently
- Performance is being assessed

LEVEL 5

IMPROVING

Is it helping?

- There is evidence of continual improvement
- Processes are resulting in measurable performance improvements

PLAN · DO · CHECK · ACT

← CONFORMANCE →

← EFFECTIVENESS →

MATURITY MODEL

PLANNING TOOL

IMPLEMENTATION TOOL

EVALUATION TOOL

API RP 1173 PEER-TO-PEER SHARING

TOOLS

See back page for a simple explanation of tools

Pipeline SMS Tool Roadmap

START

GETTING STARTED

- Study API RP 1173
- Attend workshops
- Consider the benefits
- Talk with peers

- Obtain management committment to API RP 1173 implementation
  - Liquid operators: Commitment Letter
  - AGA members: Commitment to Enhancing Safety
  - INGAA members: Commitment to Pipeline Safety

PLANNING TOOL

- Summary of API RP 1173 requirements (71 questions)
- A gap analysis tool to compare an operator's existing system to the requirements of API RP 1173
- Documents action plans and responsibilities to close gaps
- Helps operators achieve Level 1 maturity (develop a plan, and begin work)

IMPLEMENTATION TOOL

- Summary of API RP 1173 requirements (71 questions)
- Evaluates and summarizes the operator's implementation status by question, element and overall
- Helps operators track development of programs to implement the RP up to Level 3 or 4 maturity

EVALUATION TOOL

- Comprehensive set of questions with ratings for all aspects of API RP 1173
- Helps operators evaluate the effectiveness of their programs in achieving the objectives of the RP (Is it helping?)
- Appropriate at Level 3 maturity or beyond
- Determines Effectiveness score

CONFORMANCE CHECKLIST (all API RP 1173 "shall" statements)

PEER-TO-PEER SHARING APPROPRIATE AT ALL MATURITY LEVELS

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VOLUNTARY API THIRD-PARTY AUDIT PROGRAM

- API-administered audit program for conformance to API RP 1173
- Yields an objective evaluation and score to measure continuous improvement and/or benchmarking
- Appropriate at Level 3 maturity or beyond

PLANNING TOOL

- Summary of API RP 1173 requirements (71 questions)

- A gap analysis tool to compare an operator's existing systems to the requirements of API RP 1173

- Documents action plans and responsibilities to close gaps

- Helps operators achieve Level 1 maturity (develop a plan, and begin work)

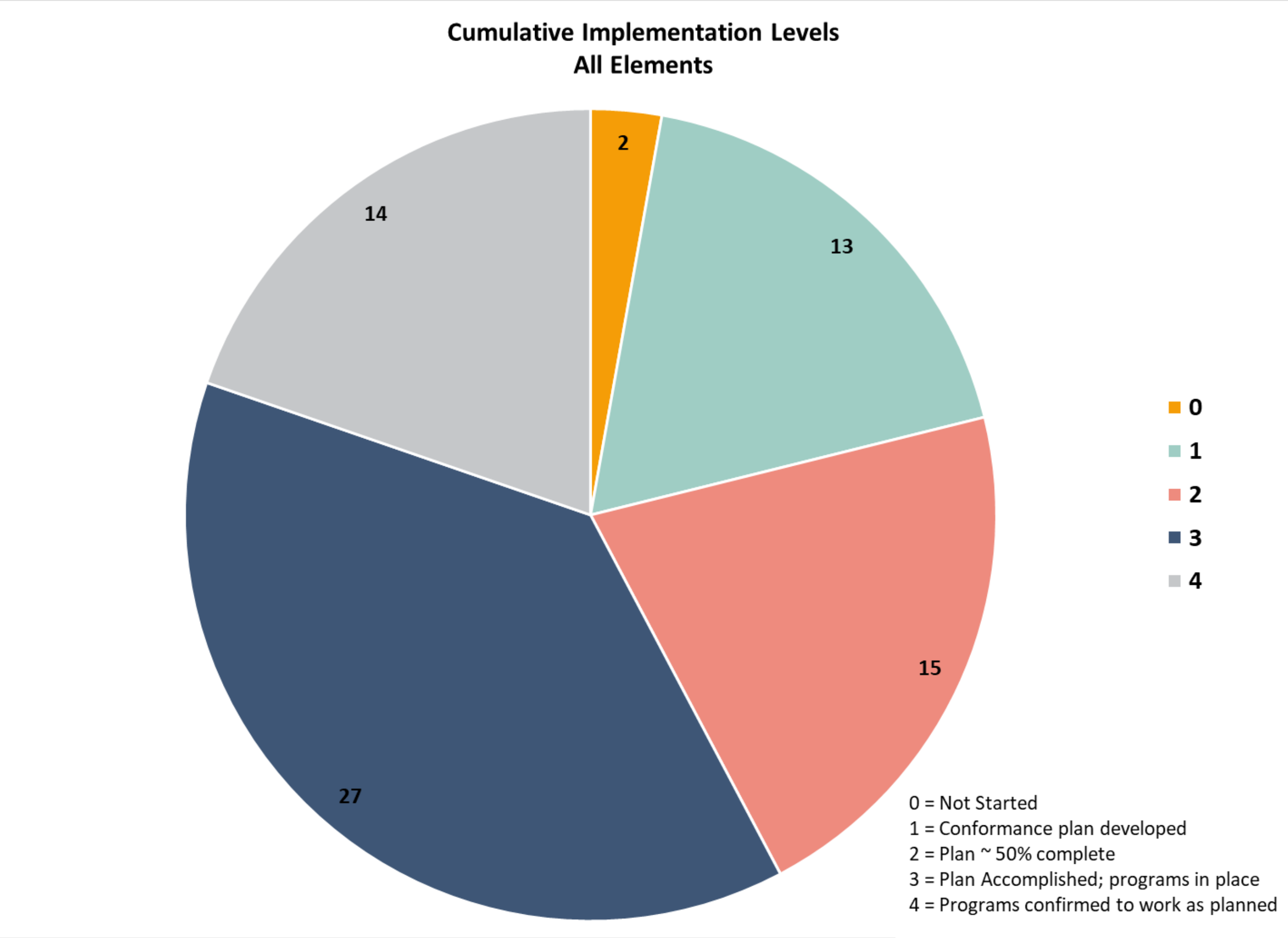| API RP 1173 Sub-element	Example Evidence	Actual Evidence (list the relevant documents / procedures)	Gap (Y/N)	Description of Gap or Gaps Use additional rows for each Potential	Description of Potential Action(s) to Close Gaps. Use additional rows for each Potential	Required (R),	Priority (H,M,L)	Owner	Due Date
5.2	List or statement of the PSMS goals. List of measureable objectives for the PSMS. Corporate communications. Corporate HSE Manual.	*EXAMPLE* *Annual letter to employees from the organization's president restating the HSE goals of no accidents, injuries or releases to the environment. Sustainability Report contained specific safety initiatives.*	*N*						

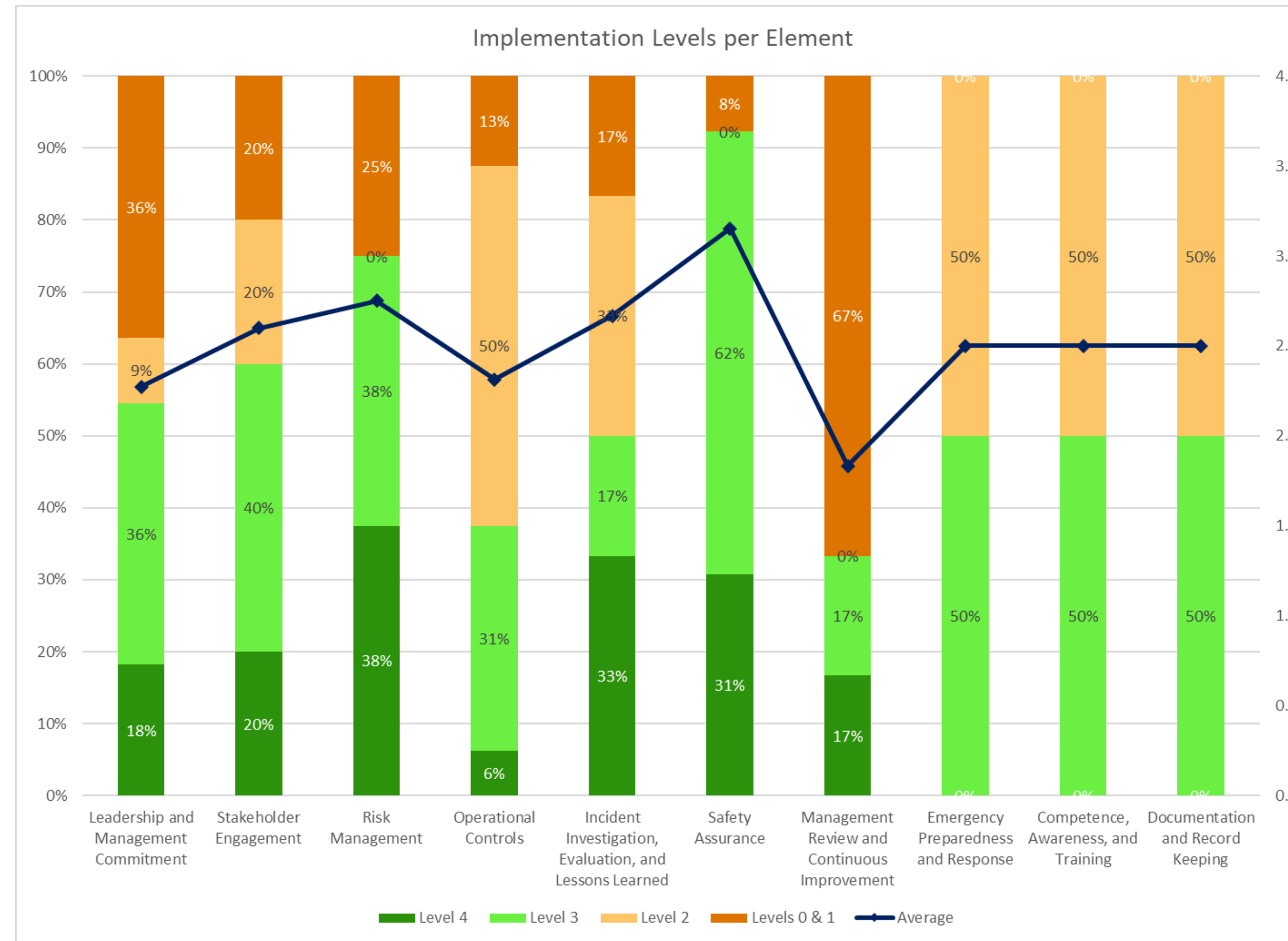**Pipeline SMS** GROUP

IMPLEMENTATION TOOL

- Summary of API RP 1173 requirements (71 questions)

- Evaluates and summarizes the operator's implementation status by question, element and overall

- Helps operators track development of programs to implement the RP

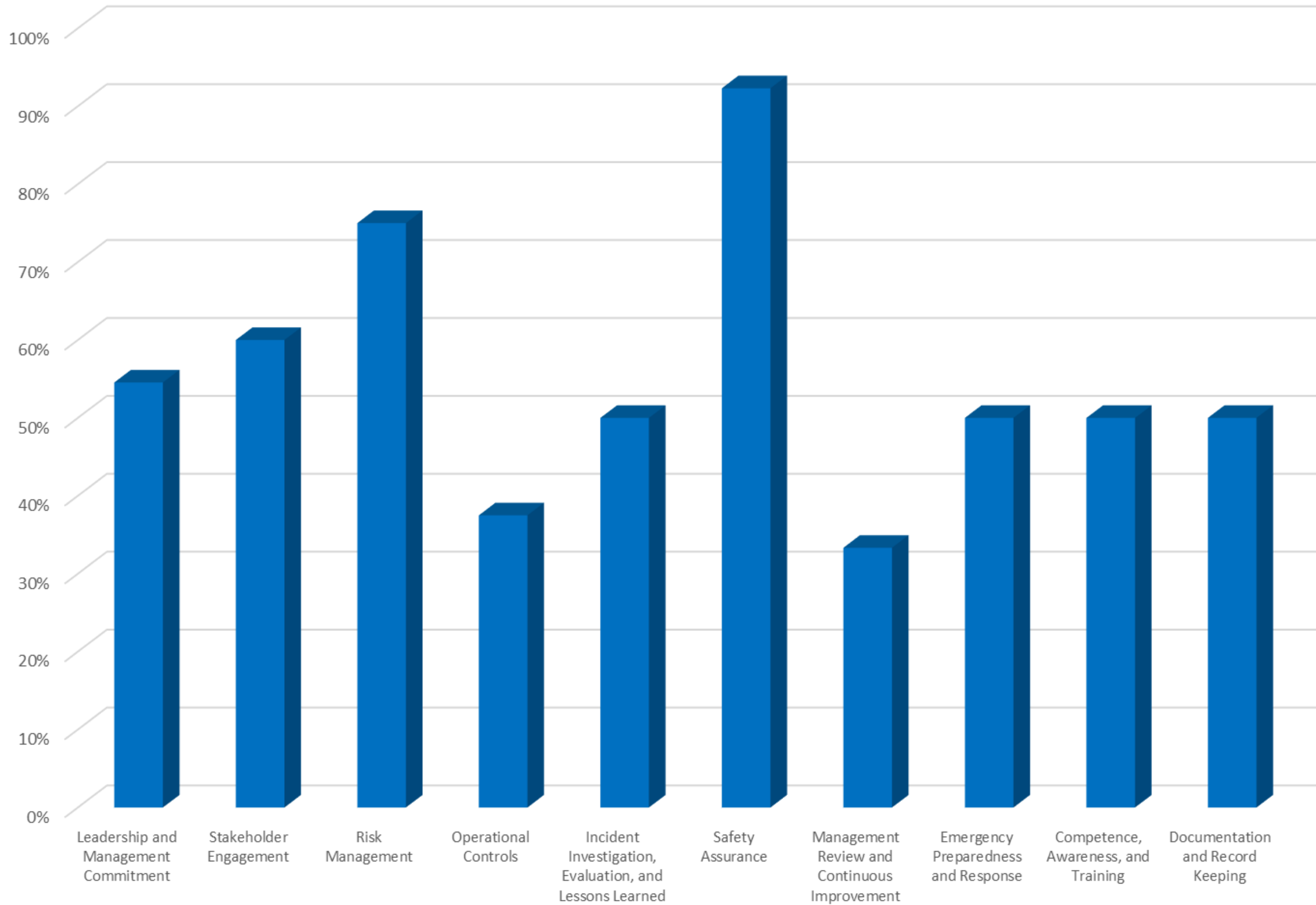| API RP 1173 Sub-element	API RP 1173 Requirement	Level 0 (Learning)	Level 1 (Planning)	Level 2 (Developing)	Level 3 (Implemented)
5.2	Has top management established and documented the goals and objectives for the PSMS?				• Top management has identified and documented its goals and objectives for the PSMS.

Level 4 (Sustaining)	Level Assignment (0 - 4)
• The PSMS objectives are measureable and consistent with overall safety policies and objectives. • There is evidence that top management is measuring the performance of the organization against the PSMS goals and objectives. • Interviews with employees demonstrate that the PSMS goals and objectives are known/understood or the employees know how to find them.	3

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IMPLEMENTATION TOOL: SIMPLE STATUS SUMMARIES

Cumulative Implementation Levels
All Elements

0 = Not Started
1 = Conformance plan developed
2 = Plan ~ 50% complete
3 = Plan Accomplished; programs in place
4 = Programs confirmed to work as planned

Implementation Levels per Element

Implementation Progress - Levels 3 & 4

EVALUATION TOOL

- One tool for evaluating Implementation and Effectiveness
  - o Implementation Score Matrix: Questions by element addressing RP requirements
  - o Effectiveness Scores: Evaluation of "Normative" KPI performance
  - o Conformance Checklist (234 Shall statements excerpted from RP)
  - o "Informative" KPIs for gas transmission, liquid transmission, and gas distribution
- Tool can be self administered or assessed by a third party

Each Pipeline SMS Element audited *at least once every three years*

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Conformance Checklist (a tab in the Evaluation Tool)

- A bite-sized version of API RP 1173, with a row dedicated to each "Shall Statement" found in the RP (234 in all)

- Includes additional guidance about achieving Level 3 or 4 maturity for each shall statement

- Intended as a reference document when completing the other Tools

- No summaries of answers. No scoring.

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WHERE CAN I GET THE TOOLS?

o www.pipelinesms.org

o Click on "GET STARTED"

o Click on the appropriate tool or guidance document under PLAN, DO, or CHECK

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THANK YOU!

Visit us at: pipelinesms.org

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