

5TH CCPS GLOBAL SUMMIT ON PROCESS SAFETY

Building Industry Capability in Process Safety Management



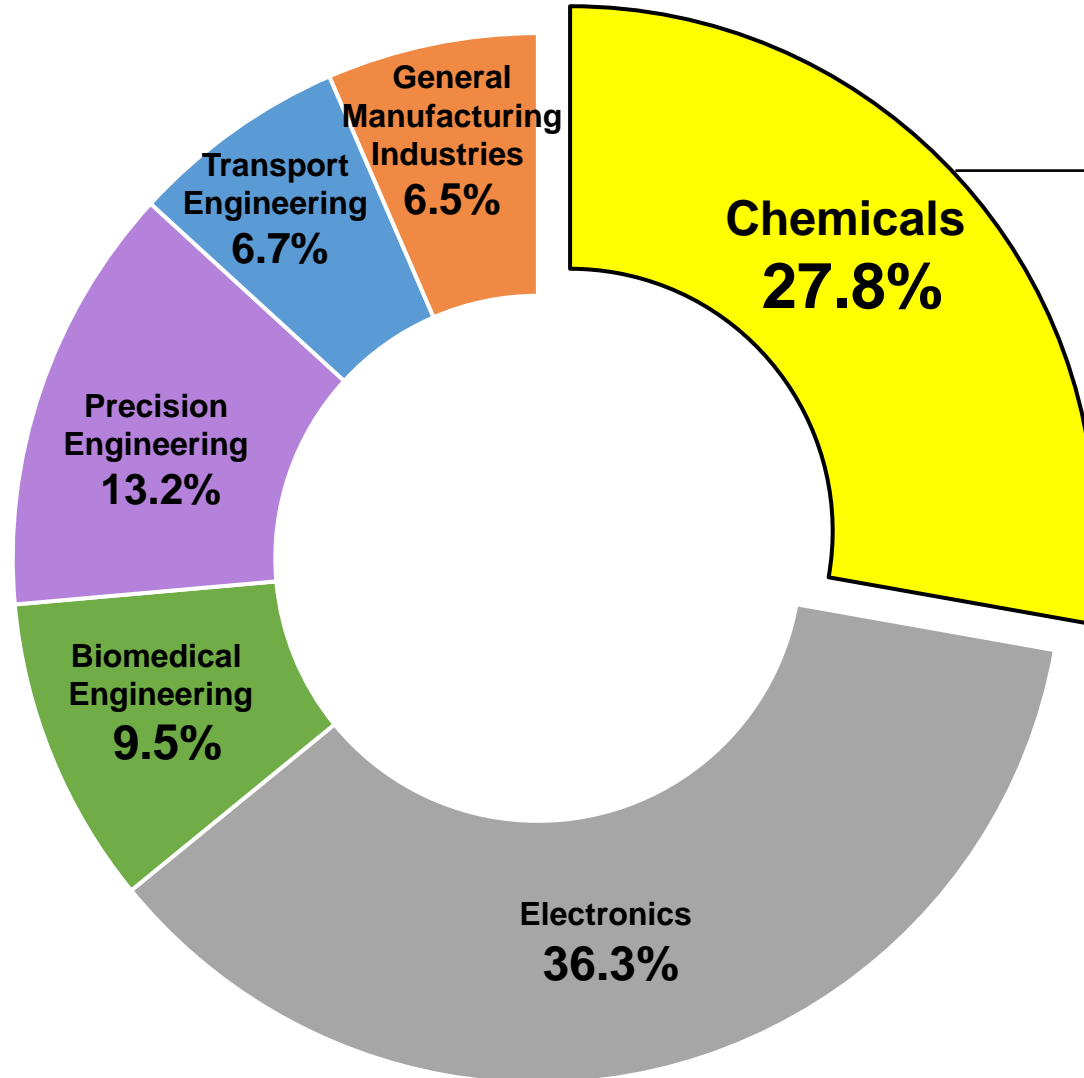
Wim Roels

Chairman
Singapore Chemical
Industry Council
(SCIC)

Photo credit: Terence Koh

SNAPSHOT OF SINGAPORE'S CHEMICAL INDUSTRY

MANUFACTURING OUTPUT 2018



One of the largest manufacturing clusters with more than 100 companies based in Jurong Island with total output of **S\$100.4B**

Segments:

- Specialty Chemicals **9.86%**
- Petrochemicals **44.78%**
- Petroleum **40.46%**
- Others **4.90%**

Provisional data as of March 2019
Source: <https://www.singstat.gov.sg/>

ROLE OF SCIC

SINGLE COLLECTIVE VOICE FOR THE CHEMICAL INDUSTRY

- SCIC represents Singapore's Energy and Chemicals cluster in the private sector
- Membership network of more than 170 companies,

SCIC's stakeholders

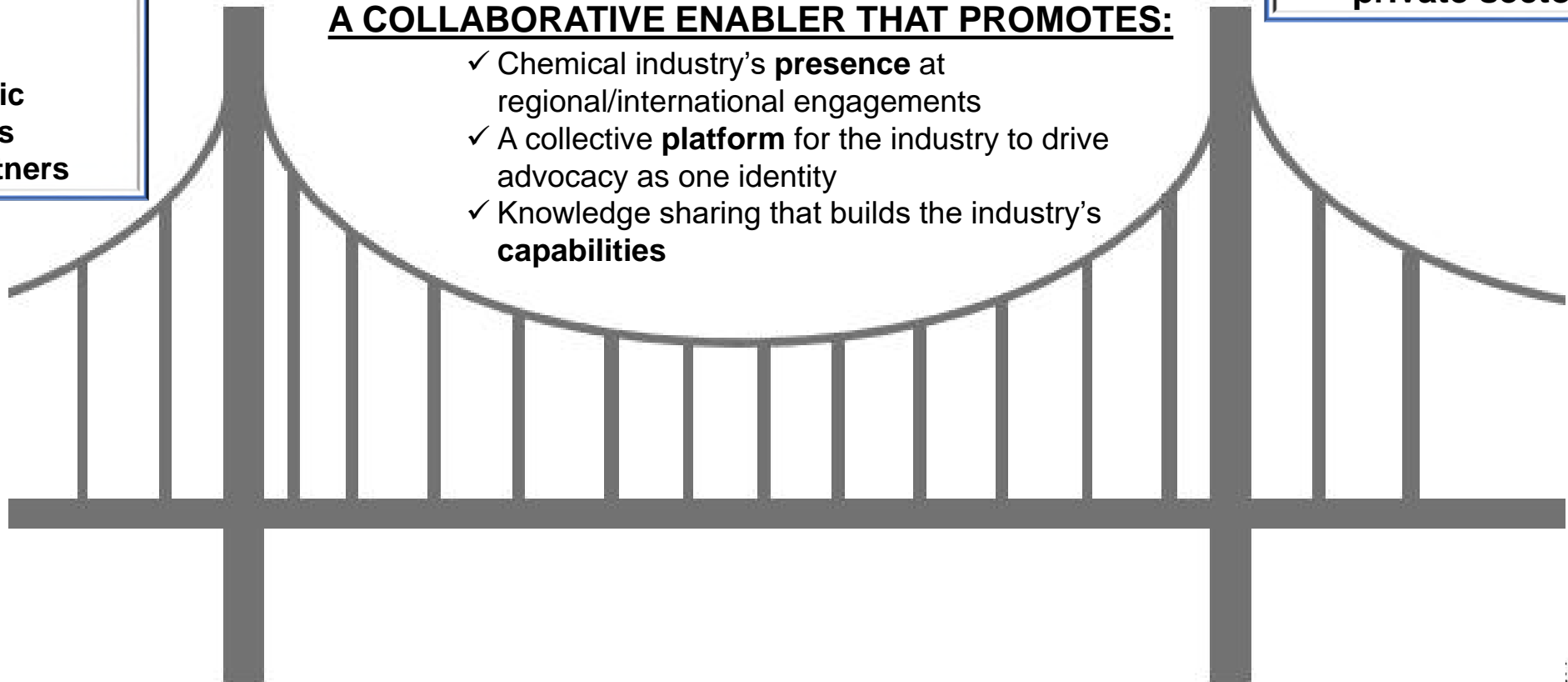
- Government
- Chemical Value Chain
- NGOs
- Students
- Members of Public
- Regional Partners
- International Partners

SCIC

A COLLABORATIVE ENABLER THAT PROMOTES:

- ✓ Chemical industry's **presence** at regional/international engagements
- ✓ A collective **platform** for the industry to drive advocacy as one identity
- ✓ Knowledge sharing that builds the industry's **capabilities**

Singapore Chemical
Companies in the
private sector



ROLE OF SCIC

PROACTIVELY LEAD EFFORTS TO BUILD INDUSTRY CAPABILITIES

SCIC Committees supported by Industry Practitioners

- Regulatory Affairs
- Responsible Care
- Process & Engineering
- Major Hazard Installations

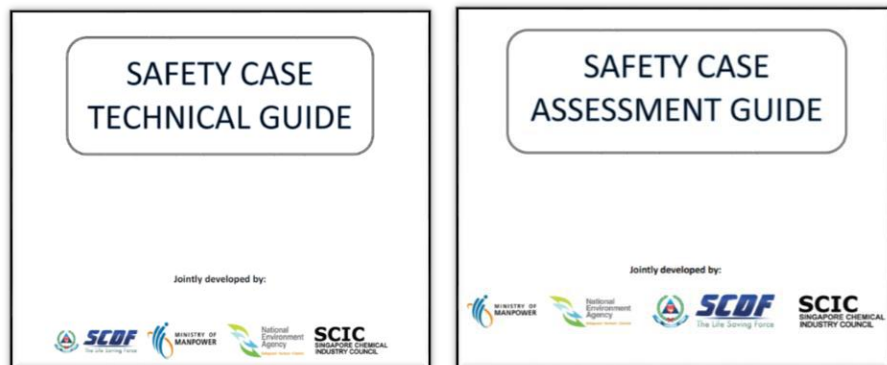
SPIRIT OF A UNITED INDUSTRY
SHARE & LEARN FROM ONE ANOTHER

Initiatives

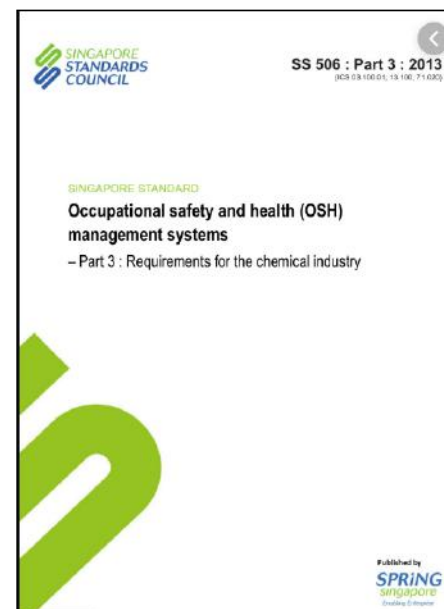
- Good practices sharing
- Bulletins / Guidebooks
- Training courses
- Experiences sharing
- Mentorship
- Forums and conference

PROMOTING PROCESS SAFETY EXCELLENCE

EXAMPLES OF COLLABORATIVE INITIATIVES



INTRODUCTION OF
Workplace Safety and Health
(Major Hazard Installations)
Regulation



CO-DEVELOPMENT OF
SS 506 Occupational Safety and Health (OSH)
Management systems

INTRODUCTION OF:

SAFETY CASE
ASSESSMENT GUIDE



SAFETY CASE
TECHNICAL GUIDE



PROCESS SAFETY REGULATORY FRAMEWORK IN SINGAPORE

**Workplace Safety and Health (Major Hazard Installations) Regulation
– 1 September 2017**



Safety Case Regime:

All MHIs are required to take all measures necessary to reduce the risk of major accidents to as low as reasonably practical (ALARP) and to limit the consequences of major accidents

PROCESS SAFETY REGULATORY FRAMEWORK DEVELOPMENT JOURNEY: LEARNING AND KNOWLEDGE BUILDING



LEARNING: Tripartite study trip to Europe
2013



Joint MHI Leadership Forum
2016



2014
SCIC Industry
Position Paper on
Process Safety
Regulatory
Framework in
Singapore

2015
Formation of SCIC
Major Hazard
Installations
Committee

2015
JOINT EFFORTS: Government-Industry Joint Workgroup



PROCESS SAFETY REGULATORY FRAMEWORK DEVELOPMENT JOURNEY: TRAINING AND JOINT ADVOCACY EFFORTS



TRAINING:
Building industry capability through education
2017

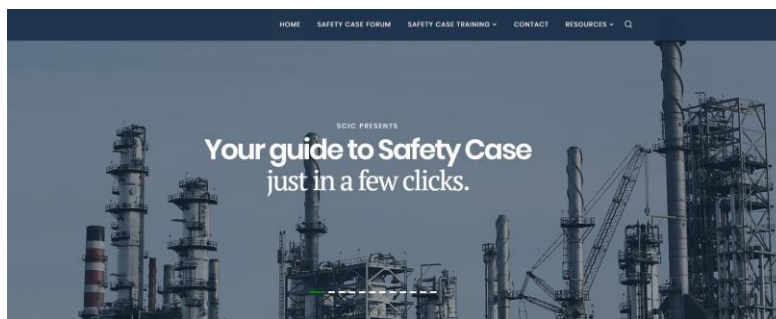


SHARING: Forums, Joint Safety Case Workgroup
2018 onwards

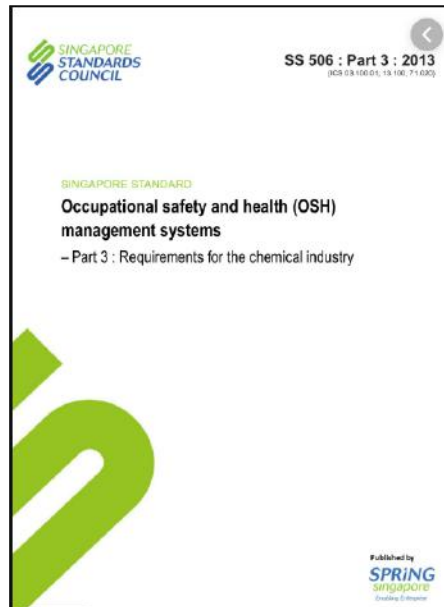
TODAY:

Continued engagement and efforts to support the successful implementation of Safety Case Regime beyond just meeting regulatory requirements

2017
Gazette of WSH (Major Hazard Installations) Regulation



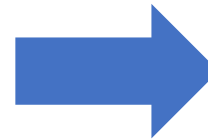
CO-DEVELOPMENT OF:



ISO/SINGAPORE STANDARD:

506 Occupational Safety and Health (OSH) management systems - Part 3 : Requirements for the chemical industry

- ✓ Address Occupational Safety and Health Processes
- ✓ Amalgamation of Occupational and Process Safety elements



Provides industry with a set of specifications or guidelines for their processes, products and services aimed at raising safety standards and control OSH risks and improve process performance

COLLABORATE TO ACHIEVE PROCESS SAFETY EXCELLENCE

Drive Compliance to Regulatory Requirements



Promotion through Industry Programmes



Importance of Leadership Commitment



WE ARE ONE UNITED INDUSTRY



Global voluntary initiative of the Chemical Industry – A commitment to continue their efforts in improving their Health, Safety, Environment (HSE) & Security performances



Nationwide Movement aims to inculcate a mindset that all injuries and ill health at work are preventable and a belief that zero harm is possible

Regardless of which industry, company, association, government body you belong to

SAFETY IS A COLLECTIVE RESPONSIBILITY



Photo credit: Terence Koh



Welcome to Singapore



THANK YOU