



Driving Supply Chain Sustainability - An insight into GPCA's improvement initiatives

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Senior Specialist – Committees Affairs

GPCA

“

To support the growth and sustainable development of the petrochemical and chemical industries in the Gulf, in partnership with our members and other stakeholders

”

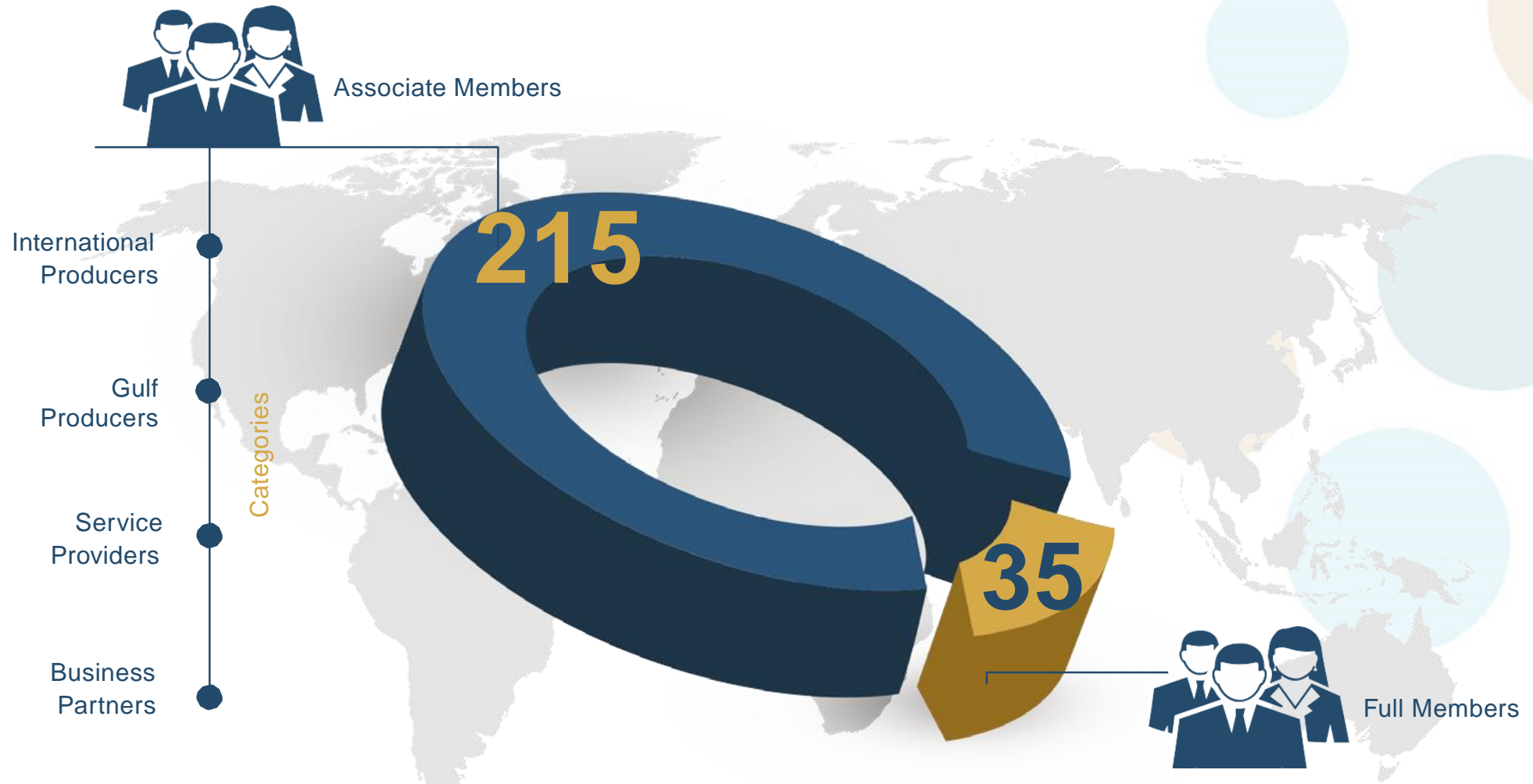


GPCA'S FULL MEMBERS

Accounting for over 95% of the chemical output in the Arabian Gulf region



GPCA Membership Categories



GPCA Strategic Pillars

Mission, Objectives
and Strategies



Working Committees

Members / Stakeholders Reach



Plastics
Committee



Fertilizers
Committee



Supply Chain
Committee



International
Trade Committee



Research &
Innovation
Committee



Responsible Care
Committee



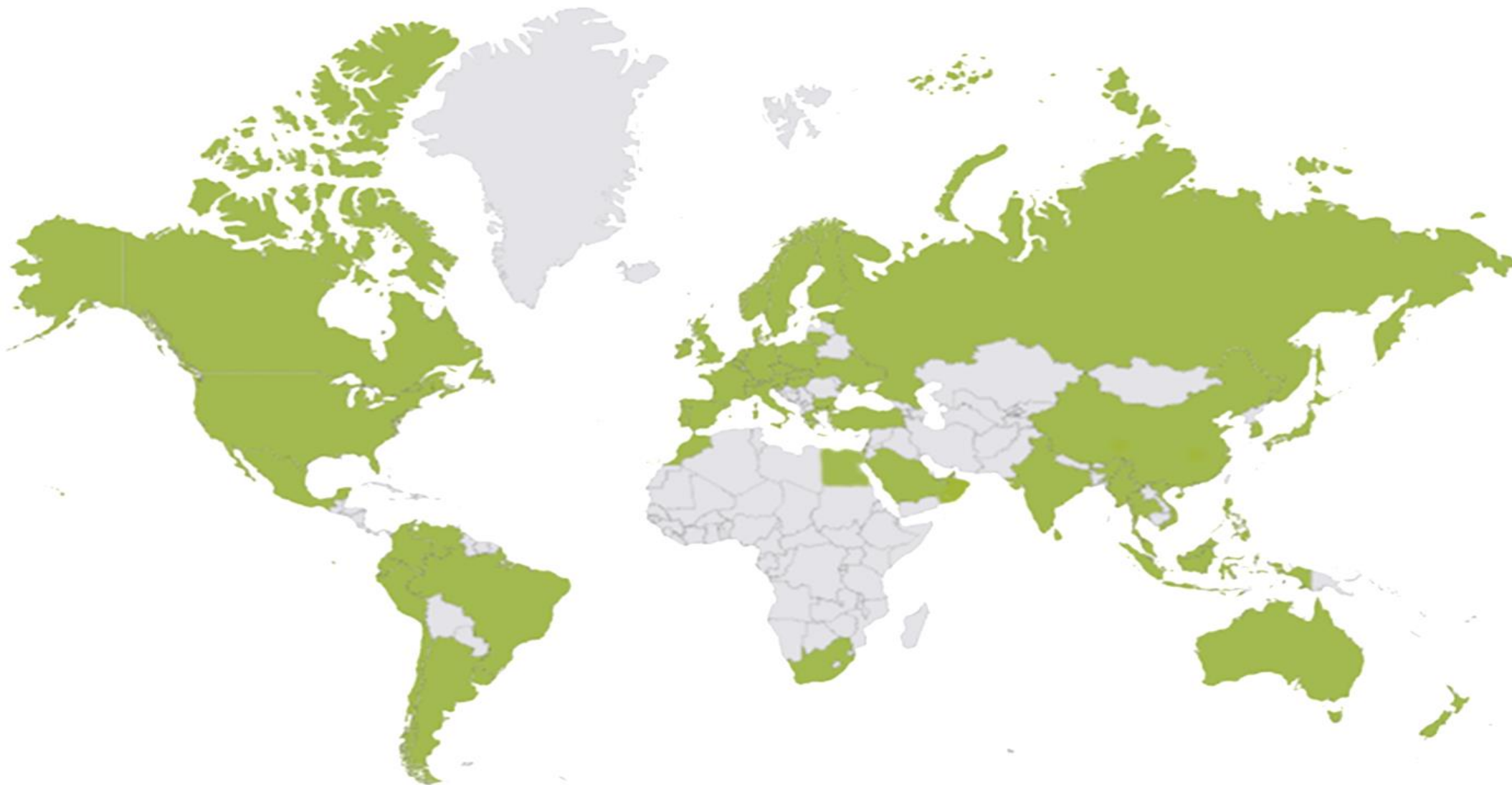


What is Responsible Care®?

1. Chemical industry's unique, global **voluntary initiative** that drives continuous improvement in environment, health, safety and security (EHSS) performance
2. **Transparent communication** with interested parties (i.e. stakeholders) about its activities to improve perception and respond to concerns of the industry
3. Embraces the development and application of **sustainable chemistry**, helping our industry contribute to sustainable development while allowing us to meet the world's growing need for essential chemicals and the products those chemicals make possible
4. **First developed in Canada** by the Canadian Chemical Producers Association in **1985**
5. **International Council of Chemical Associations (ICCA)** provides oversight for the program globally
6. Not a one-time activity. It is continuously evolving to meet the changing expectations of the industry and its stakeholders. **No end point!**



Responsible Care[®] Family of Nations



60 RCLG Associations in 65 Economies

GPCA Responsible Care® Program

1. GPCA adopted Responsible Care® in **December 2009** to improve regional EHS & Security performance and general perception of the chemical industry in the Gulf
2. Initiative run by Responsible Care® Committee of members representing a blend of Full and Associate Members
3. Main objective is to secure and maintain the ICCA Membership and develop programs for the implementation of Responsible Care®
4. Programs being developed with the cooperation of American Chemistry Council (ACC) and European Chemistry Council (CEFIC)

Signed MOUs'



Responsible Care® Global Charter

- 1 • Corporate Leadership Culture
- 2 • Safeguarding People and the Environment
- 3 • Strengthening chemicals management systems
- 4 • Influencing Business Partners
- 5 • Engaging Stakeholders
- 6 • Contributing to Sustainability



GPCA RC Committee Structure

> 60 EHS Professionals committed to advance Responsible Care in the GCC



Sub - Committees

Task Forces

Codes



Metrics



Advocacy



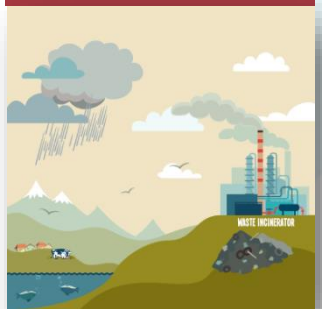
Environment Compliance



Peer Verification



Industrial Waste Ph.2



Product Stewardship



Capacity Building Measures



Effective
Networking



Advocacy



Thought
Leadership

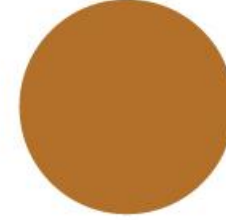
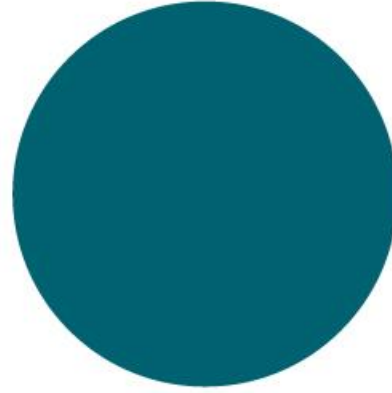
- ❑ 23 Technical Workshops held since 2009
- ❑ Member Company Outreach Campaigns
- ❑ Inaugural R.C. Conference and Awards



Responsible Care® - Summary

- Is a major contributor towards sustainable supply chains for GPCA's members
- Committee framework set up for success; Sub-Committees, Task Forces
- Leadership support essential; GPCA Board and member company executives
- Peer engagement a significant mutual benefit (ICCA (RCLG), ACC & CEFIC)
- “Sharing and learning” culture is key
- Adopt a Continuous Improvement (sustainable) approach throughout the Chemical supply chain
- Responsible Care has a significant contribution to sustainable development
- Engagement of Governments is a challenge, but an opportunity
- Need to focus on companies currently making slower progress
- Control outside the manufacturing fence lines remains our biggest challenge (Gulf SQAS)





Gulf SQAS

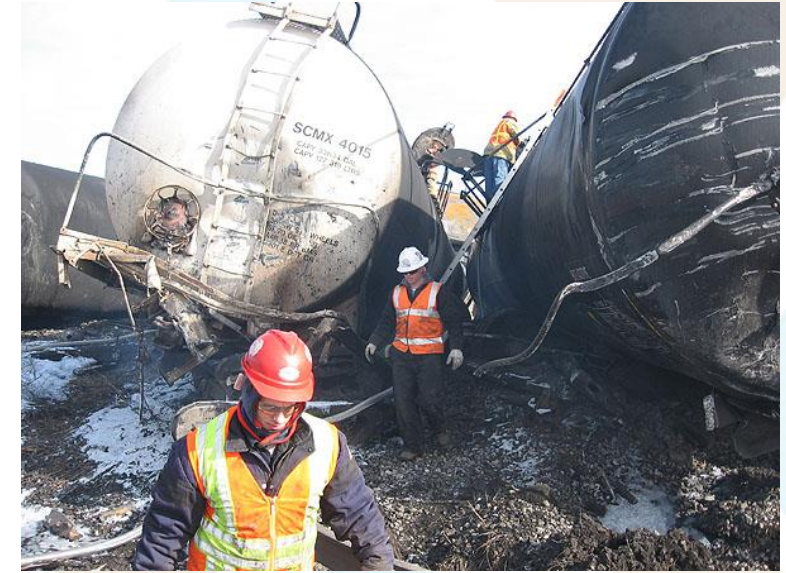
Why SQAS - Road Transport



Why SQAS - Warehouse



Why SQAS – Tank Cleaning

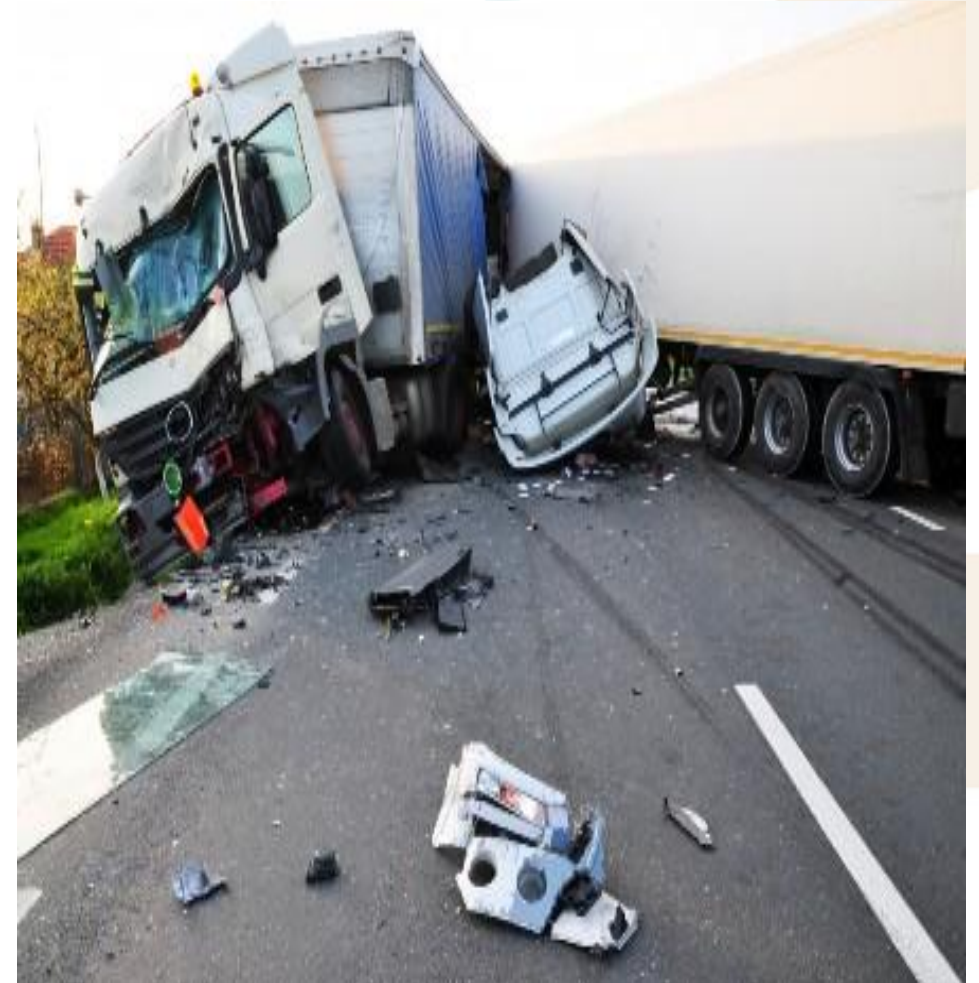


Why SQAS - Rail



Road Safety in the GCC

Country	Estimated road traffic death rate per 100,000 population	Reported number of road traffic deaths
Bahrain	8	107
Kuwait	18.7	629
Oman	25.4	924
Qatar	15.2	330
Saudi Arabia	27.4	7898
UAE	10.9	1021
GCC	17.6 (Average)	10,909 (Total)
World	17.4	1250000
UK	2.9	1827



Estimated GDP lost due to road traffic crashes: **Between 1% and 5%**, globally

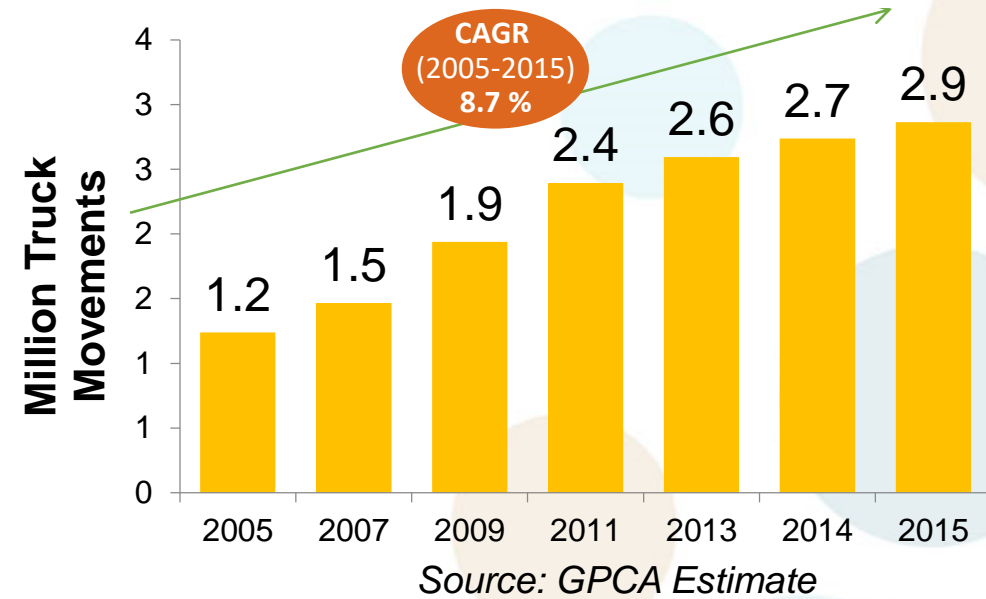
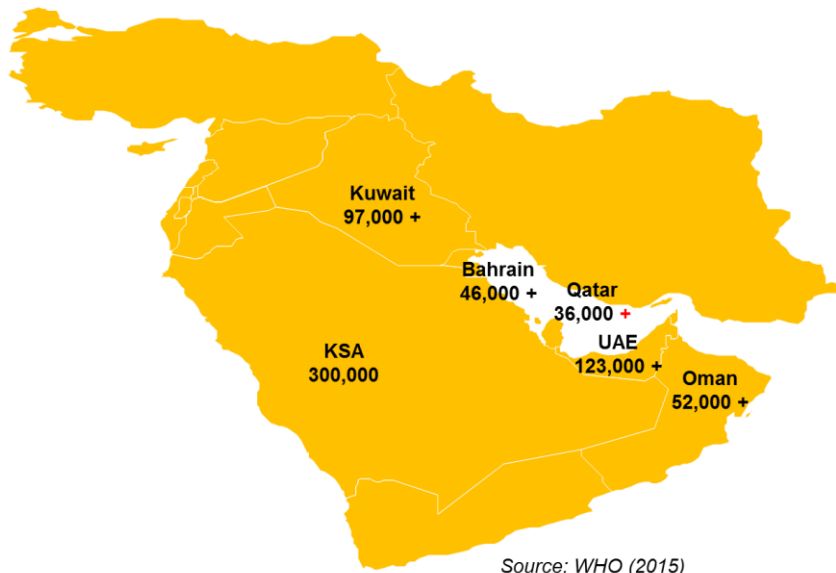
Source: WHO (2015)

Area of High Concern

“Drivers of heavy vehicles had the highest percentage of ‘at fault’ casualty crashes (70%) when compared to other types of driver. However, only one-quarter of casualties resulting from crashes involving heavy vehicles were drivers or passengers of those vehicles, instead most victims are car occupants or pedestrians.”

Buses & HGVs are often less modern than the car fleet and lack key safety features

Heavy Goods Vehicle Statistics



654,000 trucks registered
2.9 million movements
330 million km's



- Typical distance between the point of Origin to the port of loading
- Information for Oman is not available

Management of Logistics Operations in the Gulf

- The chemical industry in the GCC contracts 3rd Party Logistics Service Providers (LSPs) to store, handle and transport raw materials, intermediates and finished chemical products
- Chemical companies need **assurance** that these operations are carried out in a **safe and high quality** manner with due regard for the protection of employees, the public and the environment
- To date, this assurance is carried out by individual chemical companies undertaking **periodic audits** of their LSPs
- Outcome is **fragmented** culminating from a multiplicity of auditing programs; both costly and inefficient for manufacturers and LSPs

• SQAS Background

- Initiated by **CEFIC in 1993** (European Chemical Industry Council) at the request of **the LSPs** and adopted by **GPCA in 2014 – Gulf SQAS**
- Partial implementation in China, being considered in other countries
- **Purpose** - Evaluate and drive continuous improvement in EHSS&Q performance of LSPs
- **Avoids** multiple assessments by individual Chemical Companies
- An SQAS assessment does **not** lead to a certificate, but results in a **detailed factual report**
- Assessment reports **transparent** to all GPCA Manufacturing Companies, via an electronic database - www.gulfsqas.com
- Impartial trained assessors to set questionnaires and guidelines
- Every 3 years

It is **NOT** a certification system!
But fact finding, pass or fail questions
Drives "Improvement Action Programme"

Benefits of Gulf SQAS

- **Comprehensive, transparent, flexible and automated**
- Opportunity for **consistent alignment** with Industry direction
- Drives sustained Responsible Care[®] **improvement throughout the supply chain**
- Promotes internal **improvement in LSP's**
- **Reduced resources and cost** for manufacturers
 - ✓ **Tendering** – Up to date technical information readily available
 - ✓ **Auditing** – No need for company audits for EHSS&Q related matters
- Promote the **overall image** of the industry in the region and beyond

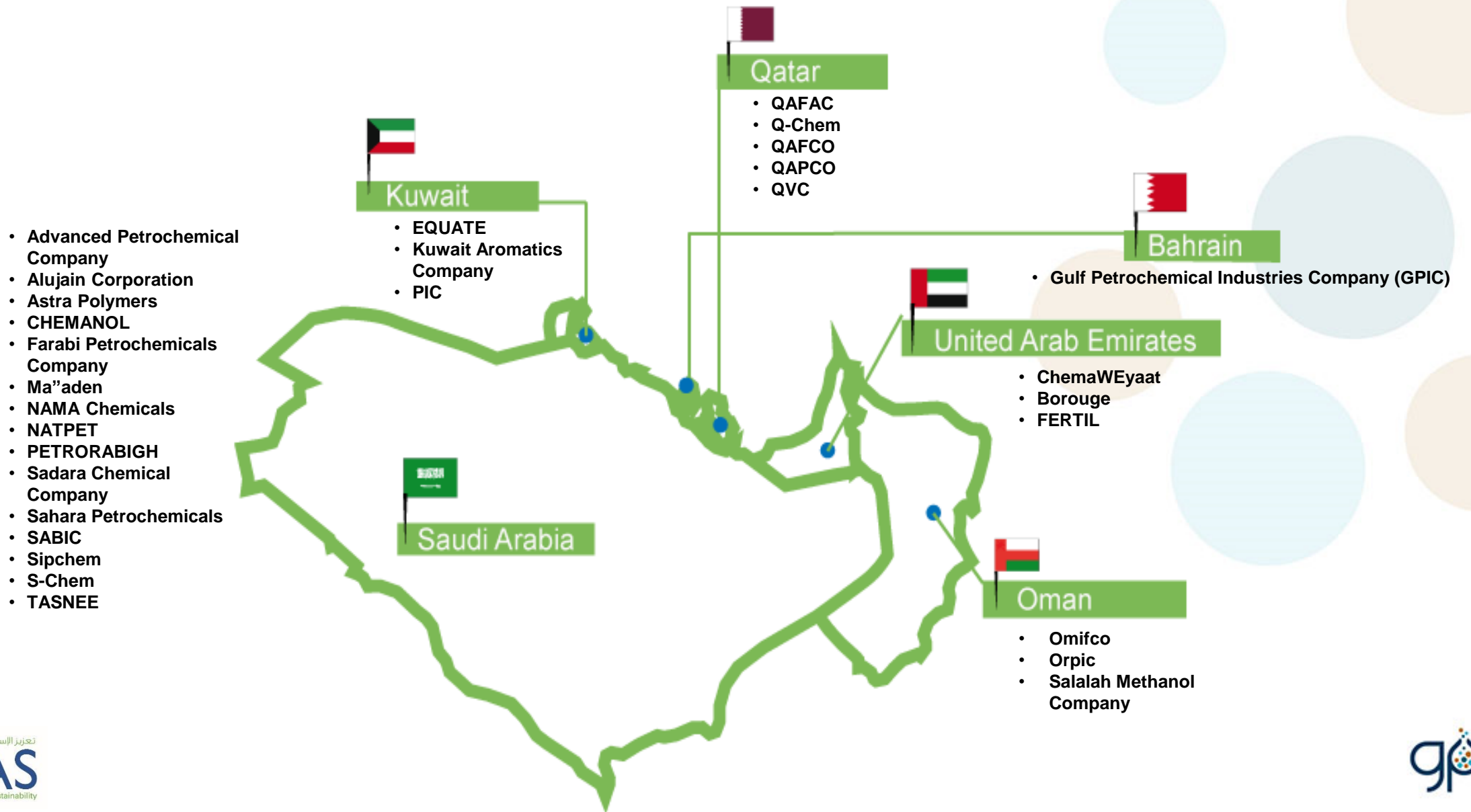
GPCA Member Company Declaration

CEO Declaration of Support for Gulf Sustainability and Quality Assessment System (SQAS)

A Full Member of GPCA, is proud to pledge its support for the Gulf SQAS Program

- **Adopt** the core principles and fundamental features of the Gulf SQAS Program.
- **Implement** procurement processes that require relevant partnering logistic service providers (LSP's) to comply with the Gulf SQAS Program in all relevant aspects of their business.
- **Encourage** LSP's to utilize the SQAS Assessment process as a means to continuous improvement in relation to the relevant aspects of Responsible Care®.
- **Utilize** the SQAS Reports as the primary means of assessing the overall EHS and Quality capability of logistic service providers.
- **Allocate** appropriate resources to effectively implement the Gulf SQAS and support, where practical, the shared responsibilities relating to ongoing development of the Gulf SQAS program.

30 CEO Declarations - 87% GCC volume



Gulf SQAS Committee Structure

Chemical Manufacturers

Naif Al-Emadi	Muntajat
Saif Al Mheiri	Borouge
Bader Ebrahim	GPIC
Yousef Dossary	SABIC
Khaled Alqashka	Equate
Geoff Fennah	S-Chem
Yaser Al Shahrani	Sadara
Humaid Alshuaili	Orpic

Logistics Companies

Amador Brinkman	Almajdouie de Rijke
Richard Heath	Alfred-Talke
James Graham	Crescent Transportation
Peer Kroener	Globe Logistics
Krishnan Sankaran	Stolt Tank Containers

Government

Jon Paul Simpson	Abu Dhabi Transport Authority
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GPCA

Alan Izzard
Udit Arora
Mark Appleyard

Borouge Senior Advisor & Director - Responsible Care/ SQAS
Senior Specialist - Committees Affairs
Leader – DGRT Roadmap TF

Assessment Modules



Questionnaires

GULF SQAS Core - Questionnaire & Guidelines - English version - February 2014 (Gulf Version)

Item N°	Question	Guideline Revised
1.	Management	Management
1.1.	Management Responsibility	Management Responsibility
1.1.1.	Company Policies	Company Policies
1.1.1.1.	Does the company have a current written policy reflecting management's active commitment to : Safety & Health, Environment, Quality/customers requirements, Security, Training development Behaviour based Study	The policy statement(s) must be clear and unambiguous concerning management's commitment to the safety of all operations, the health of the employees, the protection of the environment as well as the quality of the operations and services, meeting the customer's requirements at all times (including security). There should be evidence that the policy is reviewed, kept up to date, communicated effectively to the employees and signed by the present managing director. If a policy is missing the assessor should indicate which. All mentioned topics must be present in policy to score YES BBS (or an equivalent programme) aims to increase safety during activities by positively influencing the behaviour of operators/drivers through observation, coaching, communication and feedback. BBS principles are applicable for every Gulf SQAS module. Details on BBS can be found in the guidelines of chapter 4 of this questionnaire. It is envisaged that BBS programs are an integrated part of the company EHS&S policy. Verify if specific reference is made in the policy to Behaviour Based Program. based on the principles of equivalent programmes in Transport.
1.2.3.1.	Has a BBS project implementation plan been set up with targets, resourcing and timeline ?	Check for a project file with documented implementation plan including targets and up to date status mentioning results.

, BBS guidelines
s
own BBS Plan,

Questionnaires (Arabic)

الإرشادات	المادة السؤال
<u>إدارة سلسلة الإمداد والتعاقد من الباطن</u>	<u>4 إدارة سلسلة الإمداد والتعاقد من الباطن</u>
<u>إدارة سلسلة الإمداد</u>	<u>4.1. إدارة سلسلة الإمداد</u>
ابحث عن الإجراءات المتعاقبة والممارسات المتعلقة بفصل مختلف أنواع الشحنات، والمنتجات المتسقة مع المتطلبات القانونية للسلع الخطرة، الفصل 5-7.	4.1.1. هل تم فصل ومراقبة السلع من مرحلة التخطيط إلى مرحلة التحميل؟
من خلال نماذج التعاملات، تأكد من كيفية قيام الشركة بمتابعة الوضع/الموقع الحالي أثناء النقل والمرور. في الشركات الكبرى، يتم التحكم الفعال في وضع الشحنات عبر سلسلة الإمداد باستخدام تقنيات المعلومات مثل رمز الأعمدة، أو رمز تردد اللاسلكي، أو إدارة أحداث سلسلة الإمداد. وكذلك يتم التحكم من خلال مسح الوثائق، أو الزيارات، أو وسائل المتابعة الأخرى. ابحث عن وصف العملية التي تغطي سلسلة الإمداد بكاملها.	4.1.2. هل قامت الشركة بتوثيق العملية لمراقبة خدماتها من نقطة التحميل إلى التسليم إلى المستلم النهائي؟
يجب فحص الأدلة بموجب اتفاقية موقعة من الشركات المتعاقدة من الباطن (غير مدمجة) للتأكد من أنه قد تم دمج أو إضافة متطلبات العميل. ويجب على الشركة التي يتم تقييمها من بين شركات الكيماويات أن تضمن أن يكون مقاولو الباطن المتعاملين معها متوافقين مع متطلبات العميل بالإضافة إلى متطلبات العملاء (شركات الكيماويات). مقاول الباطن المتكامل تماماً يعتبر بمثابة سائق شخصي.	4.1.3. هل تم اتباع جميع تعليمات ومتطلبات العميل خلال سلسلة الإمداد بكاملها؟
ابحث عن الإجراءات الخاصة بالتسليم في الموعد. وللحصول على أفضل الممارسات في هذا الجانب، فإنه يمكن الرجوع إلى المرجع "الترميز الموحد لعمليات النقل"	4.1.4. هل يوجد لدى الشركة عملية رسمية مطبقة تمكنها من الإبلاغ عن التسليم في الموعد المحدد ومتابعة جميع مراحل سلسلة الإمداد؟
<u>خدمات التعاقد من الباطن</u>	<u>4.2. خدمات التعاقد من الباطن</u>

Assessment Process



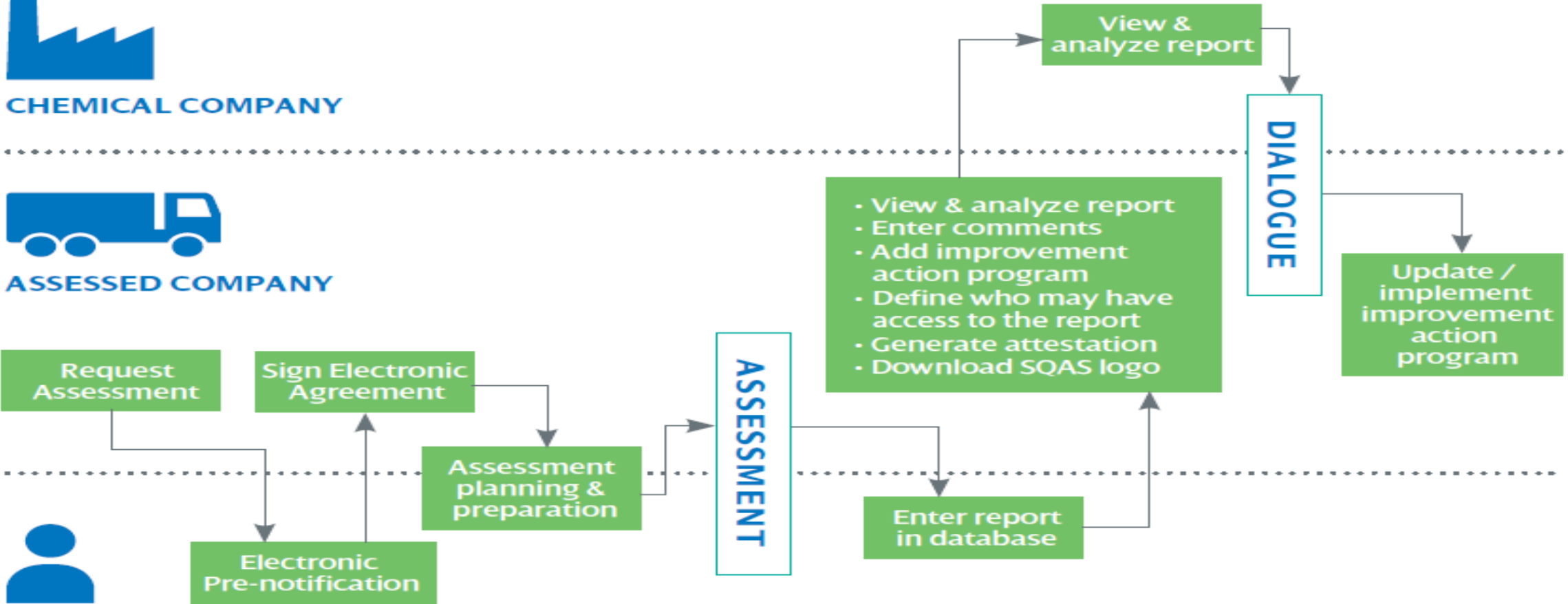
CHEMICAL COMPANY



ASSESSED COMPANY



ASSESSOR



Home

Download

Planning

loginname/reportnumber

Login

Password forgotten?

Menu

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- ◆ Links
- ◆ News & Events
- ◆ CEO Declaration of Support
- ◆ Gulf SQAS Manufacturers Group
- ◆ LSP User group
- ◆ Assessed companies
- ◆ Certification bodies
- ◆ FAQ-Frequently asked questions
- ◆ Contact us

Welcome to Gulf SQAS

Gulf Sustainability & Quality Assessment System is a system to evaluate the quality, safety, security and environmental performance of Logistics Service Providers in a uniform manner by single standardised assessments carried out by independent assessors using a standard questionnaire.

An SQAS assessment does not lead to a certificate but offers a detailed factual report which each chemical company needs to evaluate according to its own requirements.

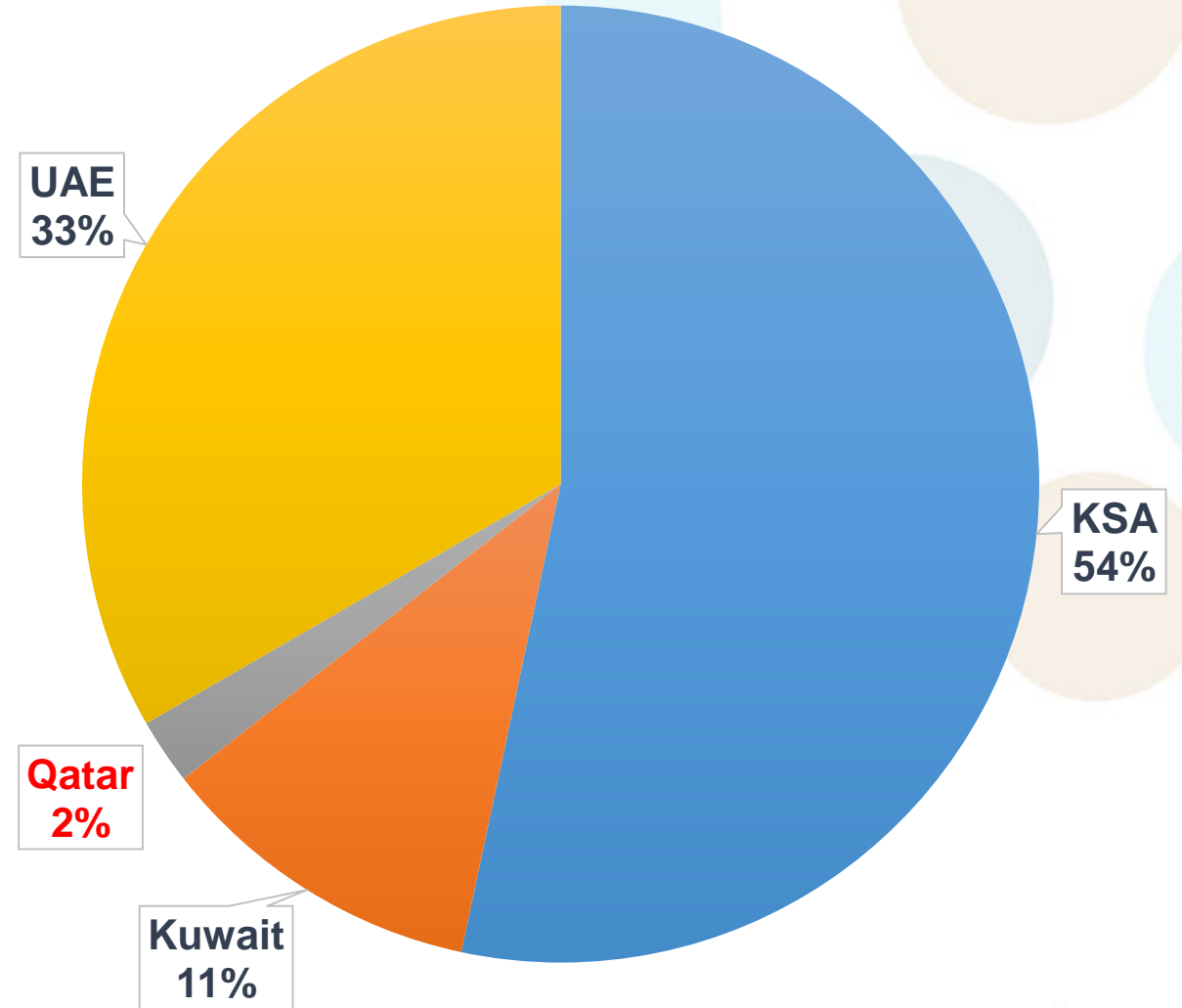
Messageboard

Post the successful implementation of the Transport Services Module, GPCA is pleased to launch the Gulf SQAS Warehouse Module. Warehousing companies in the GCC are now able to perform their Gulf SQAS assessments. To learn how you can achieve this, please contact one of our partner Certification Bodies from the list or write to us at gulfsqas@gpca.org.ae.



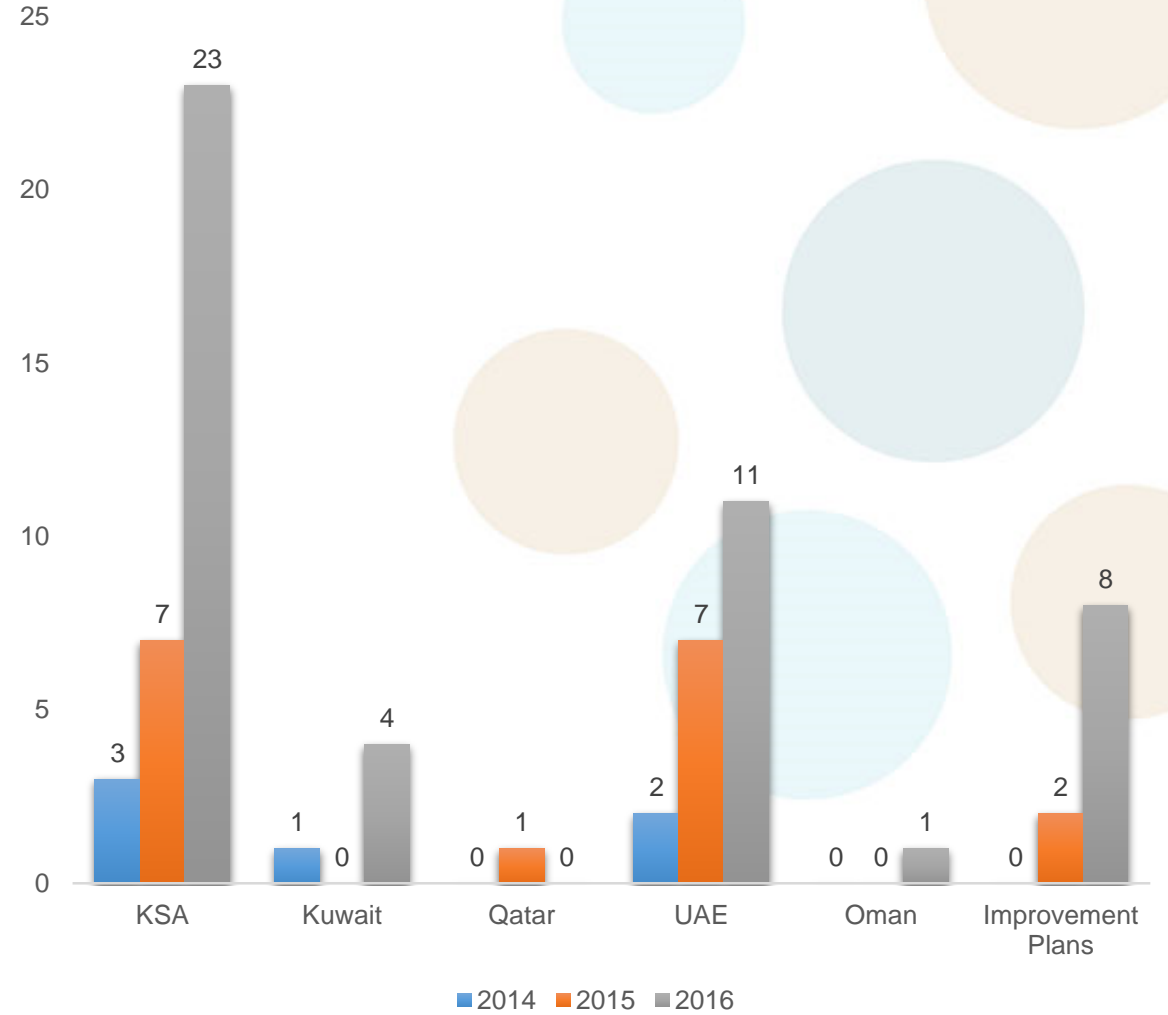
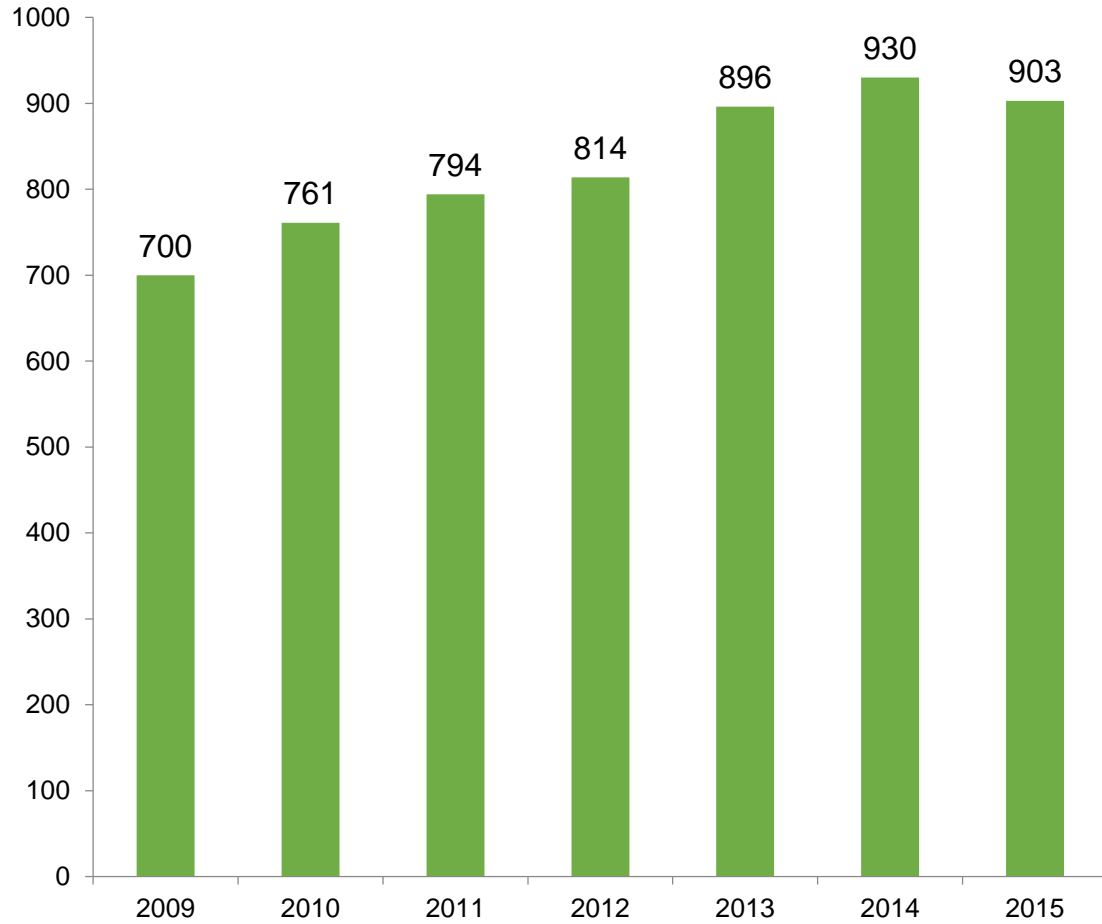
Growth of Gulf SQAS

- **Transport Services** module launched – **Aug'14**
- **Warehouse** pilot completed and module launched - **Dec'15**
- Total SQAS assessments **60**, the majority are in KSA & UAE (Q4'16)
- Significant increase in Kuwait, Qatar now moving
- **10** Improvement Plans submitted by LSPs – **Focus Area**
- **Tank Cleaning** module pilot completed in Aug'16, to be launched **Q1'17**



Growth in Assessments

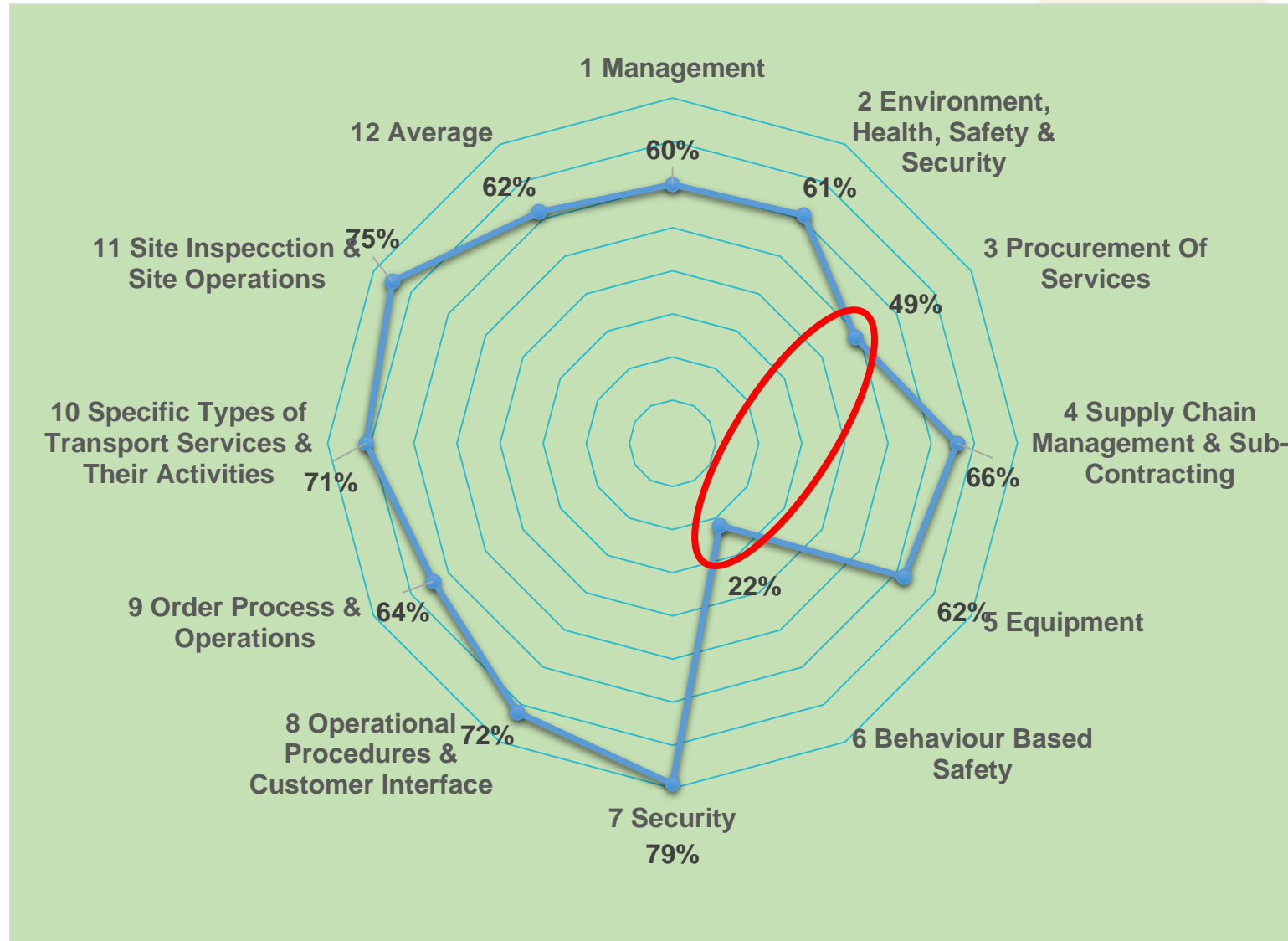
Cumulative Reports - Europe



Focus Areas for Industry Improvements

Transport Services – Questionnaire

- 50 Reports till Dec'16
- High-scoring areas:
 - Site Inspection & Site Ops
 - Operating Procedures & Customer Interface
 - SC Mgmt & Subcontracting
 - Specific types of Transport Services & their activities
- Improvement Aspects:
 - Behavior Based Safety
 - Procurement of Services



Translation Tool



	Emergency
	Gate House Check
	General
	Loading Bulk
	Loading General
	Loading Packed
	Safety

- 143 key logistics phrases for drivers and warehouse operators
- 9 key languages including Arabic, Hindi, Tagalog & Urdu

Gulf SQAS Promotes Industry Collaboration

- GPCA has selected a world class program to **improve Chemical Logistics Operations**
- Manufacturers have deemed Gulf SQAS the **EHSS&Q assurance process** for the Region
- SQAS Assessments have been well received, with LSP's recognising SQAS **learning potential**
- SQAS originated from the logistics industry and **offers proven benefits**
- It is new in the Region and it is expected that the **standards will improve** over time
- GPCA, through it's membership are adopting a **broad industry perspective**
- Gulf SQAS Program is moving in accordance with the **agreed plan**; TS & WH Modules launched, TC module launch Nov'16
- **Early engagement** will optimise the benefits. Support, commitment and active involvement from Logistics Companies is encouraged

**When you are selecting LSPs in the Gulf
are you asking if they are SQAS assessed?**

Role of Manufacturer Functions

Procurement

- Include Gulf SQAS as a mandatory requirement in Tender conditions for Logistic Services
- Ensure Company Functions are using the content of the report as part of the technical assessment for Tender Evaluations

Supply Chain / Logistics

- Utilize Gulf SQAS as the primary means of EHSS&Q technical evaluation of Logistic Services performance
- Minimize duplication of technical EHSS&Q requirements
- Review the content of the Gulf SQAS Assessment Reports and provide ongoing support to encourage contracted LSP's in their drive to prioritize resolution of specific identified areas of improvement

Environment, Health and Safety

- Utilize Gulf SQAS as the primary means of EHSS&Q technical evaluation of Logistic Services performance
- Provide technical support to Supply Chain / Logistics Functions

Role of the LSP Functions

Management

- Support and promote the use of Gulf SQAS within the company and ensure it's adoption into the integrated management system (EHSS&Q)
- Ensure continuous improvement in line with improvement programs post assessment
- Monitor consistent internal use of BBS and refresher training / monitoring

Operations

- Observe operational standards to ensure permanent alignment with Gulf SQAS
- Implement improvement programs to address identified shortfalls

EHSS&Q

- Control the continuous improvement measures and update improvement programs regularly
- Conduct regular internal assessments
- Regular monitoring and training of BBS
- Share lessons learned through the GPCA platform for the benefit of the Industry



Gulf Dangerous Goods Road Transport (DGRT) Regulations Task Force

Why Dangerous Goods Road Transport Regulations?

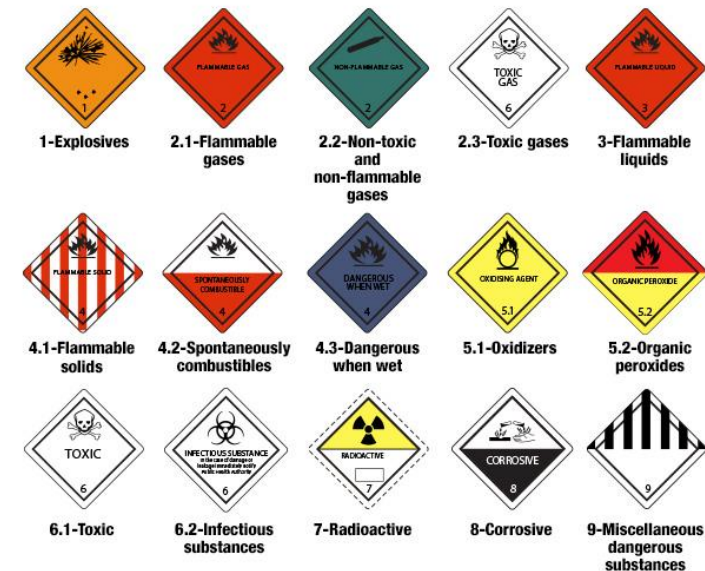
Dangerous goods movements on GCC roads are increasing significantly driven by, but not limited to:

- Rapidly expanding economy driving consumers demand for goods
- Expanding energy sector including nuclear
- A rapidly developing minerals sector
- Increased munitions movements
- Increased petrochemical downstream and other manufacturing activity

Current Regulations are:

- Fragmented and not understood
- Inconsistent, out of date and not enforced
- Not delivering the required improvement in safety standards

Chemicals account for a significant proportion of dangerous goods movements by road but many other sectors contribute to the volume and must also be engaged

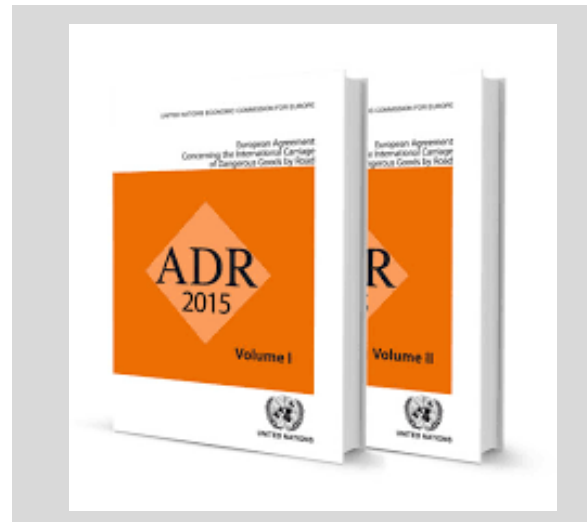
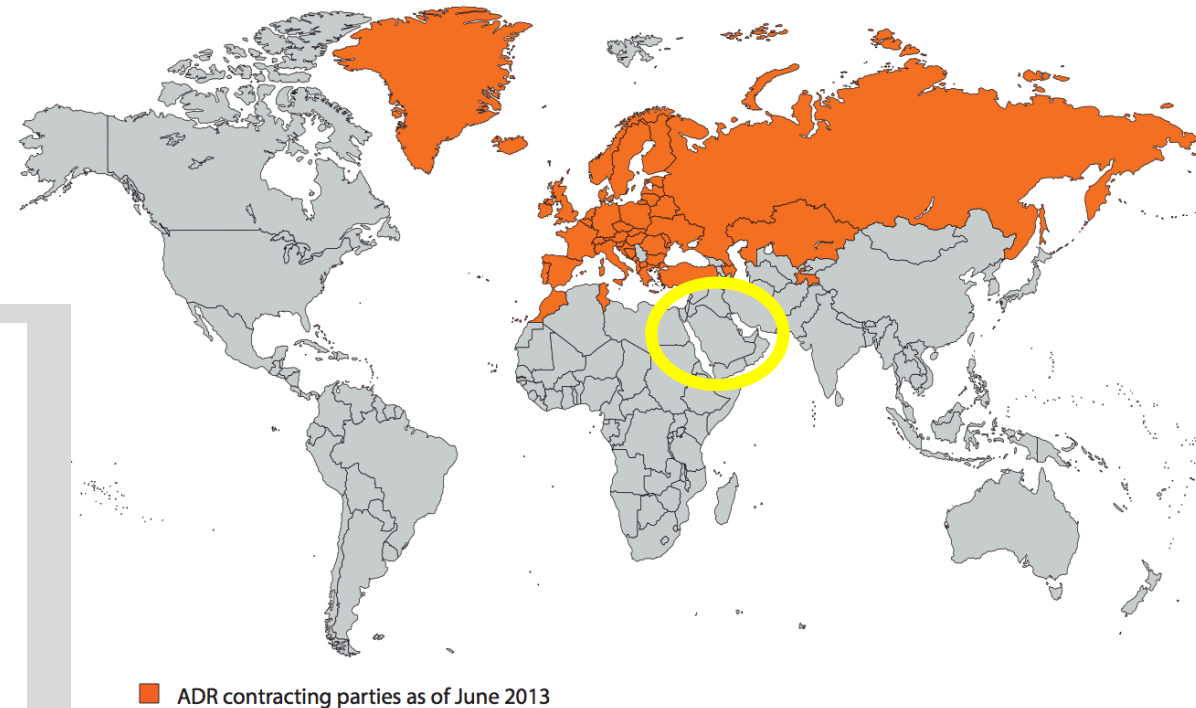


No Need to Reinvent the Wheel – ADR is Ready Made

- Having considered the options, GPCA concluded that aligning with ADR (European Agreement Concerning the International Carriage of Dangerous Goods by Road) was the preferred way forward for the GCC
- The ADR Regulations have evolved since their inception in 1957 and have currently 48 member states with well-established means of accession and implementation. (not just Europe)
- GCC and Europe are major trading partners
- SQAS has many references to ADR
- ADR is compatible with other transport regulations

On 1 August 2013, there were 48 Contracting Parties to ADR:

Albania, Andorra, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kazakhstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Montenegro, Morocco, Netherlands, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, the former Yugoslav Republic of Macedonia, Tunisia, Turkey, Ukraine and United Kingdom.



Dangerous Goods & Security Workshop

The workshop took place in Dubai on the 2nd & 3rd September 2015

Attended by over 100 delegates representing:

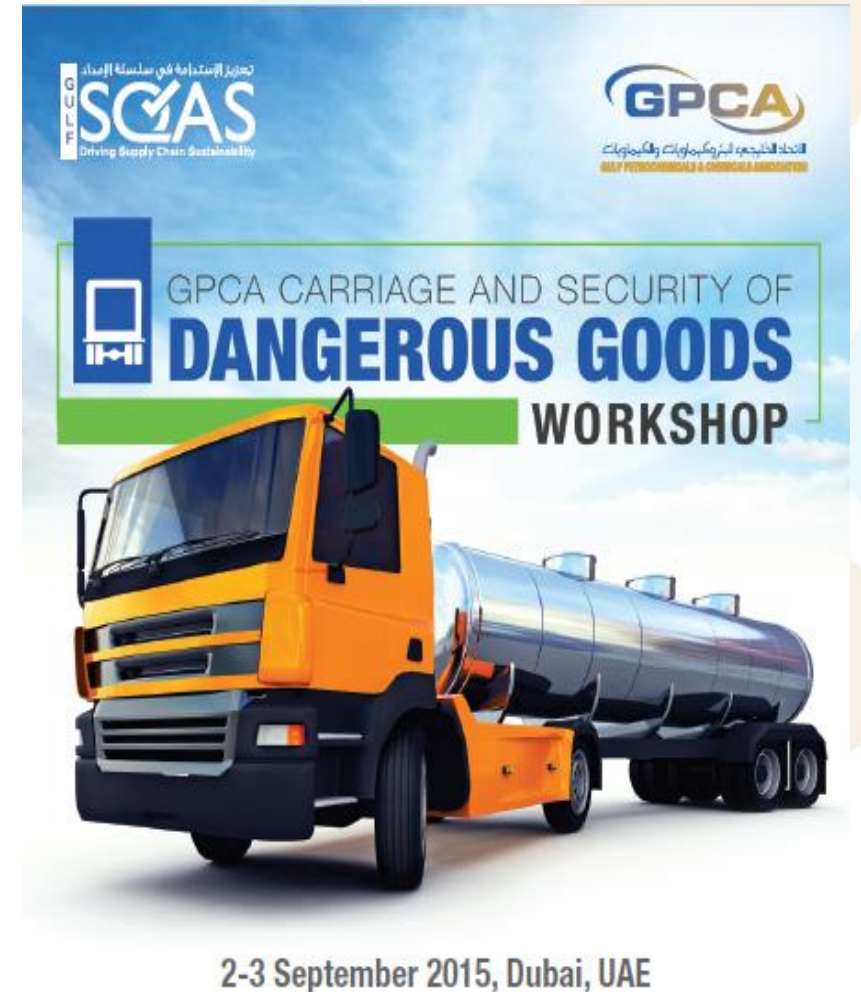
- Manufacturers & Logistics Service Providers
- Specialist Suppliers & Regulators

Two days of very detailed knowledge sharing aimed at:

- Understanding the requirements of ADR
- Demonstrating how to meet the requirements

The outcomes were to:

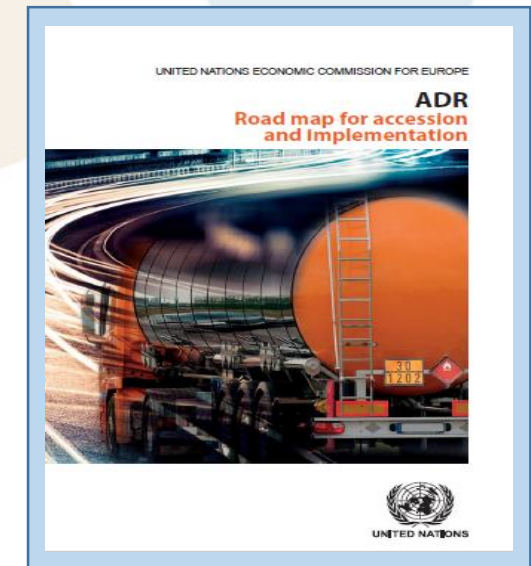
- Create a Task Force to develop the case for ADR
- Implement areas of best practice to gain earlier improvements in safety



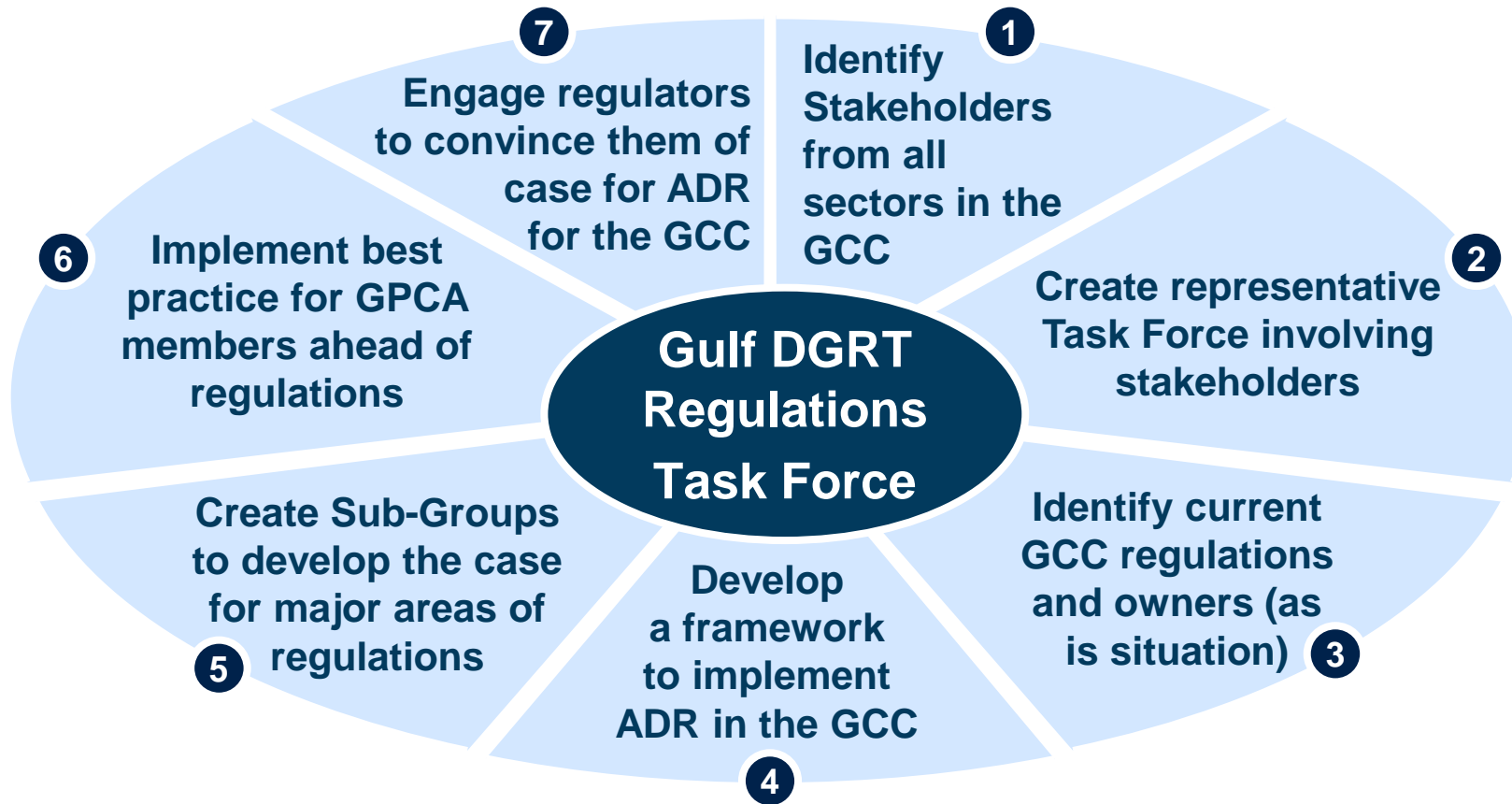
Task Force Members

Member Selection Criteria	Task Force Geography	Specialist Areas
Industry / technical knowledge / experience	Bahrain	Development, implementation and enforcement of regulations
Geographic / country specific knowledge / experience	Kuwait	Interface with United Nations Economic Commission for Europe
Industry sector representation	Oman	Training
Political / regulatory knowledge / experience / influence	Qatar	Product classification
Other reason to benefit task force or GPCA	Saudi Arabia	Packaging, tank and vehicle, design, construction and approval
	United Arab Emirates	Documentation and labelling

#	Organization	Name	Specialty	Location
1	Abu Dhabi DfT	JonPaul Simpson Tariq Al Falahi	Government / Regulator	Abu Dhabi
2	Agility	Riccardo Tonelli	LSP Chemicals / Packaging Expert	Dubai
3	ALFRED TALKE	Andreas Goebels	LSP Road (KSA)	Saudi Arabia
4	AL TAMIMI & CO	Andrea Tithecott	GCC Regulatory Law	Abu Dhabi
5	DOW	Hasso Marggraff	Manufacturer Logistics	Dubai
6	GPCA	Udit Arora	GPCA Initiatives Interface	Dubai
7	GPCA (Task Force Leader)	Mark Appleyard	Technical / Regulations	Dubai
8	LS&C	John Charlton	Training Provider / Comp Auth Rep	UK
9	MELI	Amer Badarneh or Dr Turhan Bilgili	Training Provider	Saudi Arabia
10	SABIC	Abdullah M. Al-Otaibi	Manufacturer Logistics	Saudi Arabia
11	STOLT Tank Containers B.V	Krishnan Sankaran	LSP Tank Container Operator / Shipper	Dubai



Gulf Dangerous Goods Road Transport Regulations Road Map



Dangerous Goods Classification

Driver & Employee Training

Vehicle and Tank Standards

Packaging Standards

Dangerous Goods Security

Vehicle & Packaging Labels

Consignment Documentation

Emergency Response

Are you a stakeholder and interested in this initiative?

Please pass on your details to your GPCA contact

Six Initial Areas Selected for Sub-Groups

Training



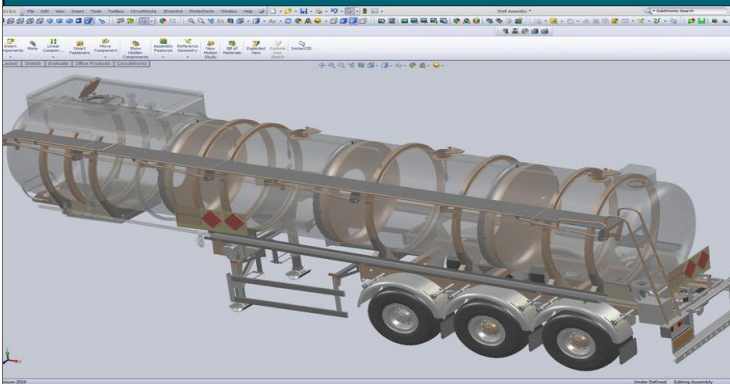
Regulations



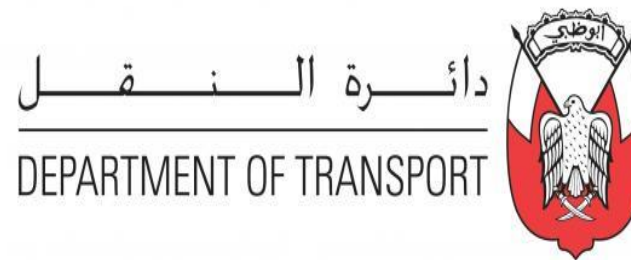
Packaging



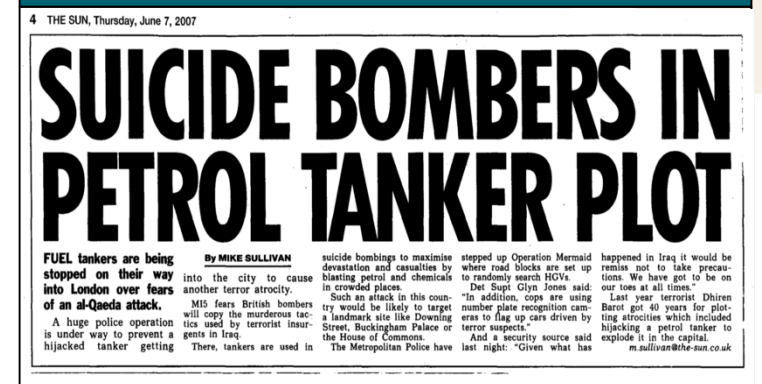
Tankers



Competent Authority



Security



Summary

- GPCA is driving supply chain sustainability in the Gulf Region
- We believe the industry led approach is the right way to succeed
- To achieve success we need support and commitment from stakeholders
- If you would like to know more about GPCA or any of our initiatives I will be pleased to answer your questions

www.gpca.org.ae

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www.gulfsqas.com

Thank you