



# **'Looking Back' over CONCAWE's 50 Years**

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**10<sup>th</sup> CONCAWE SYMPOSIUM**

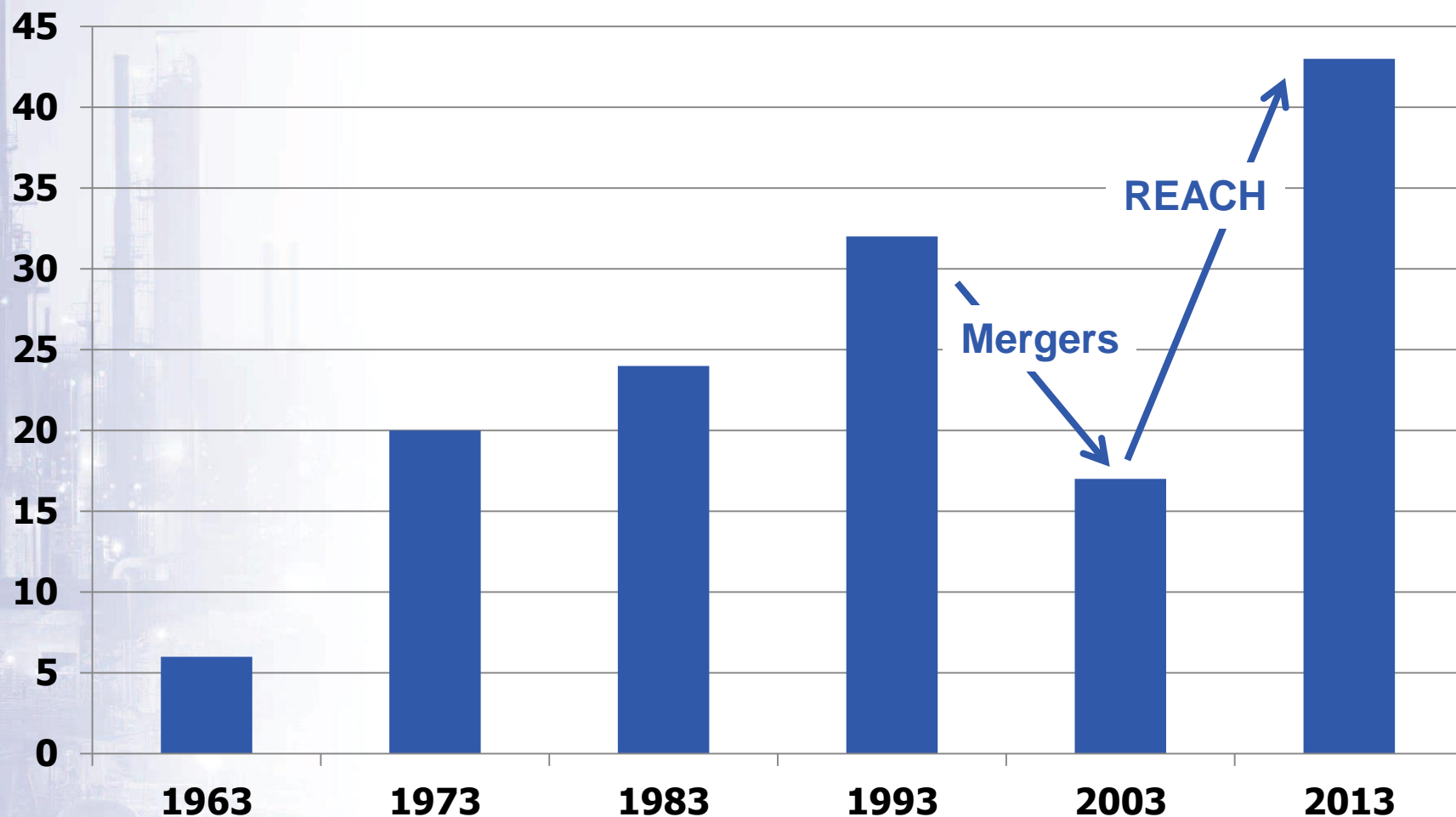
**25<sup>th</sup> February 2013**



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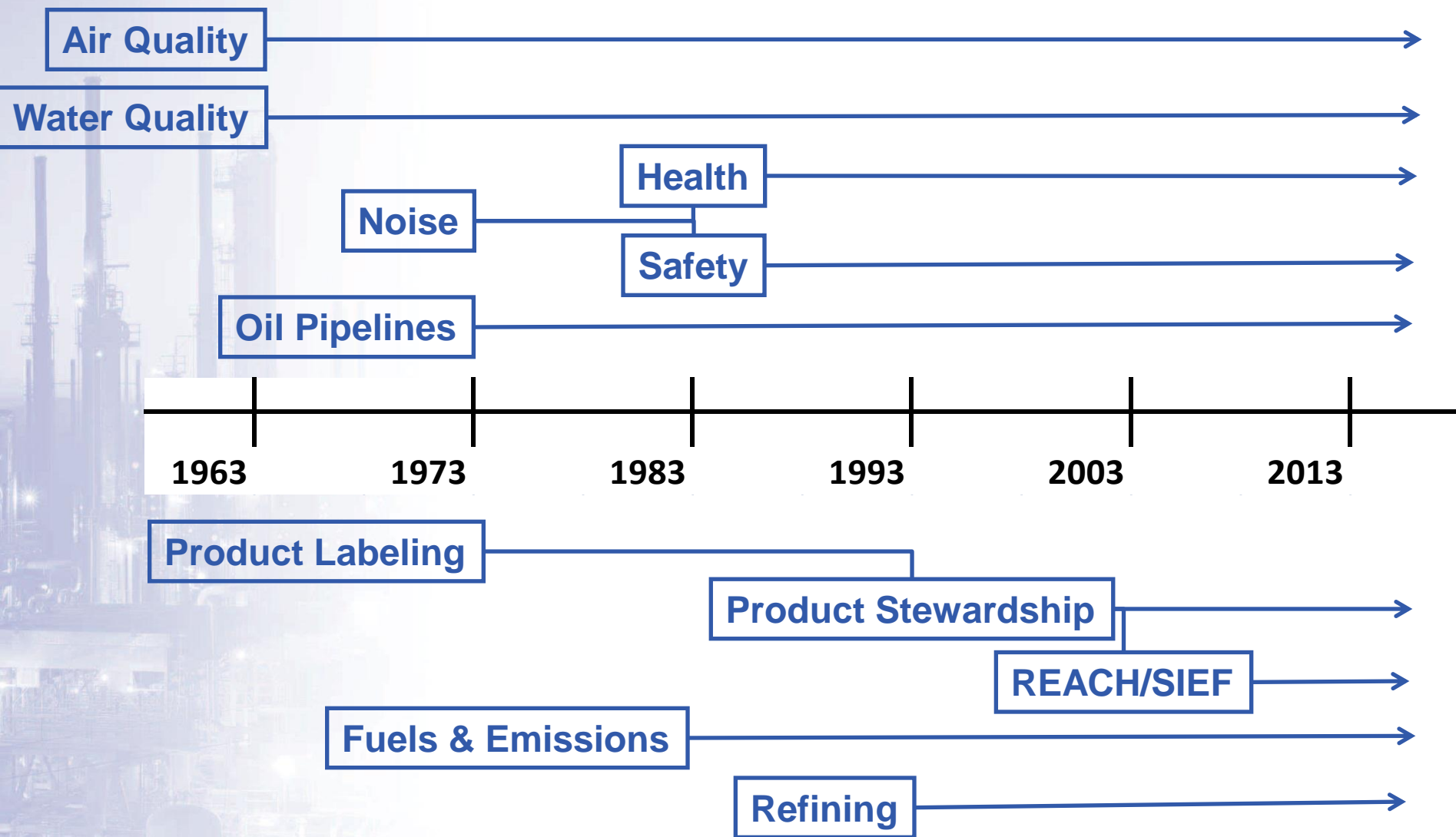


## CONCAWE Member Companies



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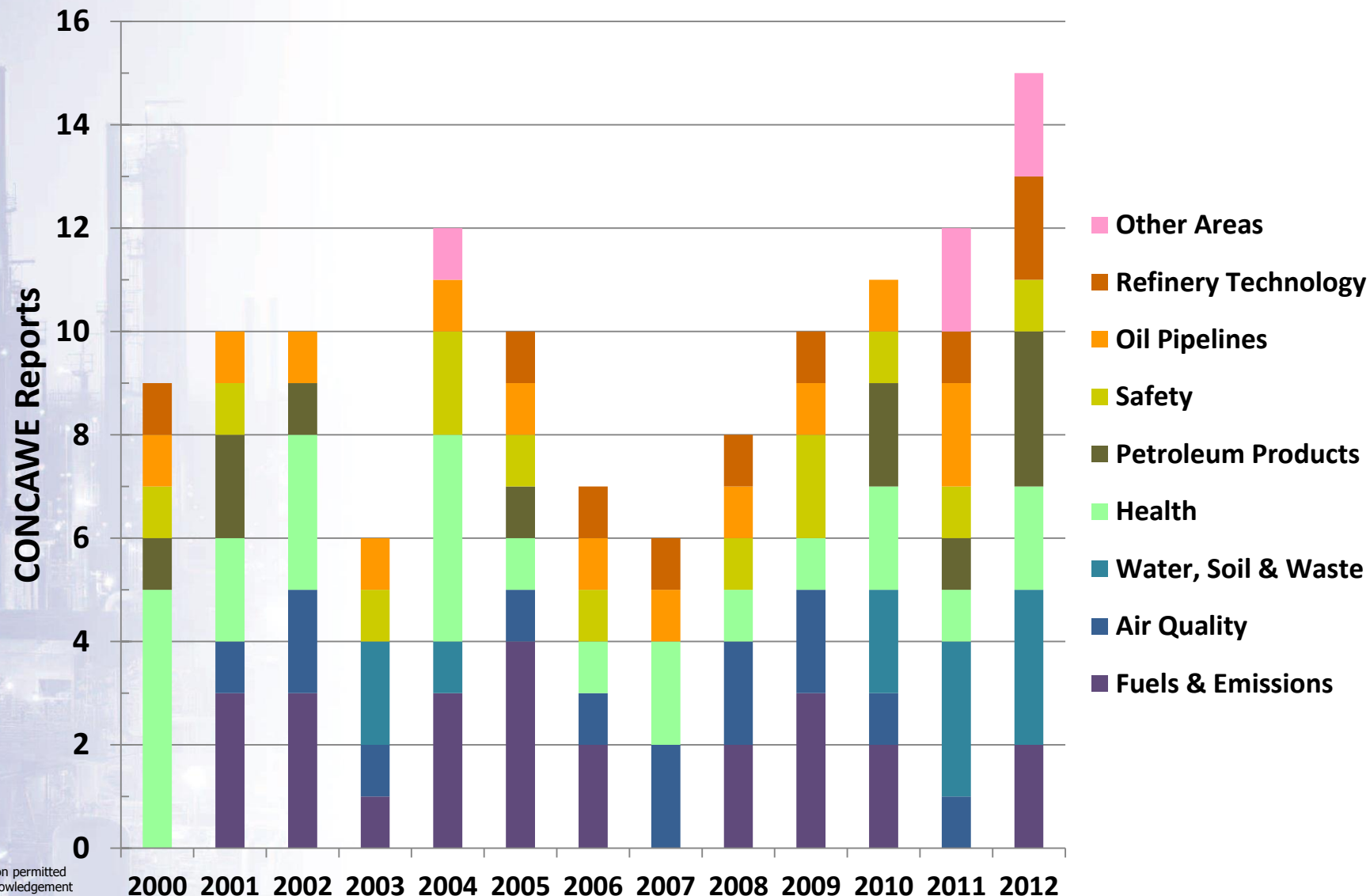




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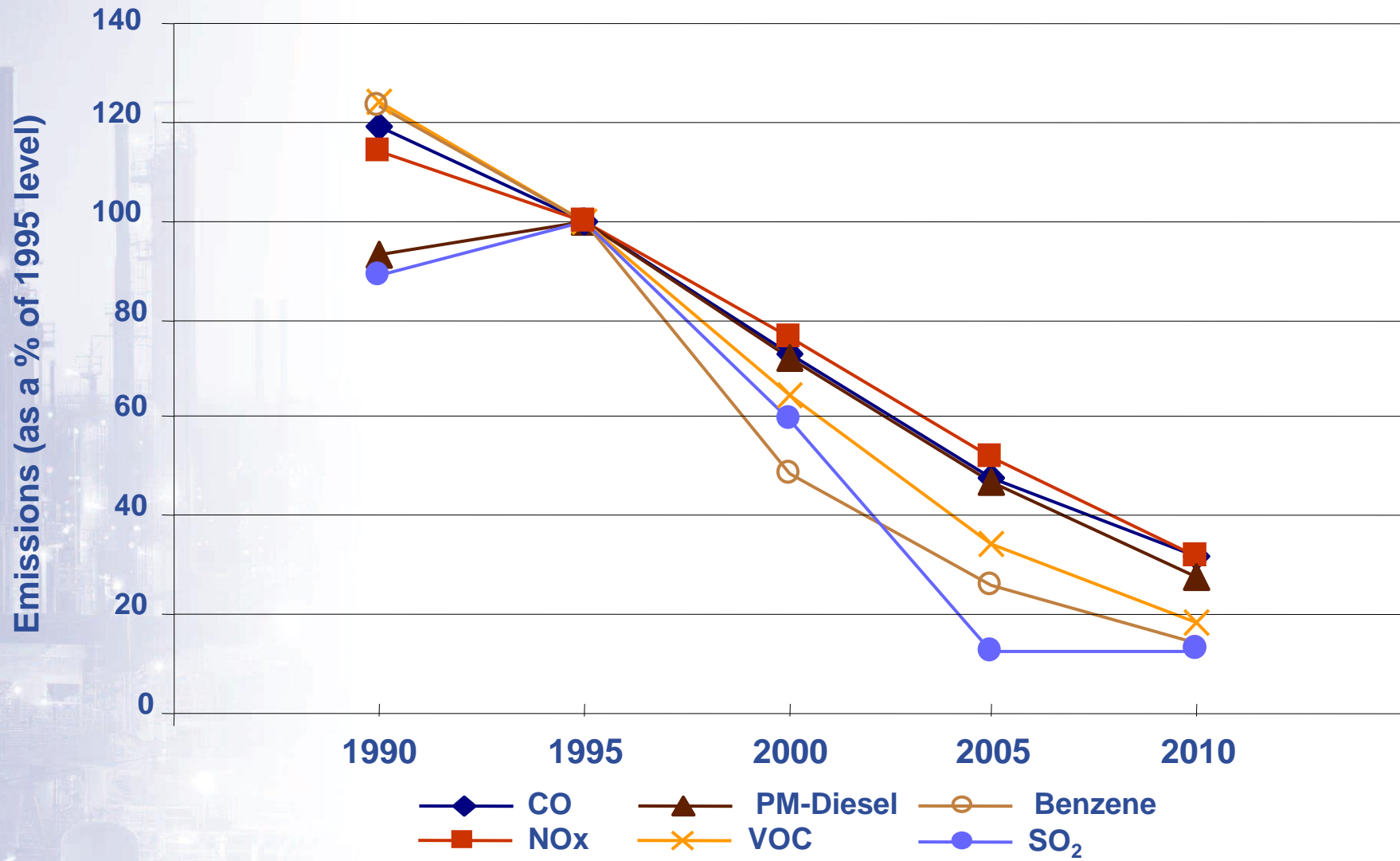






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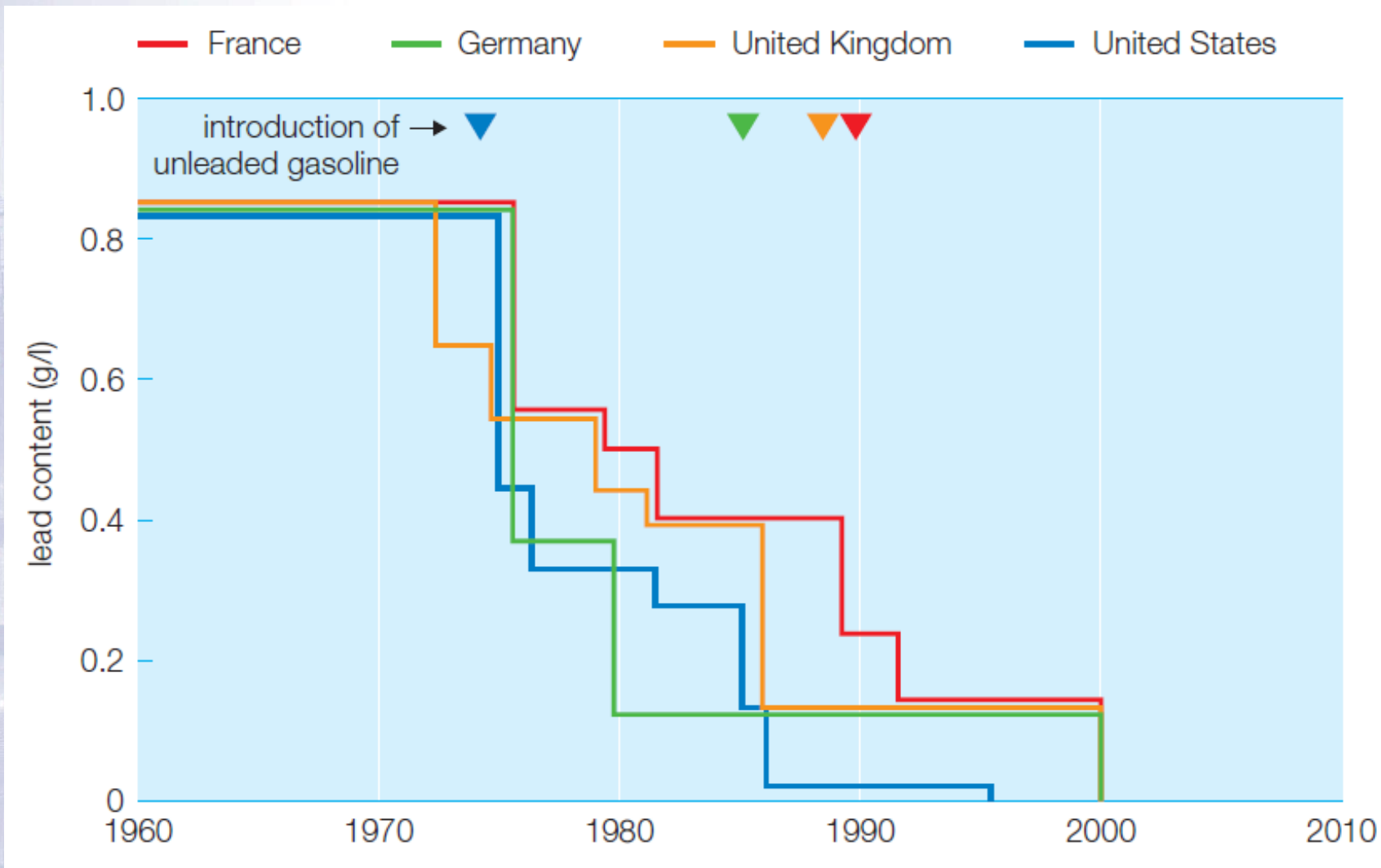




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Source: European Commission

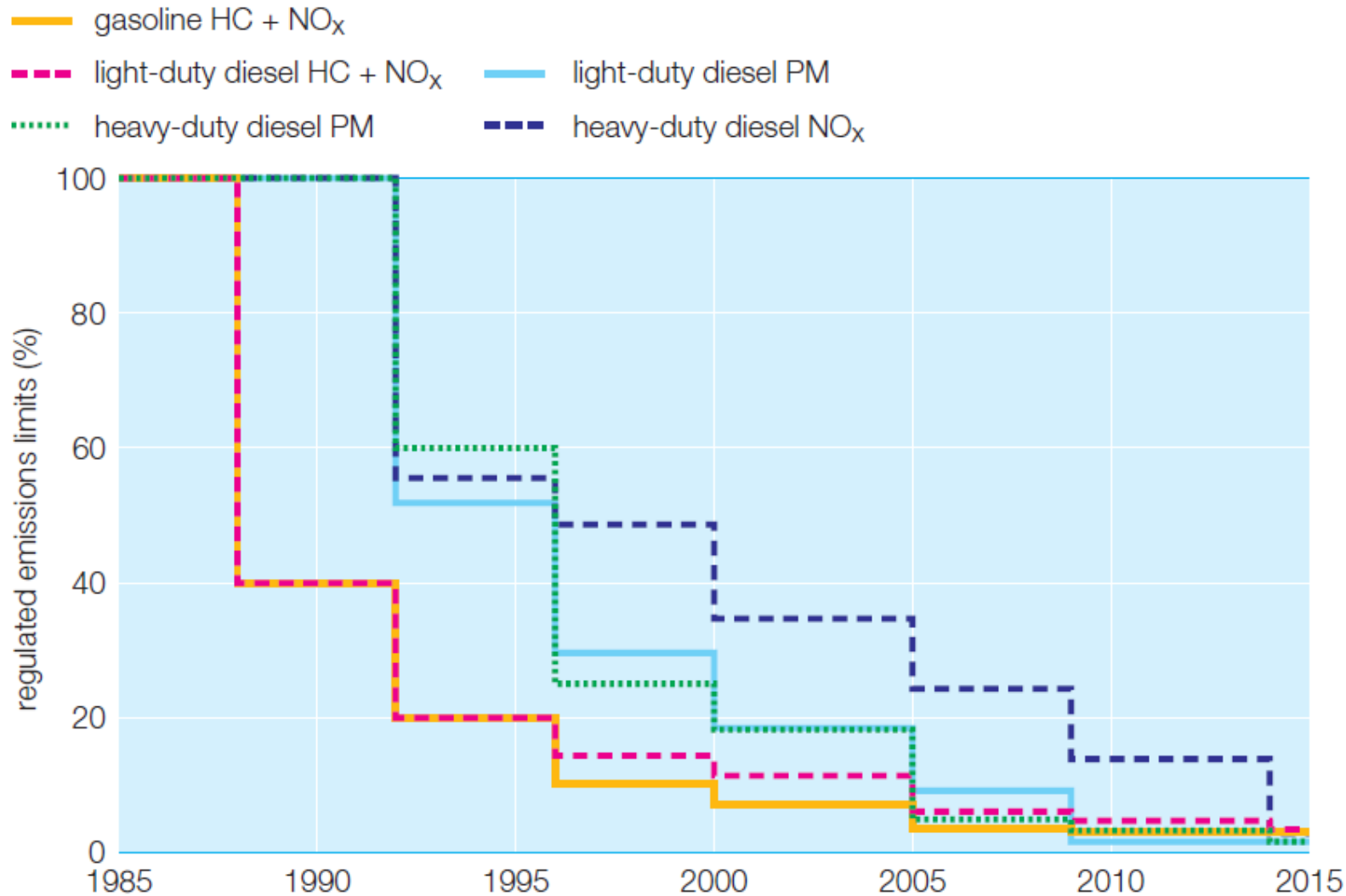




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Year			1994	1995	1996	2000	2005	2009
Unleaded gasoline (standard grade)			EN228					
Sulphur	ppm m/m	max	1000	500		150	50/10	10
Benzene	% v/v	max	5			1		
Aromatics	% v/v	max	Not specified			42	35	
Olefins	% v/v	max	Not specified			18		
Oxygen	% m/m	max	2.5 <sup>a</sup>			2.7		
Vapour pressure (summer)	kPa	max	up to 80			60 <sup>b</sup>		
Diesel (standard grade)			EN590					
Cetane Index		min	46					
Cetane Number		min	49			51		
Sulphur	ppm m/m	max	2000		500	350	50/50	10
Density	kg/m	min	820			845		
		max	860					
T95	degrees C	max	370			360		
Polyaromatic hydrocarbons	% m/m	max	Not specified			11		
Lubricity	µm @ 60°C	max	Not specified		460			

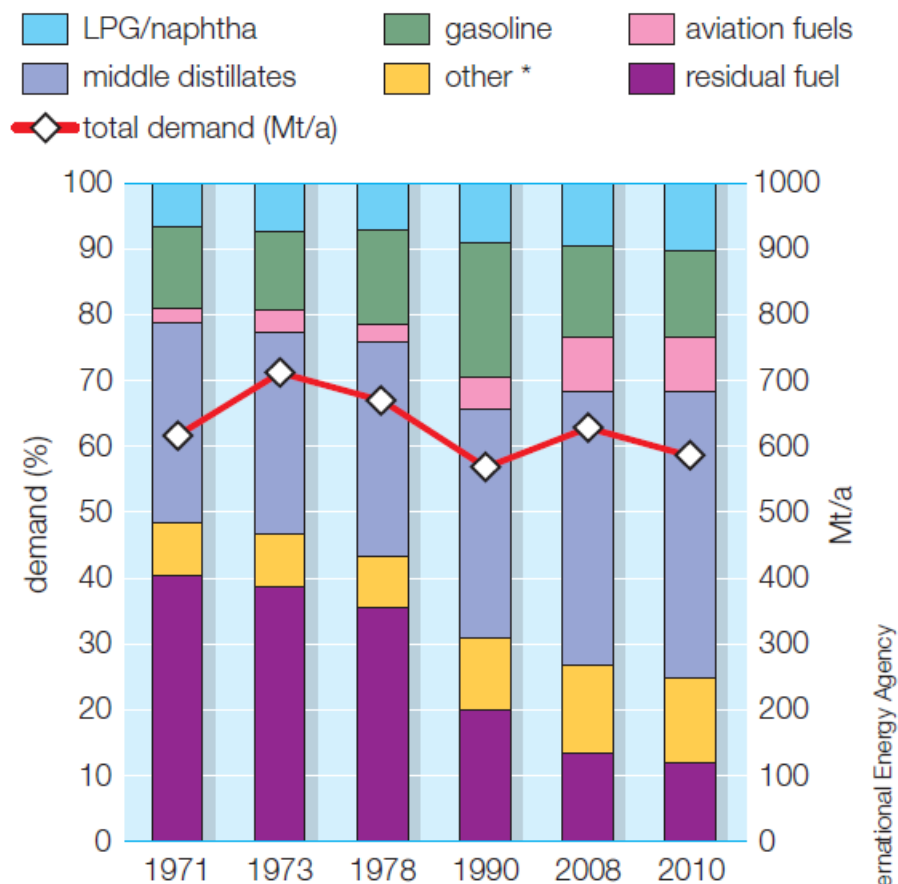
<sup>a</sup> Up to 3.7% at Member State discretion. Individual limits apply to specific compounds.

<sup>b</sup> 70 kPa maximum allowed in Member States with arctic or severe winter conditions.

Source: CONCAWE

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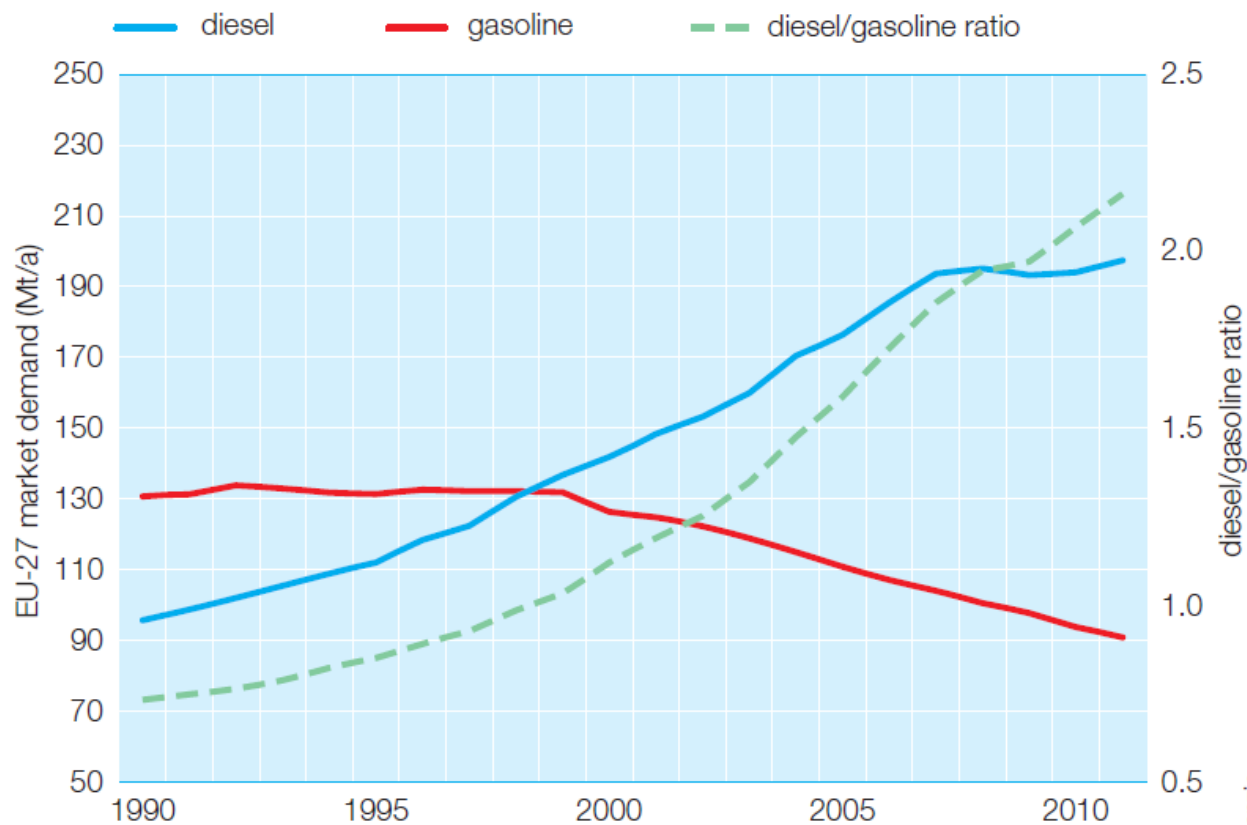
\* The 'other' category mostly consists of speciality products such as lube oils, bitumens, solvents, etc.

Source: International Energy Agency

➤ Evolution of petroleum product demand in what was to become the EU-15 over the past 40 years

Source: International Energy Agency





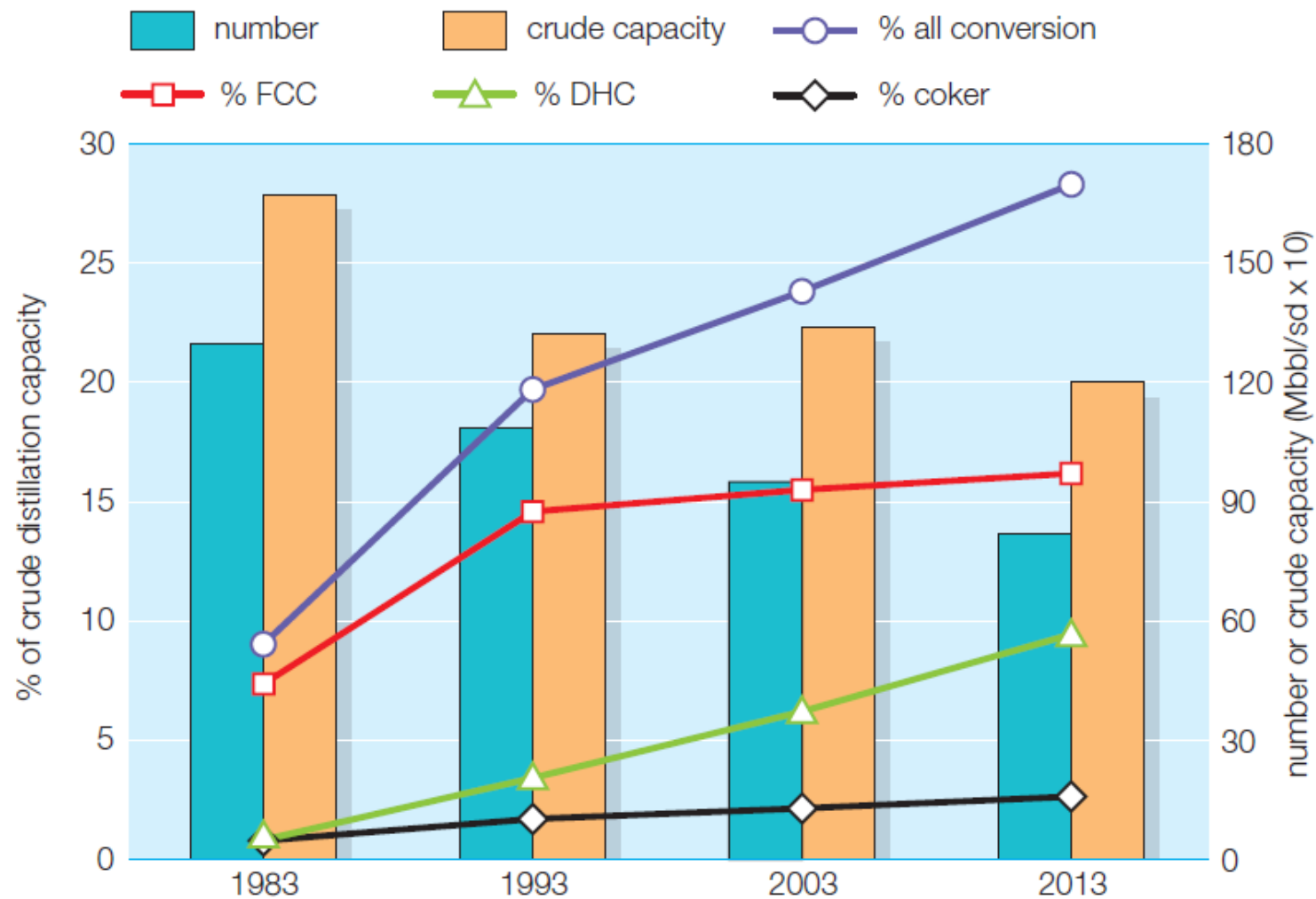
*Above: the high uptake of diesel passenger cars and strong road freight growth have caused the diesel to gasoline ratio in EU-27 countries to triple over the last two decades.*

Source: Wood Mackenzie

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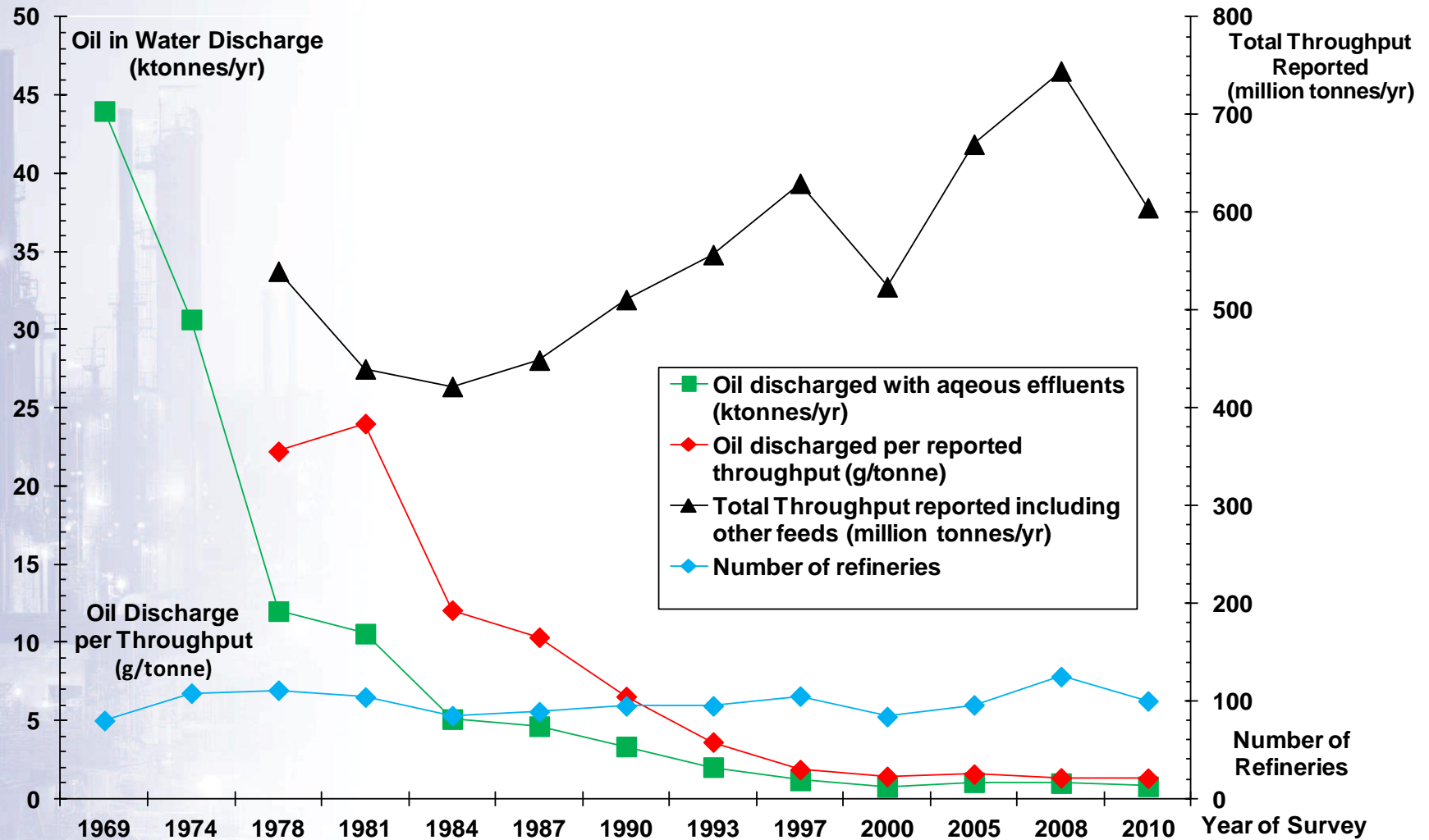
Source: Oil and Gas Journal

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# concaawe Effluent Water Quality: Dramatically Improved

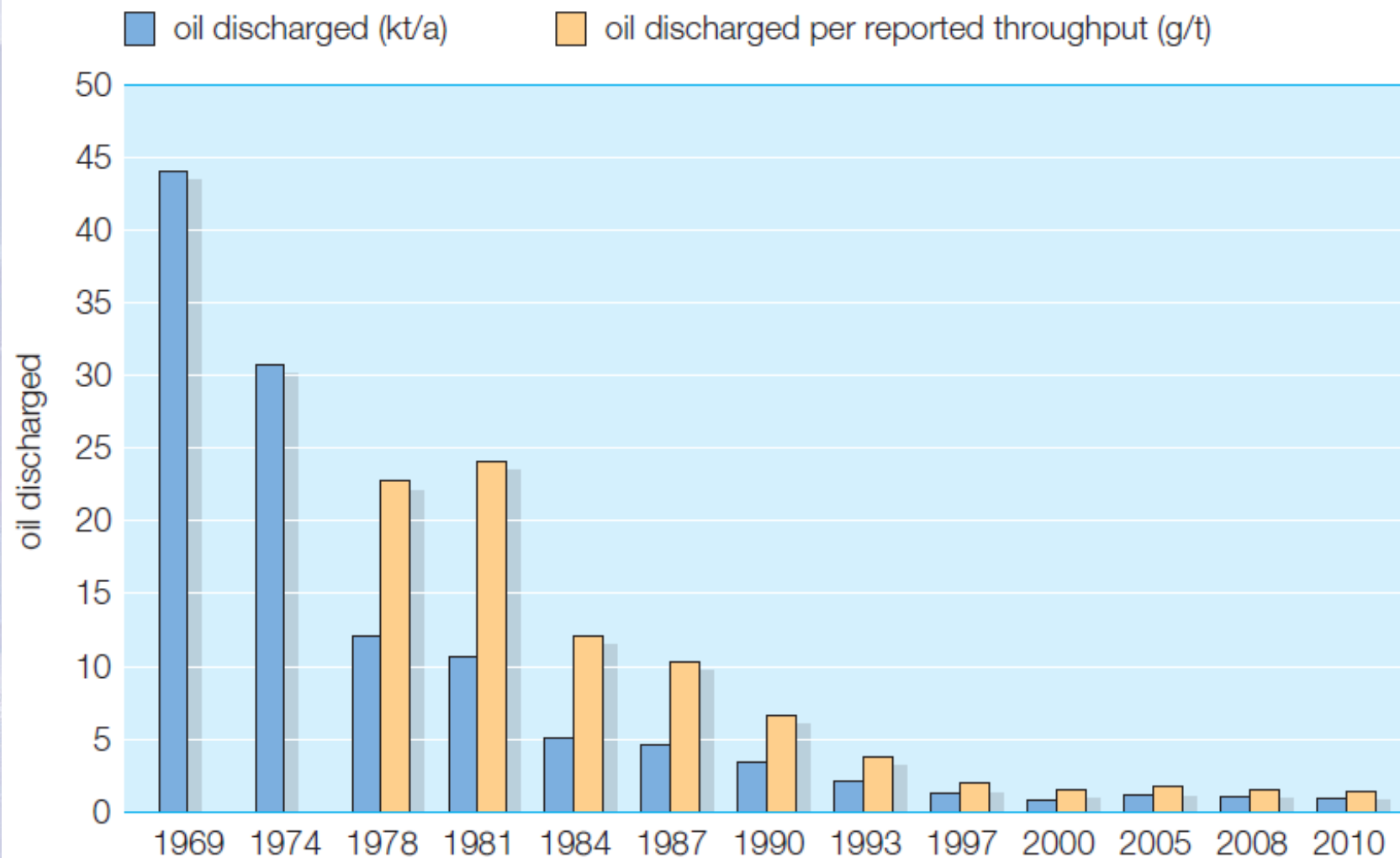


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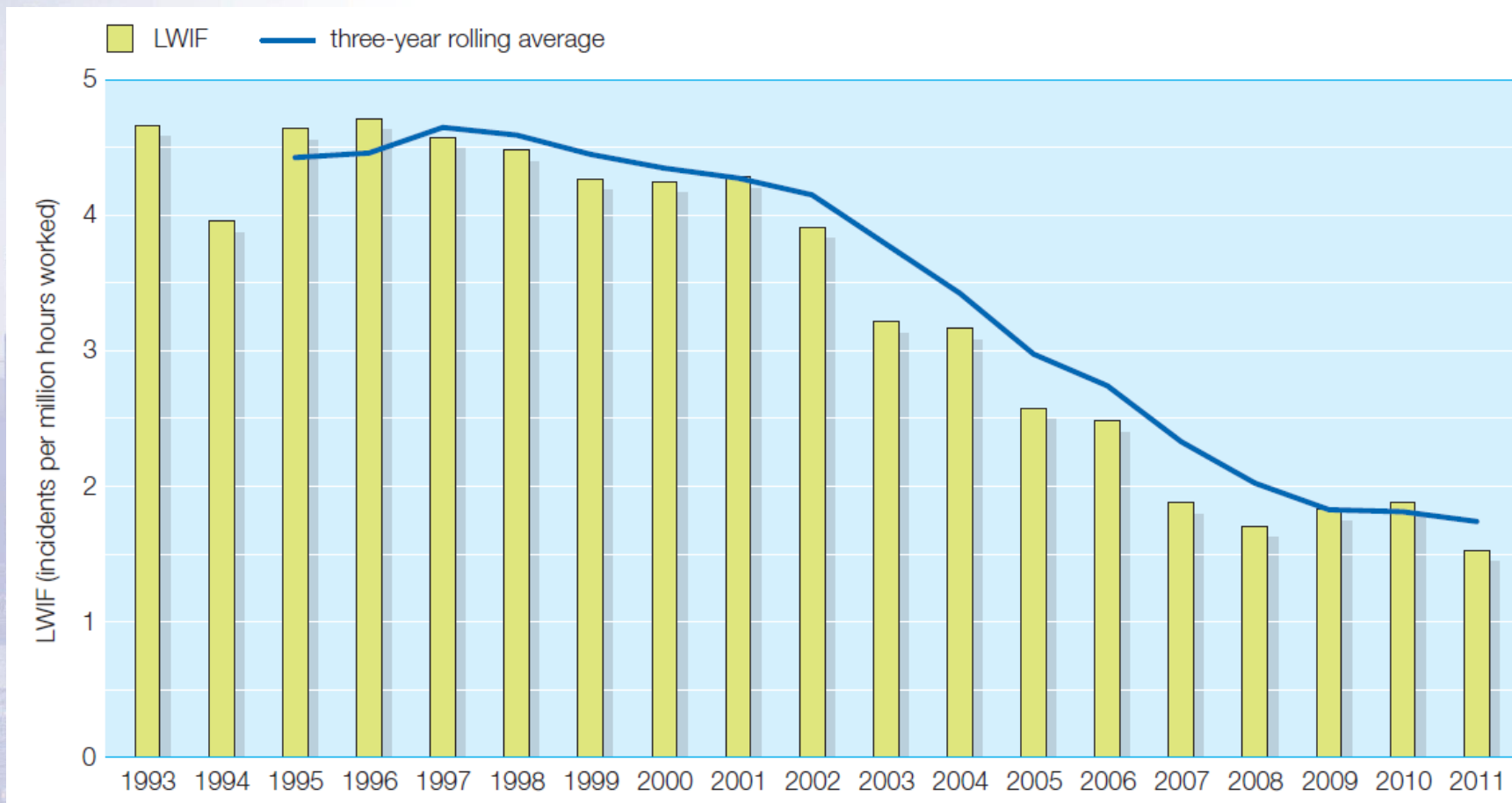




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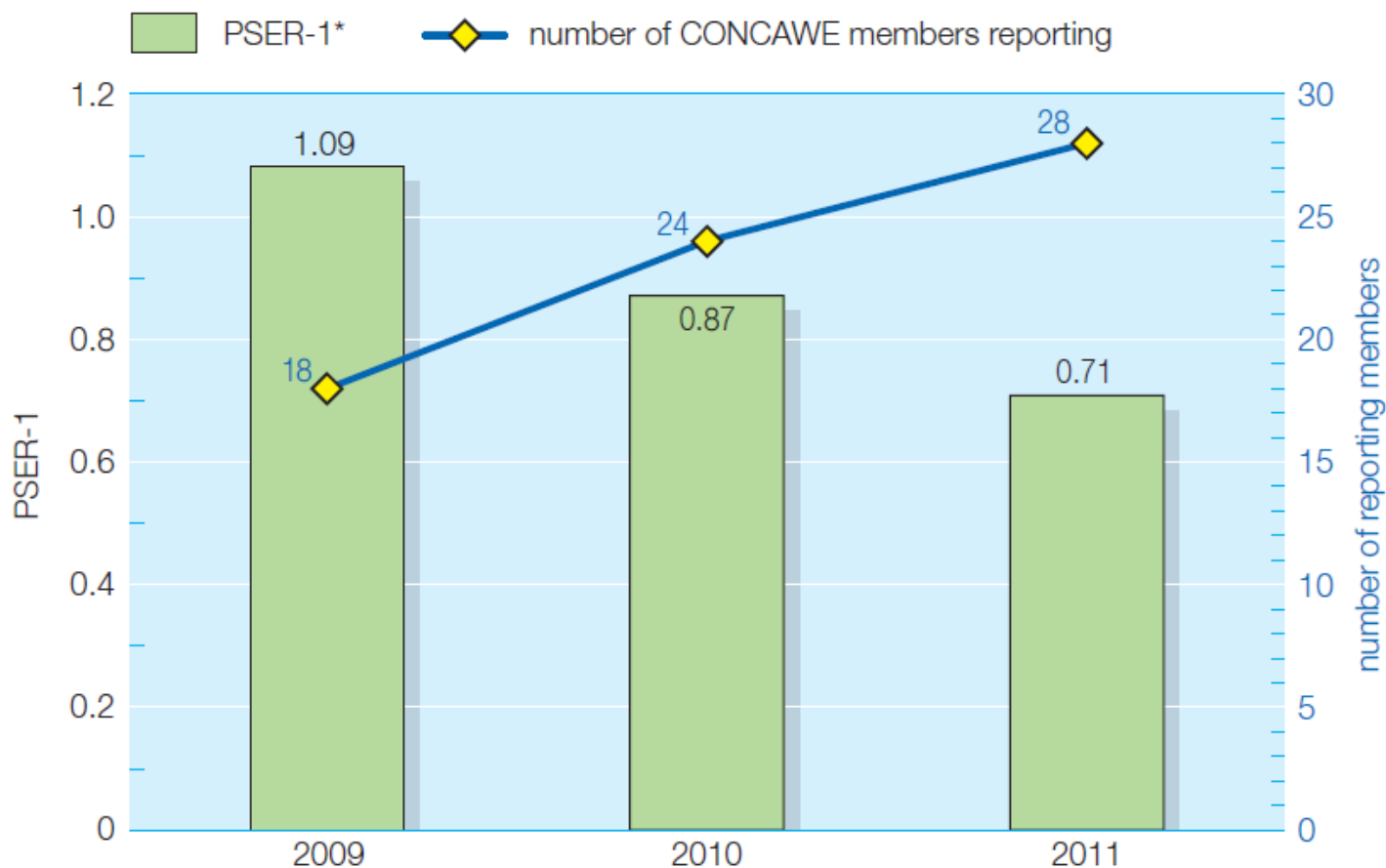




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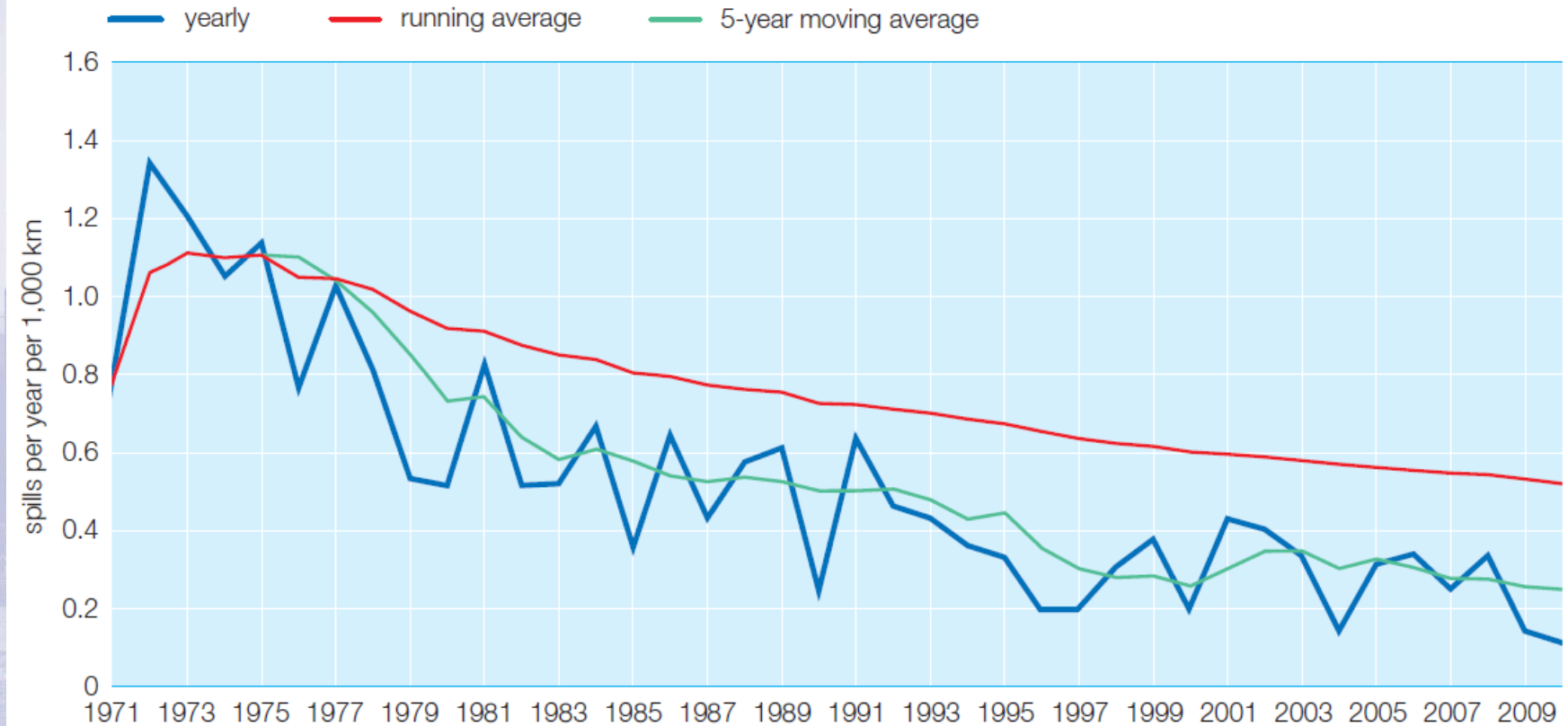


\* PSER-1 the number of releases of hazardous substances per 1 million hours worked causing a fatality, injury or fire or explosion leading to damages valued over € 25,000 or above set threshold values indicative to have the potential to cause these.

Source: CONCAWE

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Source: CONCAWE



- ▶ CONCAWE was formed to conduct research in relevant environmental science well before any significant societal or regulatory pressure
- ▶ The refining, distribution & marketing industry has an impressive record of continuously improving its performance
- ▶ Member Companies have pooled their collective expertise in the non-competitive fields of safety, health, environment and product safety
- ▶ CONCAWE has proved to be an effective platform for this cooperation
- ▶ The industry, working in partnership with consumer-related industries, has helped deliver dramatic environmental improvements for society
- ▶ The future challenges are great, especially when delivering further improvements while staying competitive: both regionally & globally
- ▶ CONCAWE, and its refining members, will contribute to further progress over the coming decades

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- ▶ Transition to a growing global population and sustainable society
- ▶ Ever-changing energy and fuel demands
- ▶ Increasing urbanisation
- ▶ Meeting customer expectations for clean and affordable fuels
- ▶ Increasing diversification of the vehicle fleet
- ▶ Increasing use of renewable fuels and pressure on GHG emissions
- ▶ Environmental pressure and regulations on air, water, and land
- ▶ Stewardship of petroleum products
- ▶ Implications of energy and transport on human health
- ▶ Global competitiveness of all European industries
- ▶ Skilled engineers and scientists to meet these many challenges

## ***CONCAWE's principles:***

- ***Sound science, cost-effectiveness of solutions, and transparency of results***

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**1955**



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