

Dr Guillaume Drillet
Global Marine Services
Guillaume.Drillet@sgs.com

SAFER
GREENER
SMARTER

Implementing analysis
of microplastics under
accreditation ISO 17025
– lessons learned



Who we are...

SGS GLOBAL EXPANSION

1878 Rouen, France
1913 Pan-Europe
1928 21 further global countries
1939 South America
1955 Africa Asia
1981 Expands to ex-USSR

1913
 Leader in grain inspection (21 million tons)

1915
 Headquarters moved from Rouen to Geneva

1946
 Inspection of European imports

1955
 Oil and Gas Chemical Public Sector

1981
 Listed on the Swiss Stock Exchange

TODAY
ONE BRAND SERVING THE VALUE CHAIN GLOBALLY AND ACROSS INDUSTRIES

2001
 SGS rebranded

SGS INDUSTRY EXPANSION

1990 Consumer Testing
1980 Life Sciences Automotive Certification
1970 Environmental
1960 Oil and Gas Chemical Public Sector

BUSINESS PRINCIPLES

SGS' Business Principles are the cornerstone on which all of our activity rests. They are held to be fundamental, overarching beliefs and behaviors that guide our decisions and allow us to embody the SGS brand in everything we do.



INTEGRITY



RESPECT



HEALTH, SAFETY & ENVIRONMENT



QUALITY AND PROFESSIONALISM

SUSTAINABILITY ACHIEVEMENTS



SGS received a rating of AAA in the Morgan Stanley Capital International's (MSCI) Environment Social Governance assessment for 2020.



SGS was rated by Sustainalytics as "low risk" of experiencing material financial impacts from ESG factors for 2020.



We received a Platinum Rating award from EcoVadis and were placed in the top 1% of the evaluated companies.



SGS has been rated as P1M1 by ISS ESG Corporate Rating for its excellence in management of environmental, social



For the seventh consecutive year, we received the Gold Class award in SAM's Sustainability Yearbook for our excellent sustainability performance.



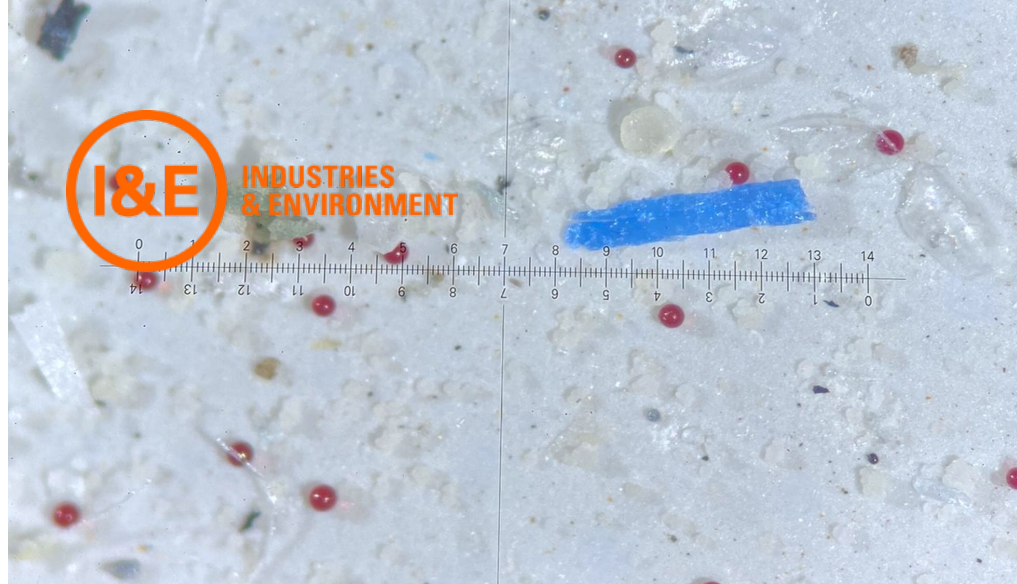
We rank first in the Professional Services industry in 2020 Corporate Sustainability Assessment.



We were awarded an A- score on the CDP 2020 Assessment. SGS maintained its status as a carbon neutral company since 2014.



We were included in the FTSE4Good Index for the third time.

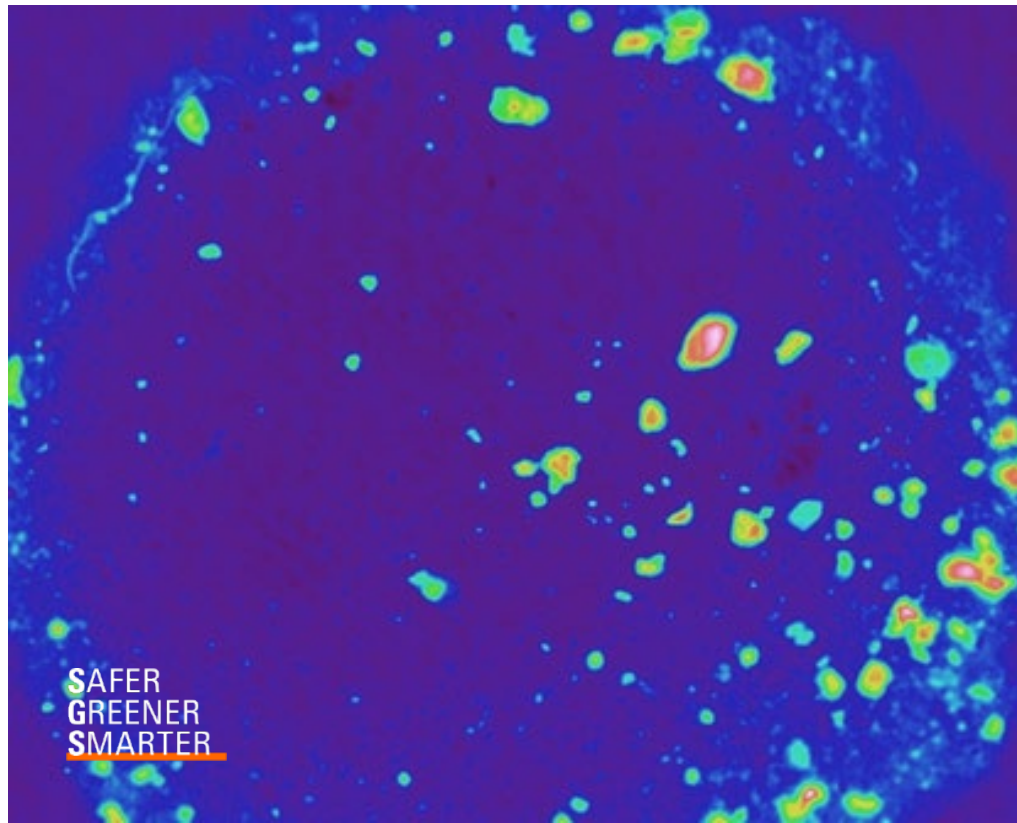


Environmental plastics monitoring in commercial laboratories... Where to start when no global recognized standard exist (yet)?

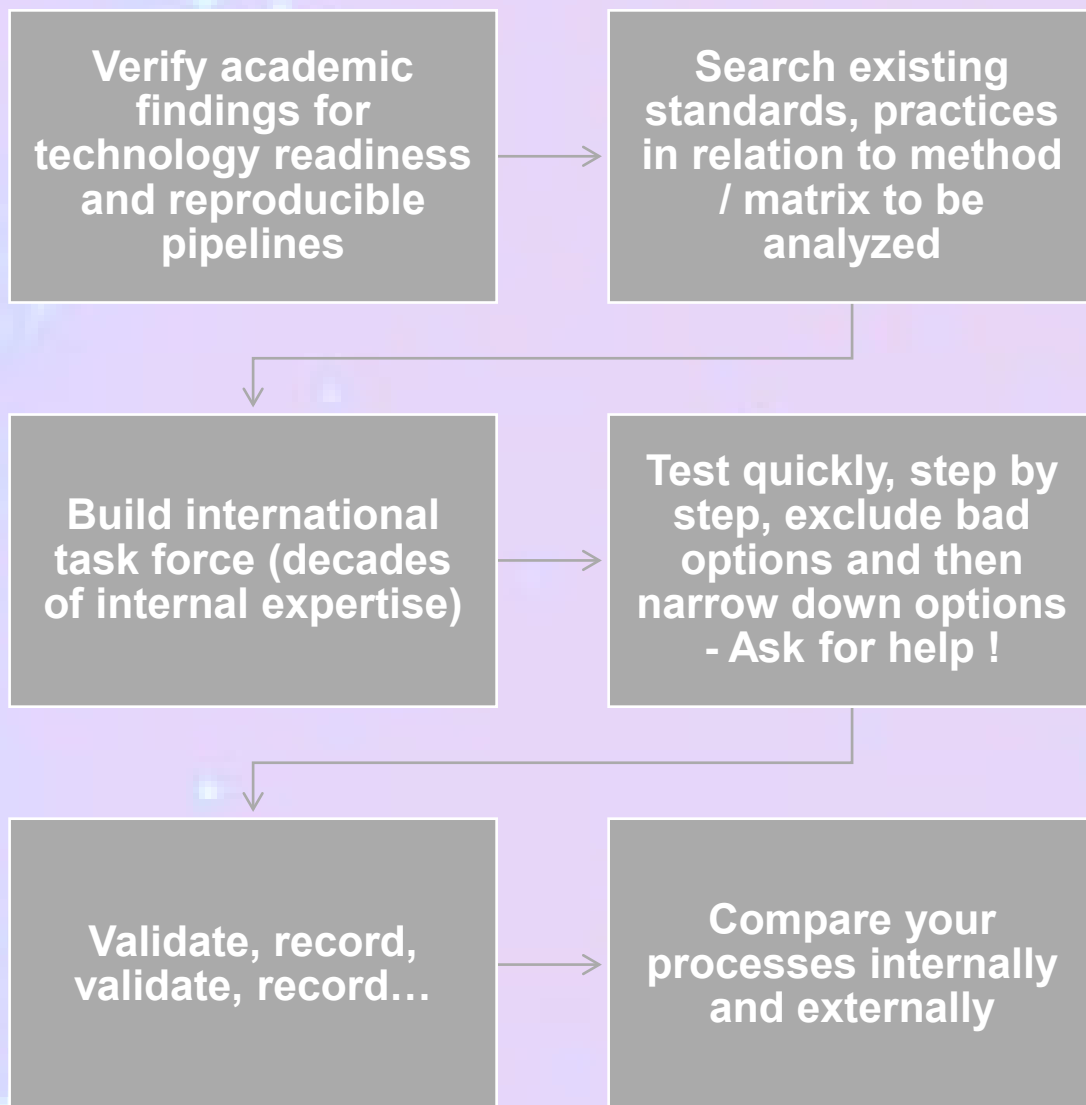
- Conundrum: Limited requests, high investments and therefore questions on ROI

But new requests in Asia

- Urgency to implement monitoring programs within months
- Sampling and analysis of micro- to mega-liter
- >1,000 of samples
- Multiple matrices (water, sand, sediment, compost, biota)
- Multiple actors and stakeholders (shipping, aquaculture, governments, NGOs)



Focus on project management. Pick what is valuable from existing research



- Combination of technologies (μ FTIR, FTIR-ATR + siMPle)
- Best practices (GESAMP, NOAA), sample process and extractions
- Group discussion at every steps of development, joint decisions
- Challenges: Sampling uncertainty, Extractions, Digestions/oxidation, “The blind baking experience”
- Focus on largest sources of uncertainty (sampling, sample recovery rates)
- Intra and interlaboratory studies



**SINGAPORE LABORATORY
ACCREDITATION SCHEME**



Schedule

SGS Testing & Control Services Singapore Pte Ltd
30 Boon Lay Way
#03-01
Singapore 609957

Certificate No. : LA-1999-0164-F
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FIELD OF TESTING : Environmental Testing

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MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT
	8. Determination of Carbon Monoxide (CO) from Stationary Sources (Instrument Analyzer)	USEPA Method 10: 2017
L Microplastics	1. Sampling for Microplastics Analysis	In house method PR(SG)-[I&E]-[EHS]-MIC-001 Rev01 : 2022
<ul style="list-style-type: none">WaterSand	2. Analysis of Microplastics	In house method PR-(SG)-[I&E]-

**ISO 17025 – Achievement – Quality
But most of all: Requirements !**



Questions?