

SHAPING THE EHS FUTURE

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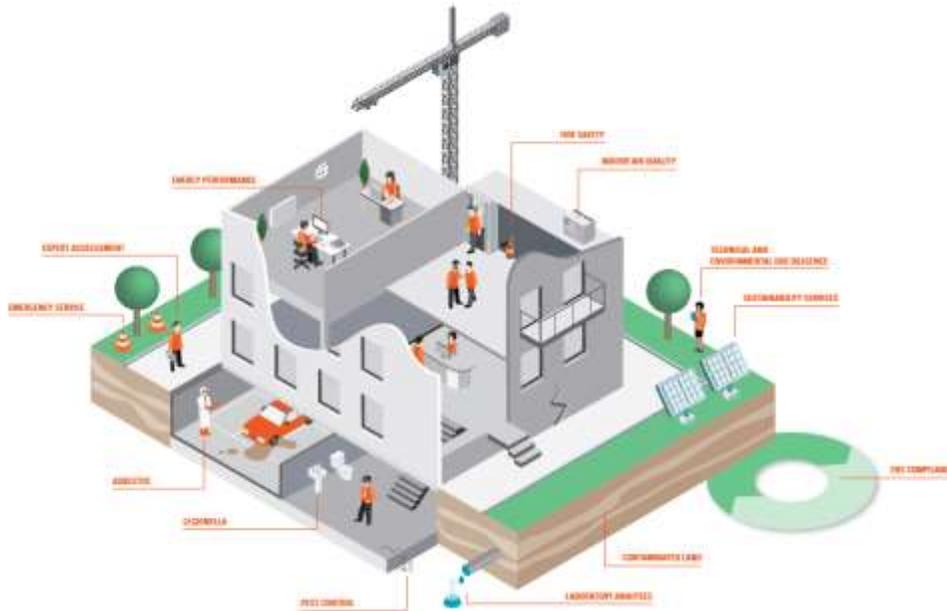
Investor Days, 25-26 October 2017

WHEN YOU NEED TO BE SURE

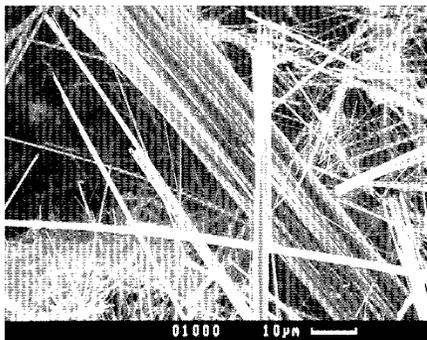




BRINGING EHS FROM THE WORKPLACE INTO THE HOME

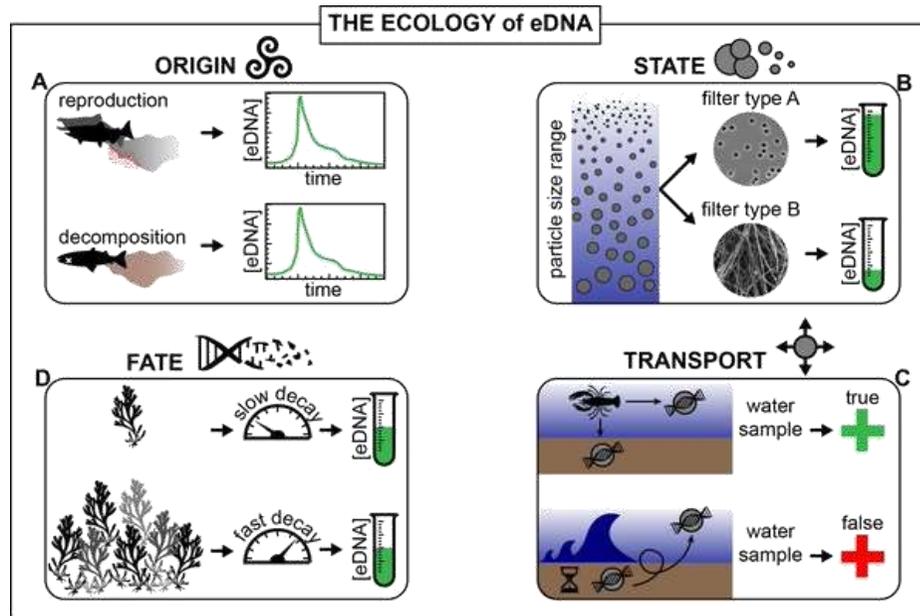


- Traditionally the business has been B2B – industrial, government & consultants
- Public awareness and health issues are driving new opportunities
 - Air Pollution
 - Water supply – lead, PFOS, bacteria
 - Management of waste e.g. E-waste
 - Indoor air quality – volatiles, asbestos, bacteria
- EHS is already in the home
 - 100,000 asbestos tests per year on home materials in Switzerland
 - 300,000 legionella samples from hot water supply in German homes per year
 - 37,500 pool and spa water samples in Poland for 2017

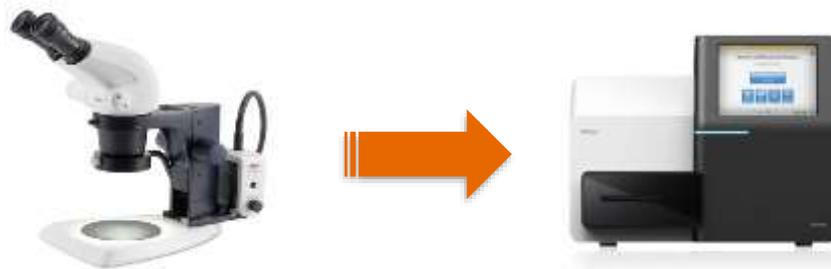


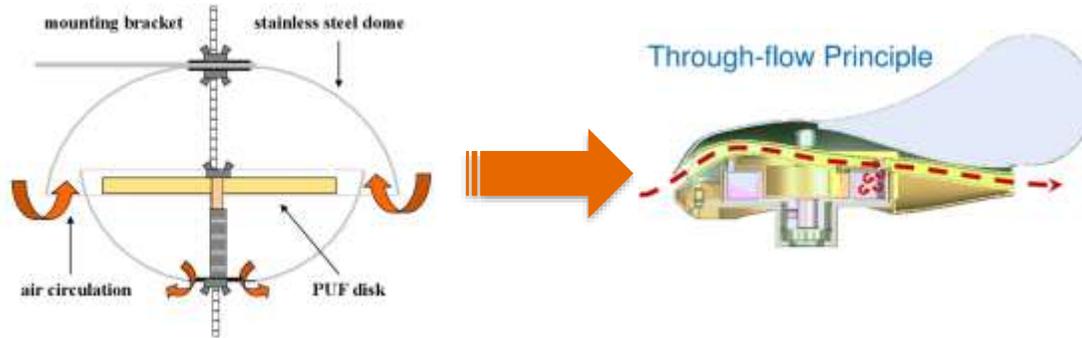


- We aim to do more in the B2C space
 - Launch of the formaldehyde kit in China
 - Atmospheric Particulate matter PM2.5
 - Home water kits
 - Volatile organic compounds – home and small business
- Resources on hand
 - China pilots (market size)
 - SGS Galson
 - Global IH footprint
 - Home capability built on industrial experience
- 2018 will see us launch
 - B2C portal with education & training of non professional buyer
 - 24/7 live video chat (already implemented in the USA)



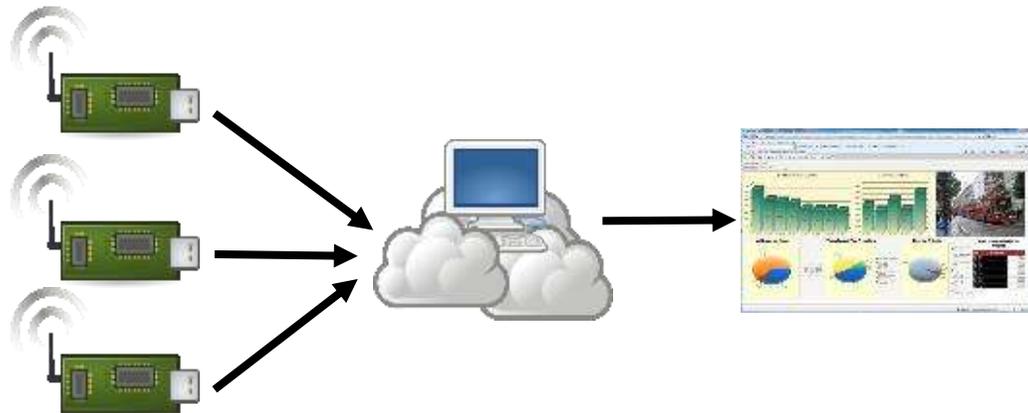
- Many Environmental Impact Assessments require the study of biodiversity
 - Does the activity have, or has had, an impact on ecosystems
 - Identify rare or endangered species
 - Set the baseline
- Currently based on morphological identification either visual or microscopic technique
 - Slow process
 - Some uncertainty
 - Subjective
- SGS first to offer eDNA (Environmental DNA) services
 - Establishing biodiversity through DNA profiling of reproductive material, waste and decomposition
 - Reduces uncertainty and subjectivity through DNA sequencing
 - Safer sampling protocols
 - Develop the use of biosensors using Artificial Intelligence





- US refineries and Chemical plants need to comply to EPA Method 325
- Method requires continuous monitoring of volatiles by means of passive samplers
- Traditionally methods are impacted by weather and wind direction
- With its partner SGS developed the Shark - a directional, multi dimensional, passive air sampler
- Delivering greater accuracy
- Allows triangulation to identify “hot spots” – required in chemical hubs
- Deployed in the USA with global roll out in 2018





- Majority of regulatory compliance is based on laboratory analysis – Environment and IH
- Remote sensor technology has been under development for a number of years having issues with:
 - Acceptance by regulators
 - Accuracy & Sensitivity
 - Durability & Size
 - Connectivity in remote locations
 - Calibration issues
- Demand for real time continuous monitoring in:
 - Indoor air quality (IAQ)
 - Ambient air & Fence Line assessments
 - Industrial Hygiene – personal protection
- SGS EHS is developing sensor based solutions:
 - Wide range of parameters
 - Variety of communication (Wi-Fi, 4G, Sat)
 - Diverse power (solar, battery, RF)
 - Full package selection, placement, calibration and data management



- Mid 2017 we launched of a new Real Estate Initiative, targeting new international customer groups:
 - Leader in the Netherlands through SGS Search
 - Brokers and general contractors
 - Developers
 - Investors & Banks
 - Operators
 - Facility Management companies
- Priority targets
 - Specific entry in the EU (UK, Belgian and Polish markets)
 - Global partnership program with the World Bank to assist developers gain EDGE certification (building sustainability)
- SGS is unique in this area given its geographical footprint and combined capabilities in sampling, testing and auditing services



- EHS clients are
 - Moving towards the millennial generation
 - Social community driven
 - Immune to traditional marketing and sales pitches
 - Green minded
 - “You”

SGS ENGAGE

- The digital age is a “now” market connected 24/7
- SGS Engage
 - The digital bridge between the client, the field, the laboratory and the regulator
 - Engages the clients into the value chain bringing mutual efficiencies
 - Available in Web, Android & IOS formats



