

The logo for Sustainable Oil Recovery & Remediation (SORR) is centered in the image. It features the letters 'S', 'O', 'R', and 'R' in a white, sans-serif font. The letter 'O' is replaced by a teal-colored circular icon consisting of three concentric, slightly offset rings, creating a sense of depth and movement. The background of the entire slide is a photograph of an offshore oil rig under construction or maintenance, with a large crane and various structural elements visible against a blue sky with light clouds.

SORR

PRESENTER

SORR
Chief Scientist
Professor Richard Banati, FRSN



Our Evolution...

2019 SOR is created

Sustainable Oil Recovery was formed under the direction of Founder Captain Marc Kuhl in collaboration with the inventor.

2022 Xtreme Tech Challenge

A non-profit organization behind the world's biggest startup competition for which SOR was a global finalist.

2020 Sucoil® Sponge

Our revolutionary sponge was branded and trademarked as the Sucoil® Sponge and Provisional Patent: 2020901778 application filed for Australia.

2022 Stormwater Solution Trial

Federal government grant awarded to SOR's Stormwater Solution & trial implemented with Central Coast Council For 3 months at Tuggerah Lakes, NSW. Proving successful results, the solution has been rolled out to multiple Central Coast Council sites.

2021 Climate Launch Pad

The world's largest green business ideas competition, SOR was an Australian national finalist.

2023/24 SORR created, partnership with Superlon & Deep Supplies

To meet critical demand, Sustainable Oil Recovery & Remediation entered into a joint venture partnership to develop sophisticated supply at volume of solutions and end of life for 100% environmental sustainability and zero landfill.



Collaborating with



A Global Problem



“What works is not scalable,
what is scalable is not sustainable.”

Marine Scientist in the Industry

Collaborating with



What is SORR

SORR is a stand alone solution , deliverable at scale and in combination with other remediation approaches, SORR provides partial and turnkey solutions for:

- Stormwater Solutions
- Marina Solutions
- Civil Works
- Mining Solutions
- Oceanic Solutions/Oil Spills
- Environmental Impact Data Collection



SORR

Collaborating with



SORR Technology



...captures over 1000 times its own weight during its life.



Fast uptake of oil with high capacity without sinking

(When used as intended)



Uniquely reusable many times

(Small material footprint)



Dual use option

(Immediate remediation and retrospective pollutant detection)



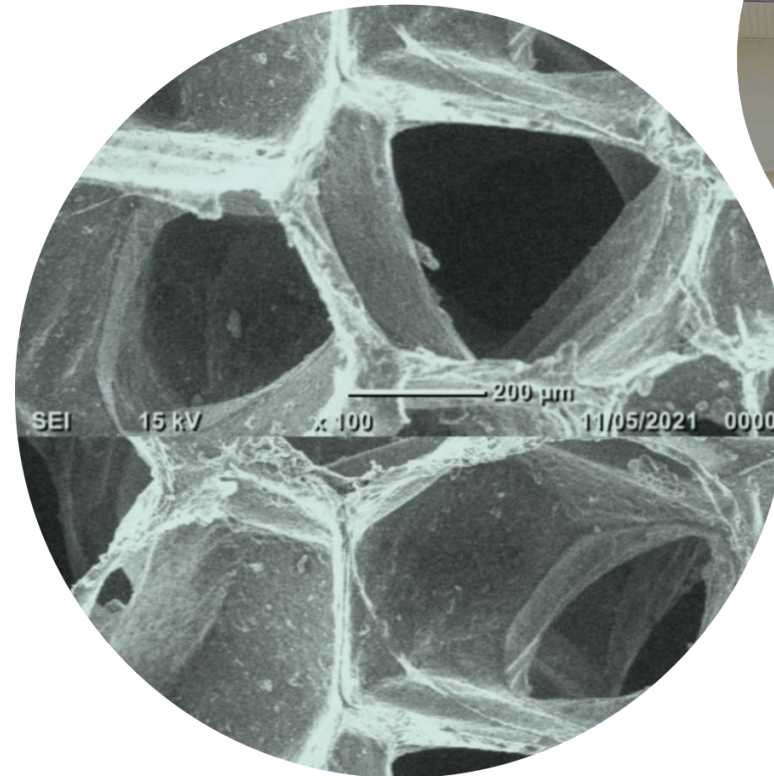
Highly adaptable to different use scenarios

(Enclosed granulate, fragments, self-supporting mats, etc)



Sophisticated supply at volume

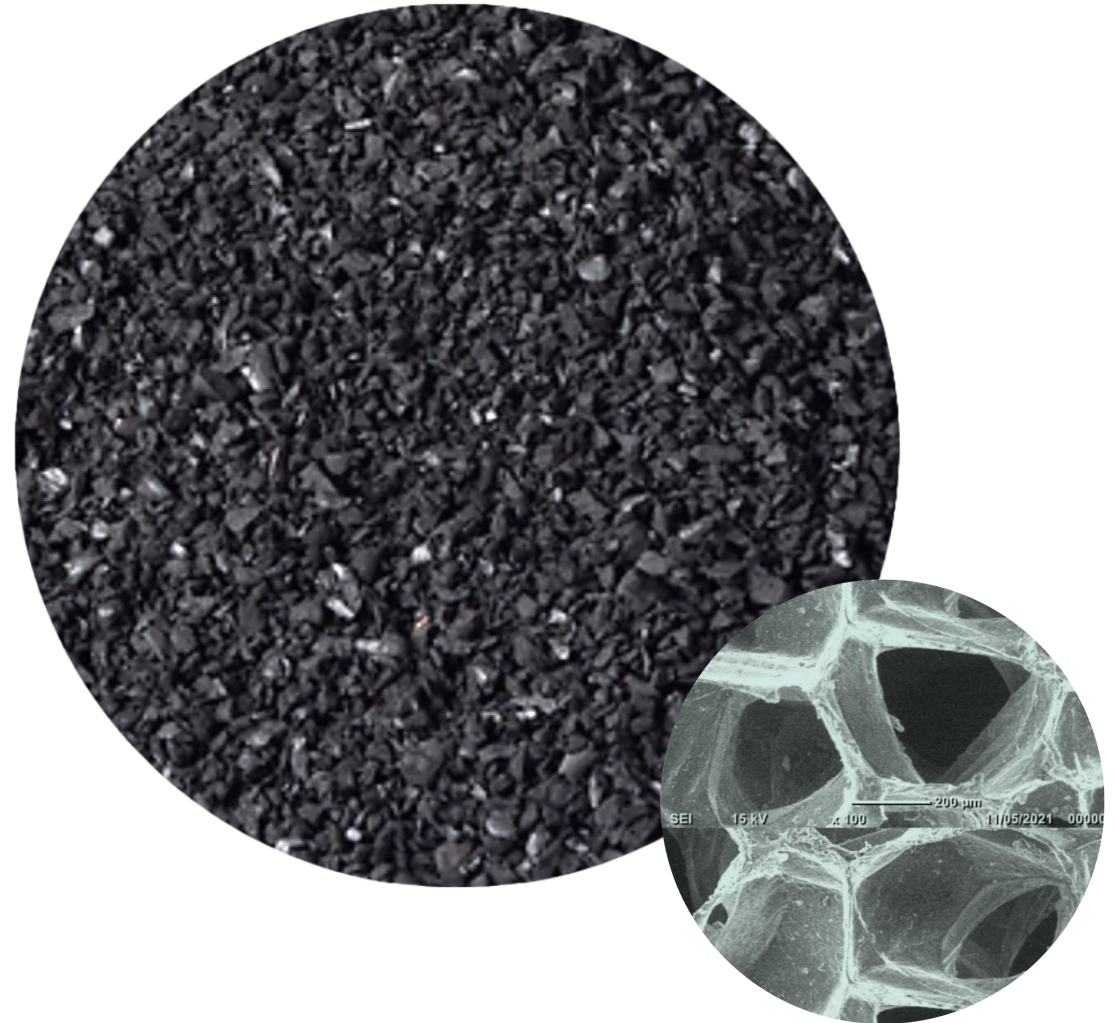
Oil & gas solutions and end of life for 100% environmental sustainability and zero landfill



The “Sponge”...

To enhance the clarity in conveying the specifics of the SORR sponge and its comparative evaluation against activated carbon, we must consider the following distinguishing features of the sponge:

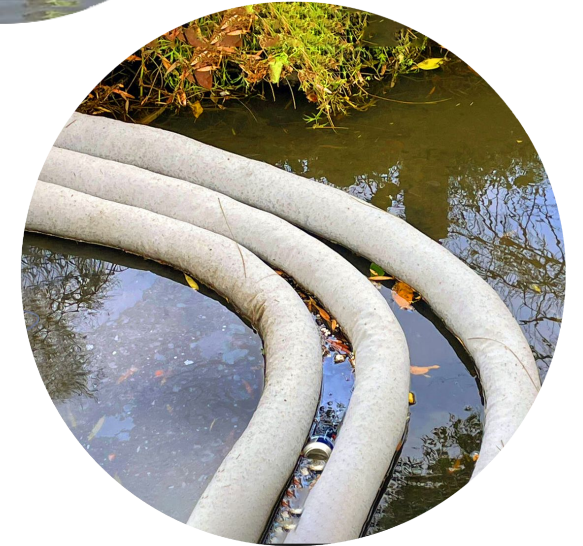
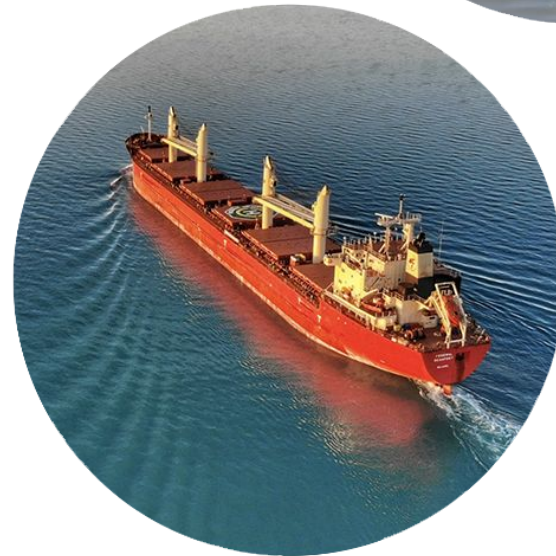
1. Self-supporting Structure
2. Mechanical Robustness and Reusability
3. Heat Resistance
4. Adaptability in Shape and Granule Size
5. On-Site Custom Fabrication
6. High Internal Surface Area
7. Composite Usability
8. Strong Capillary Action and Long-Term Deployment



The “Sponge”...

In summary, the sponge's strength lies in its adaptability in delivery forms, ranging from large buoyant blocks or sheets of several meters to smaller granules in the range of centimeters or millimeters. It can be deployed within containment fabrics or structures, or directly into pre-existing cavities, such as storage tanks, or contaminated spaces, as often encountered in salvage operations on ships.

The sponge's versatile deployment options make it a valuable tool for a wide array of environmental applications.

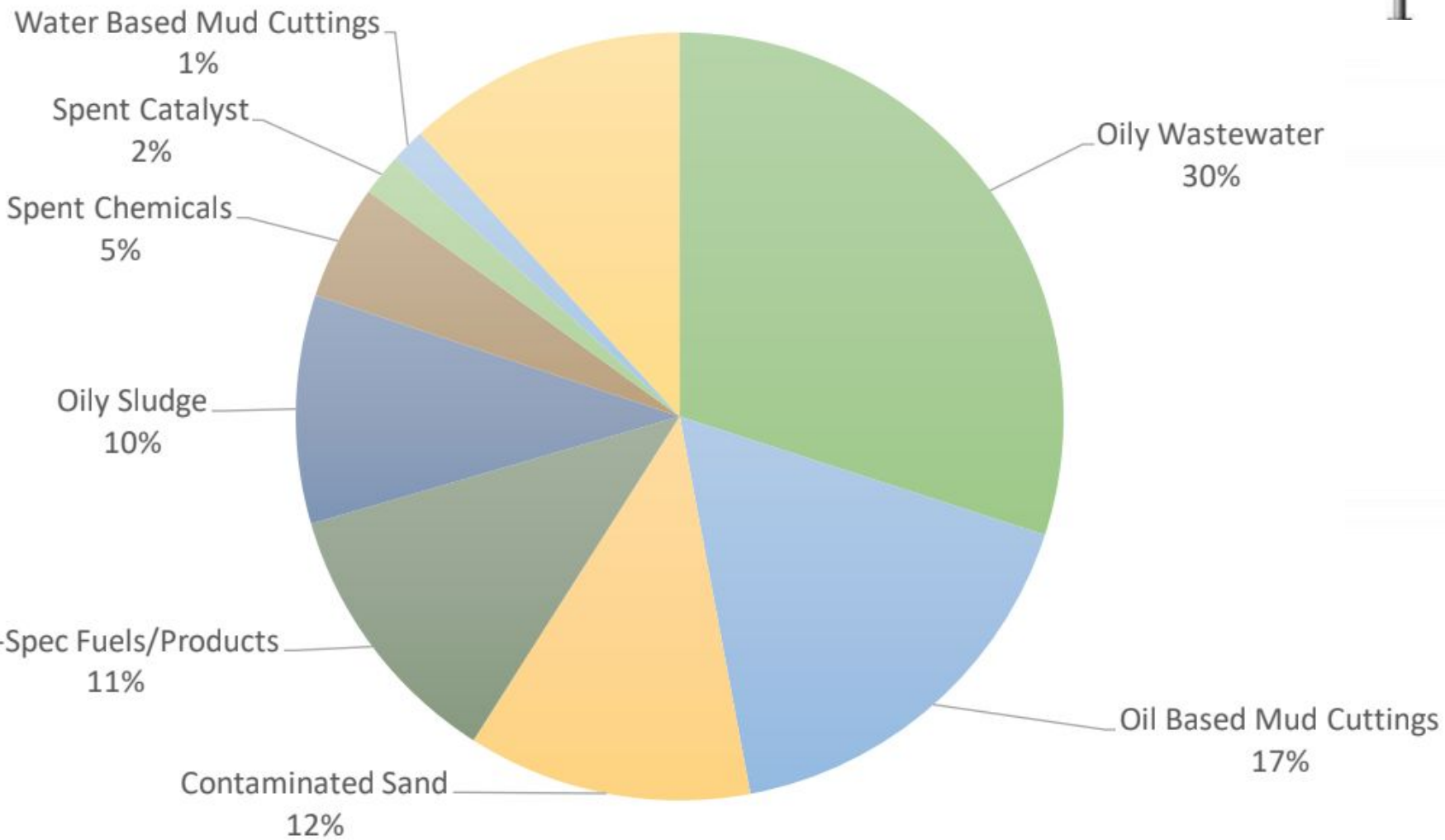




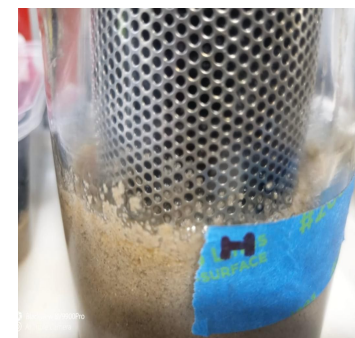
جامعة الملك عبد الله
للعلوم والتقنية
King Abdullah University of
Science and Technology

Advanced Membranes and Porous Materials

SORR



API TYPE OIL-WATER SEPARATOR

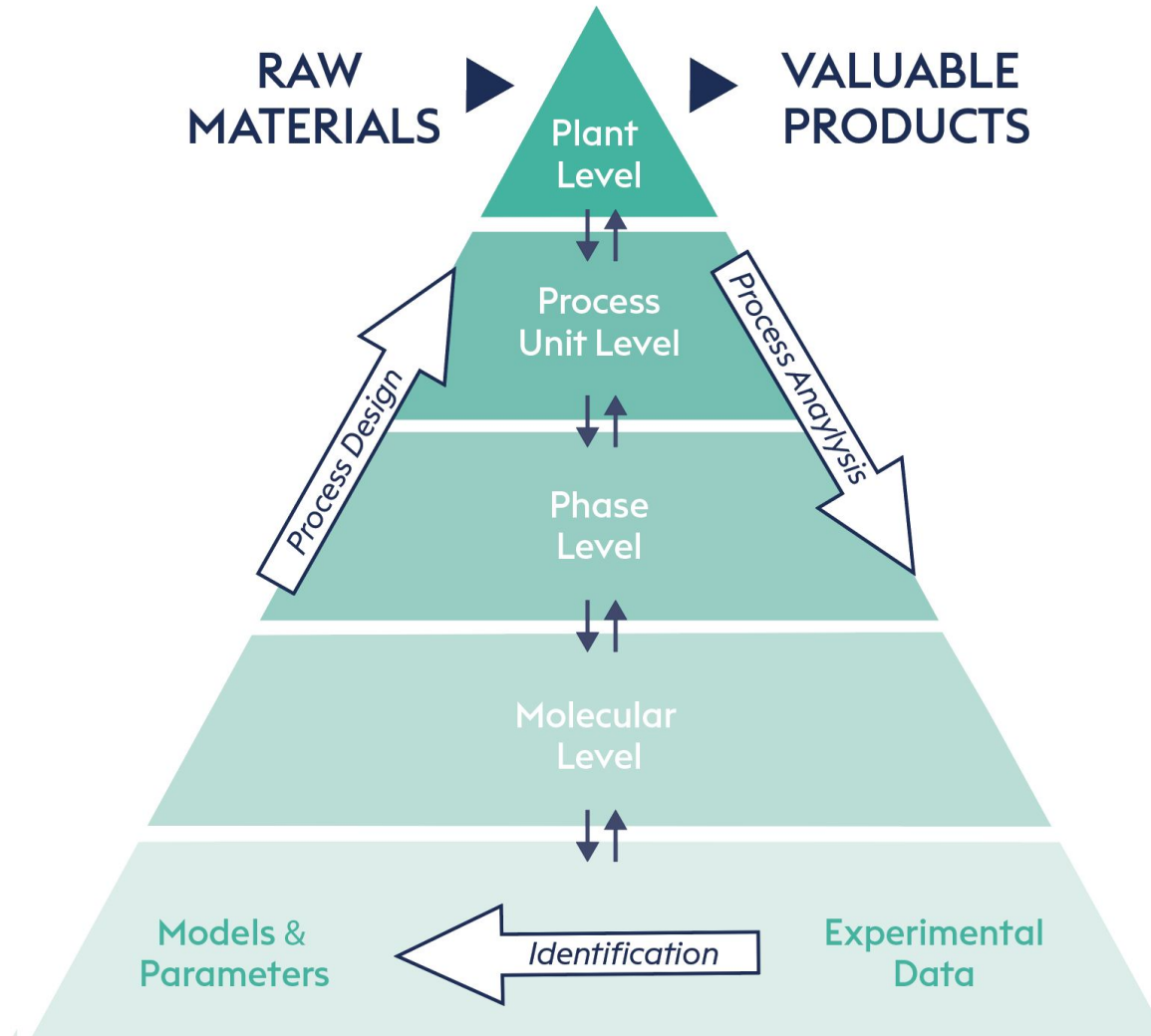


International Petroleum Industry Environmental Conservation Association

large spill			Tier 3
medium spill		Tier 2	
small spill	Tier 1		
	local	regional	remote
	proximity to operations		



SORR Streamlined Prioritisation

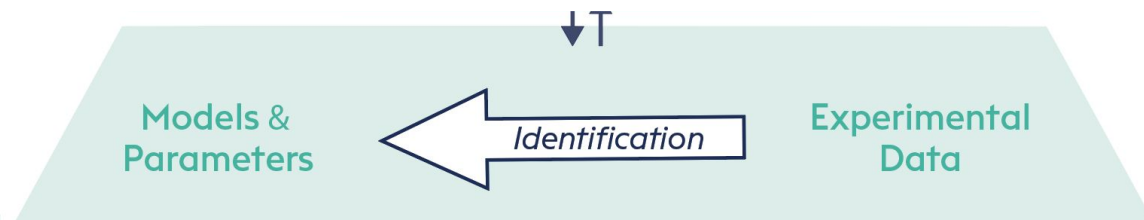


SORR Streamlined Process

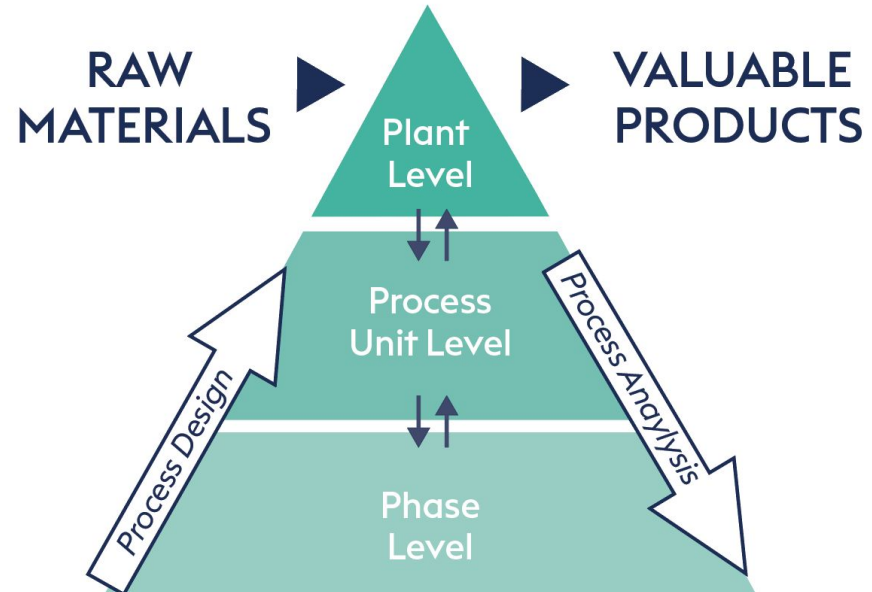
RAW
MATERIALS



VALUABLE
PRODUCTS

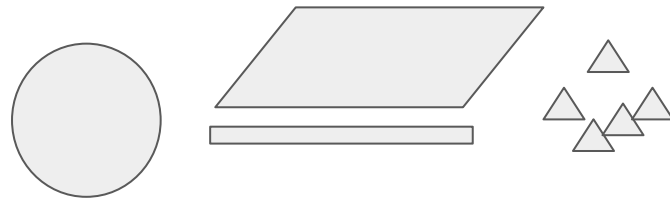


SORR Streamlined Prioritisation

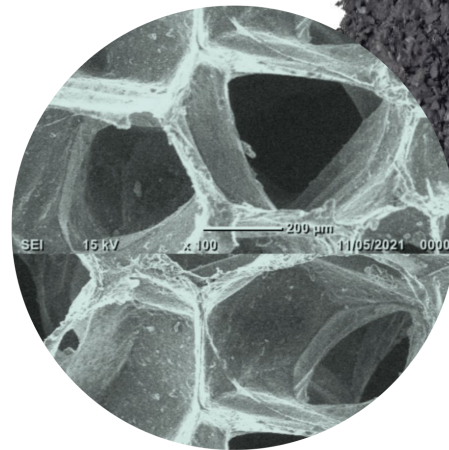


Cost Conscious Solutions/Scalability

SORR's solutions are scalable across all tiers (1-3) clean up and containment incidents with minimal impact on sustainability or performance.



large spill			Tier 3
medium spill		Tier 2	
small spill	Tier 1		
	local	regional	remote
	proximity to operations		

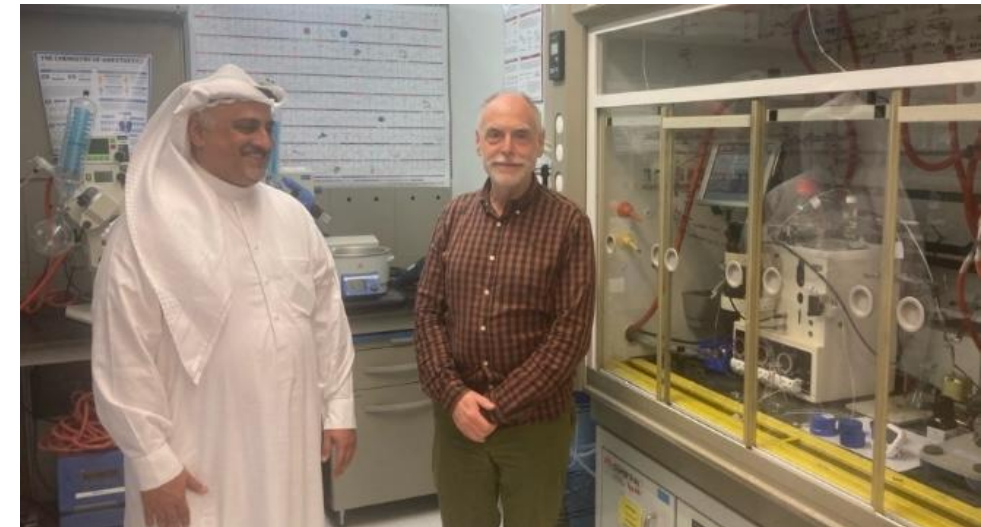
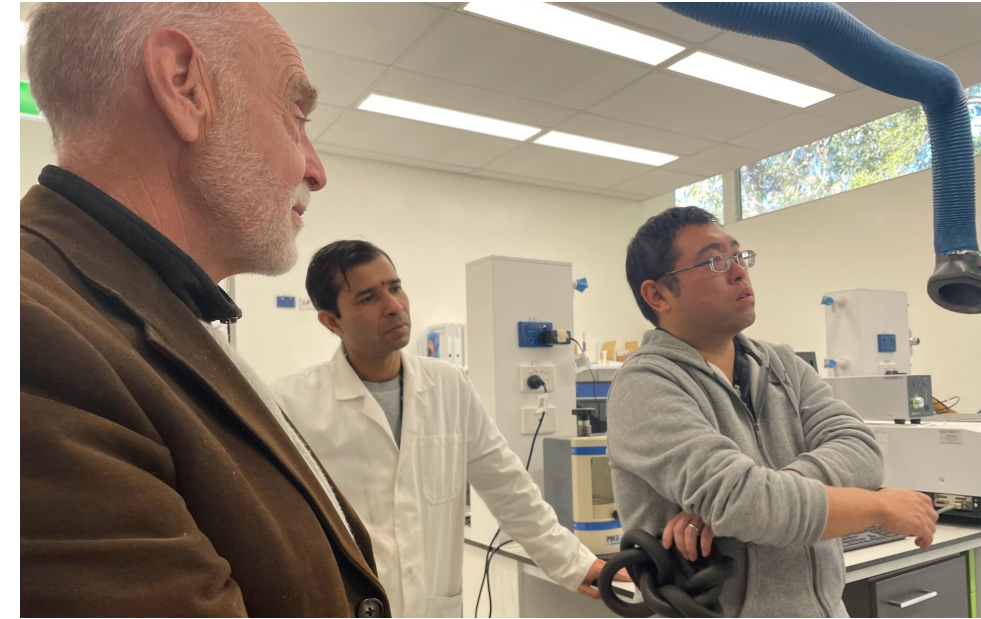


1000kg -> 1 MILLION LITRES OF OIL CAPTURED
current capacity ~16T/m, incl delivery to site

SORR Process Engineered

SORR materials & process have inherent capabilities that allow industry-lead custom modification at scale.

We work closely with business partners to prove the *PROCESS ENGINEERING METHODOLOGY* to deploy the solutions to optimise effectiveness.

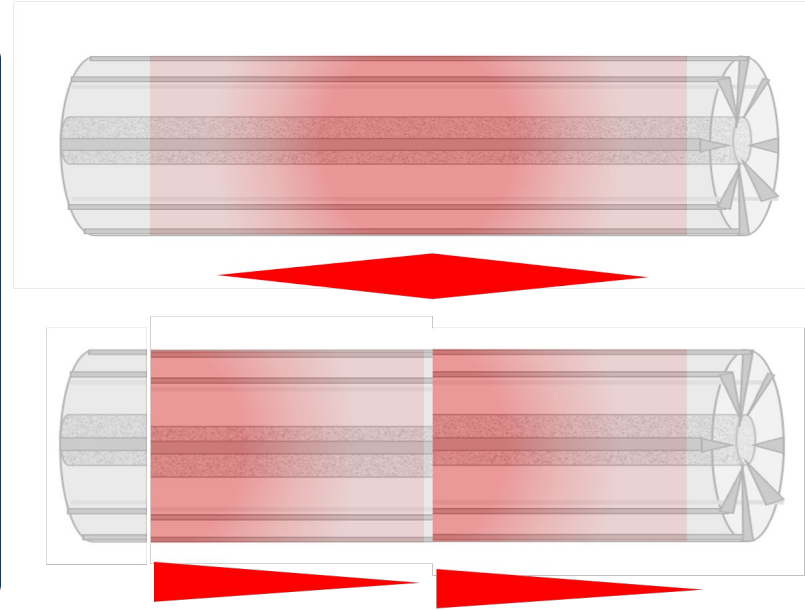
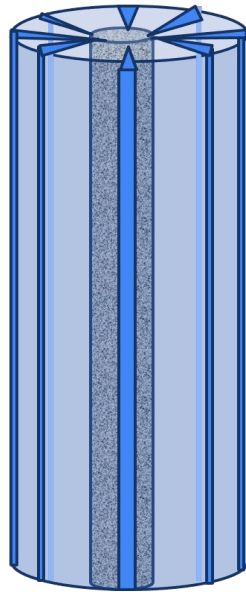
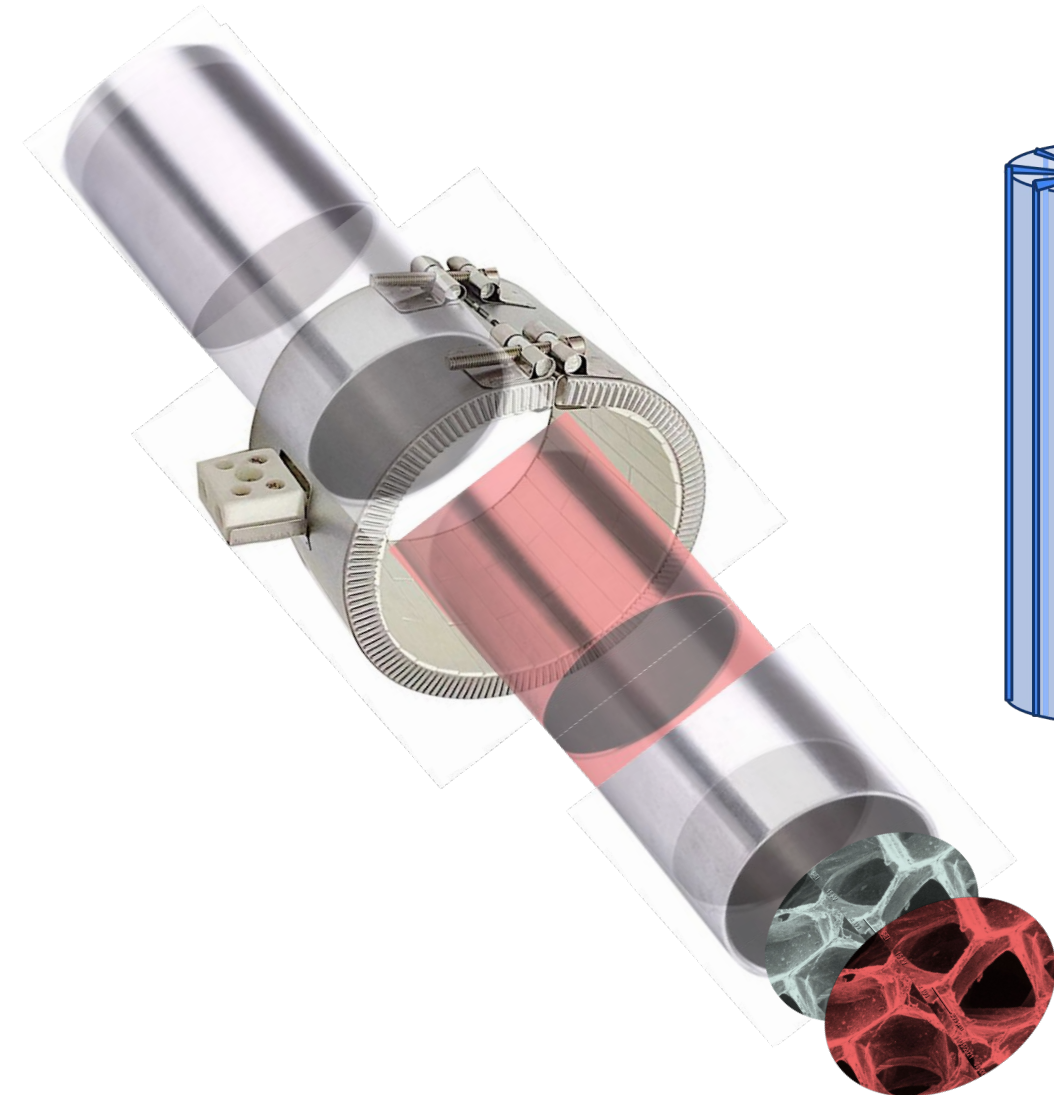


8 March 2024 - Saudi Arabia



https://www.washingtonpost.com/national/2024/03/02/red-sea-environment-car-go-ship-sinking-houthis/1c91e87a-d8d0-11ee-82ad-c2391b06a8f5_story.html

SORR P.A.G.E Proprietary Filtration



- Filtration
- Separation
- Retention

The Sponge End Of Life Products



Captures hydrocarbons, heavy metals & PFAS



Collects data using AI for scientific analysis, tracking & identification of pollution source



Carbon Black



Hydrogen & Low Emission Fuels



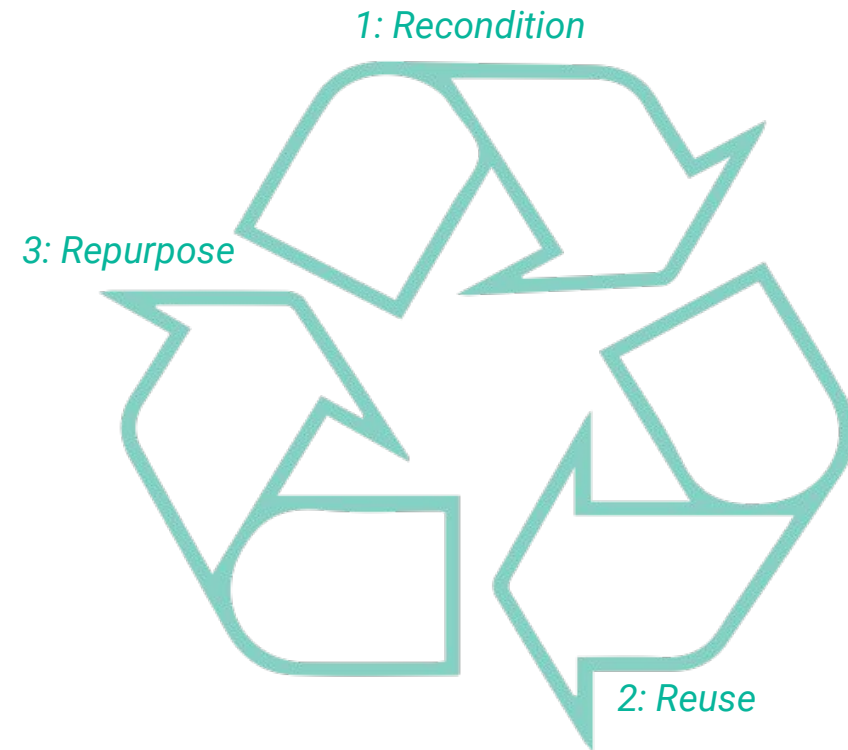
Sponge uncompressed ready for use



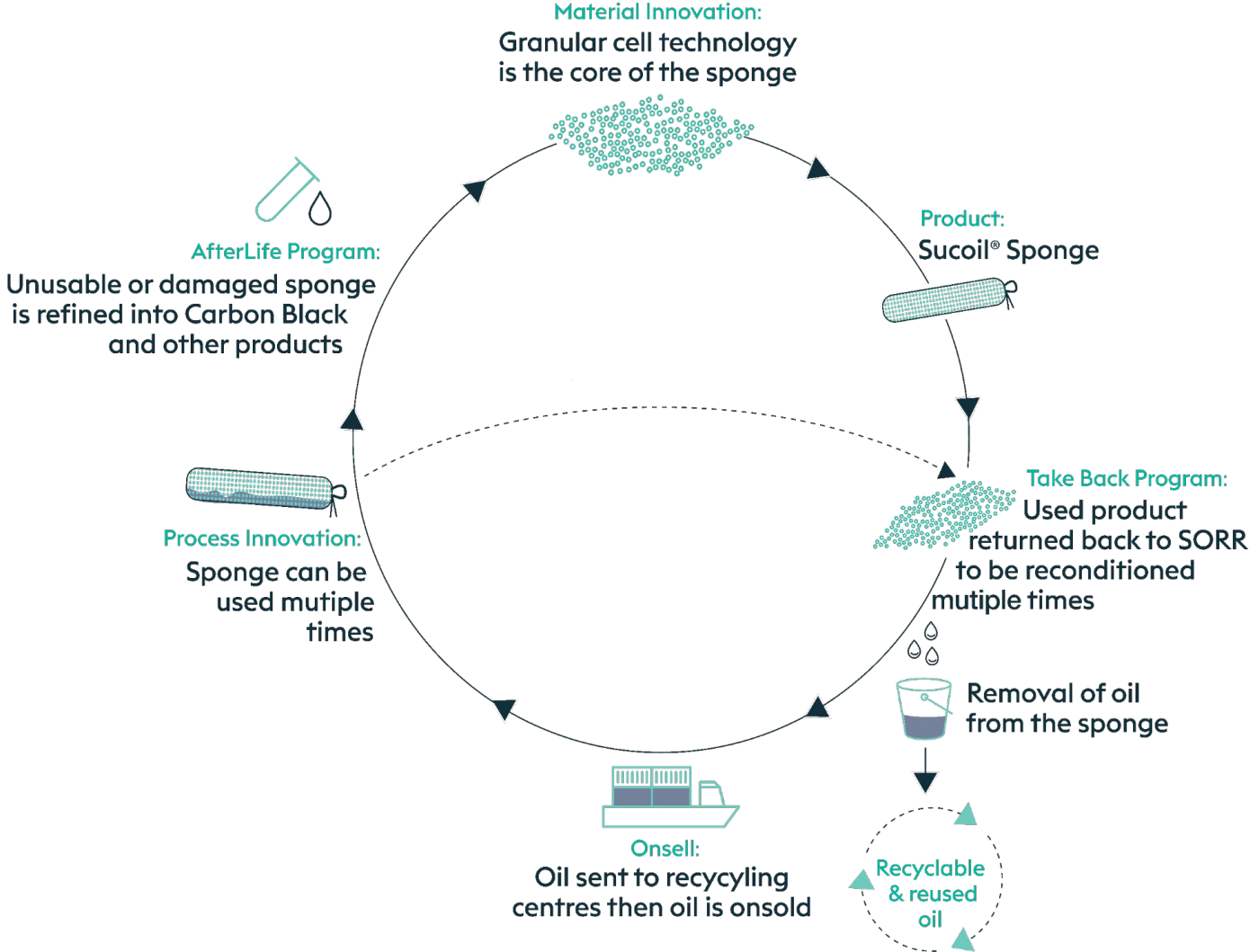
Sponge oil expressed and recovered oil



Sponge compressed to its minimal volume



CODA - 100% Environmentally Sustainability

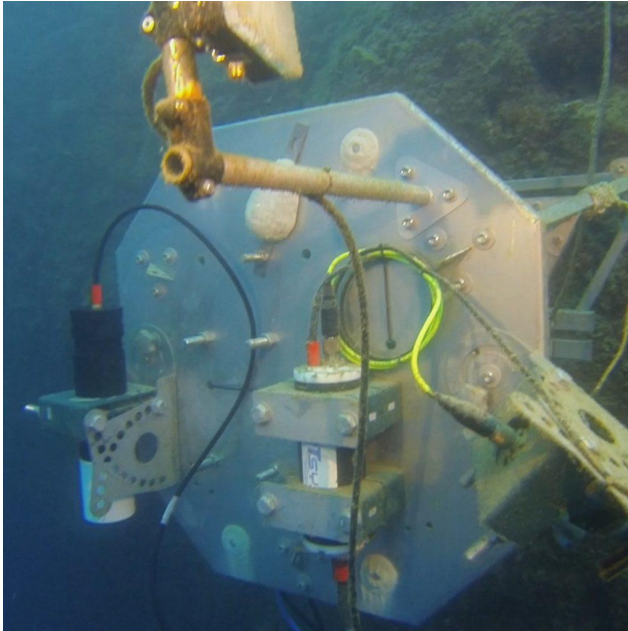


Environmental Sustainability

SORR is fully aligned with the UN Sustainable Development Goals (SDGs), focusing particularly on Goals 3/6/9/11/12/14.

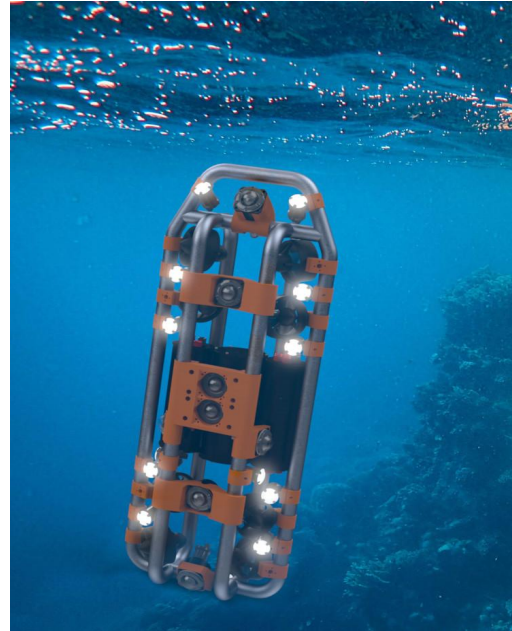
Partnerships with Industry Suppliers

Sysense



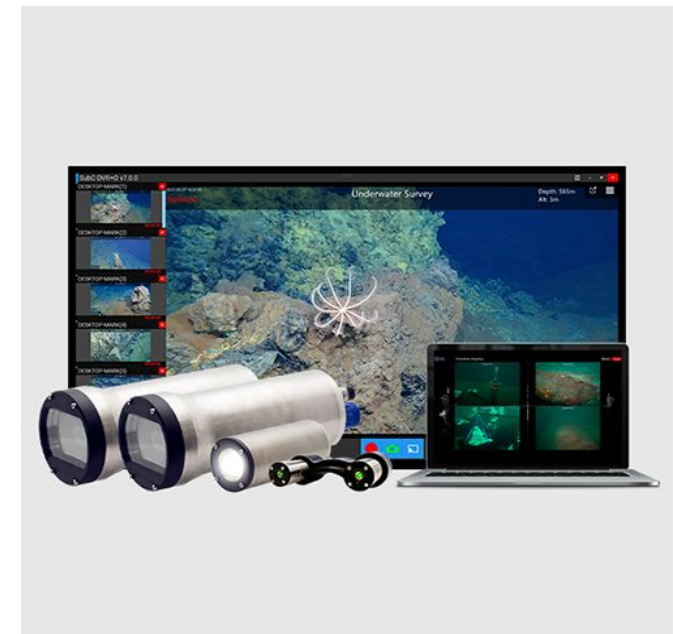
Real time monitoring of underwater noise, salinity, turbidity and other water quality parameters indicates any impact that works have on local wildlife.

Sentinus



Various self-operating and remotely operated underwater systems for monitoring, subsea 3D modelling, preventative and predictive maintenance.

Imaging 4k Survey



Time-lapsed recording or live subsea streaming in 4K & HD. Video Survey system with Digital Video Recorder and Overlay (DVR+O), 6000m Rated.

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