

# R&D strategy 2022-2027

- **Blu economy and sustainability**
- **Underwater innovative solutions**
- **Pioneering system sensors for subsea monitoring**

**It's Full Electric!**

**eLARS™**  
**all-electric**  
**Launch & Recovery**  
**systems**



*The all-electric eLARS™* ● ● ● ● ● ● ● ●

- Low cost of ownership
- Zero pressurised oil over water
- Built-in actuation system redundancy
- Emergency recovery mode
- Automated operations
- Self-diagnostic control system

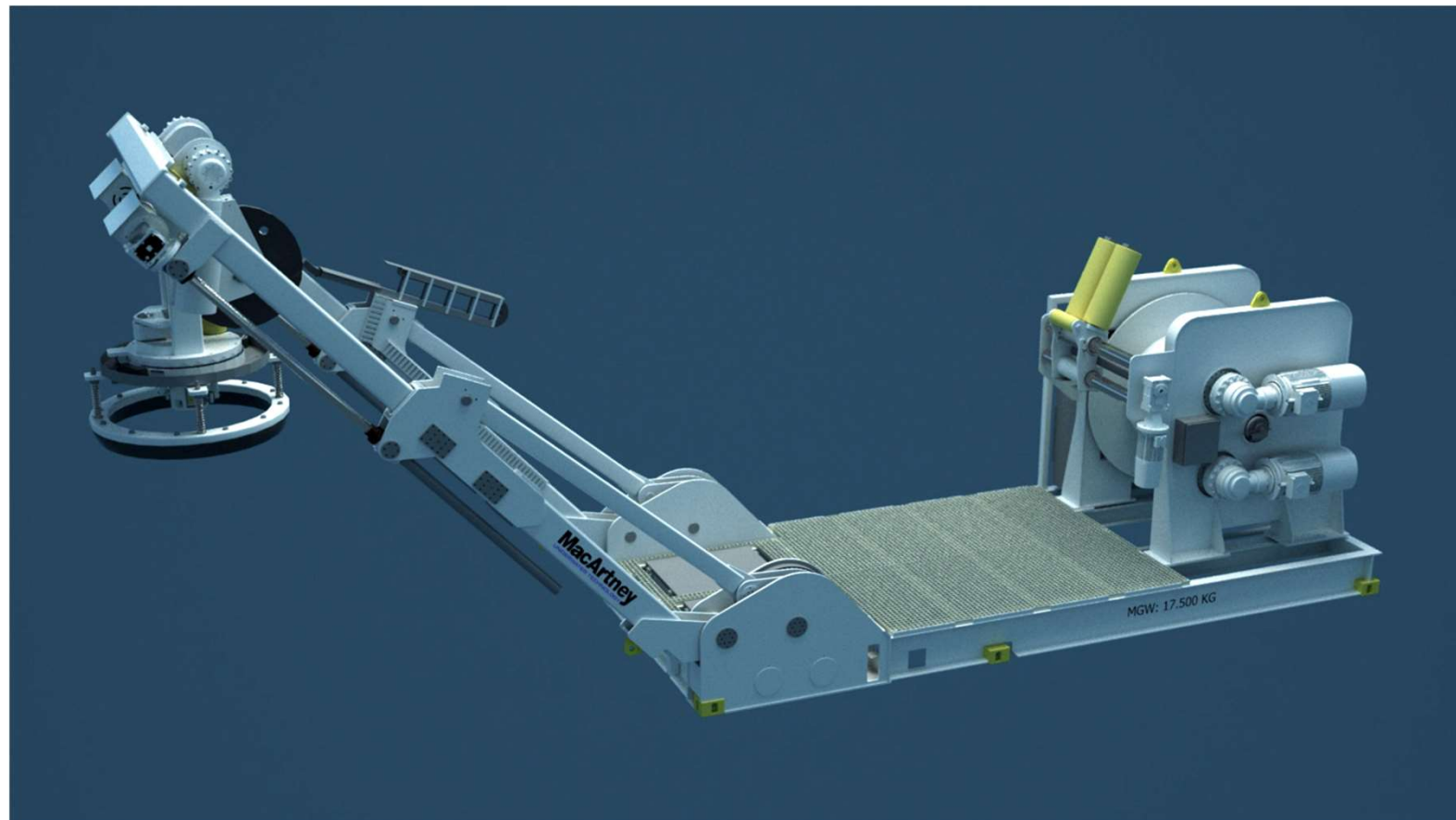
## The all-electric eLARS™ series eA-frame

.....  
from  
hydraulic  
to  
all-electric  
.....



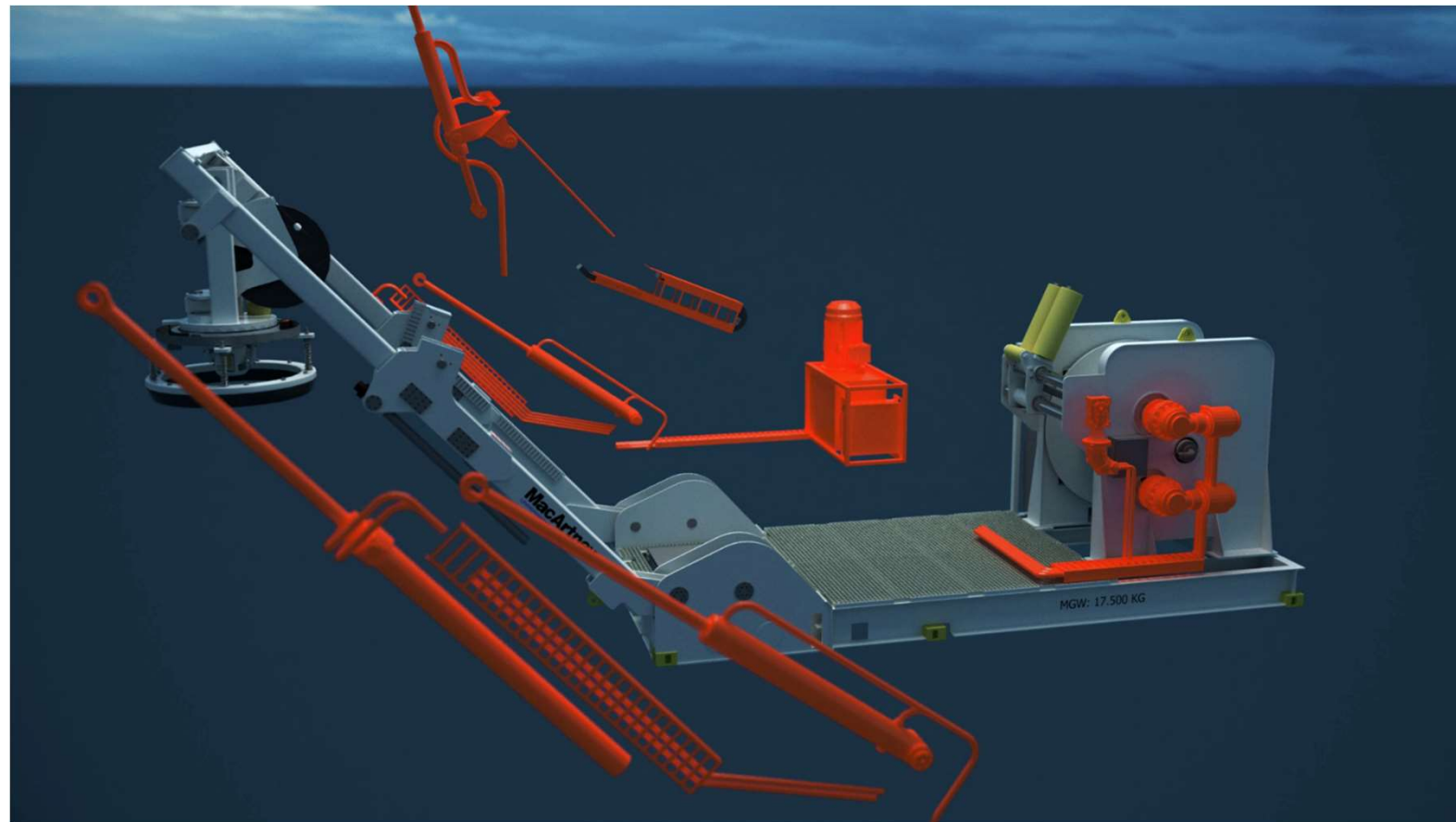
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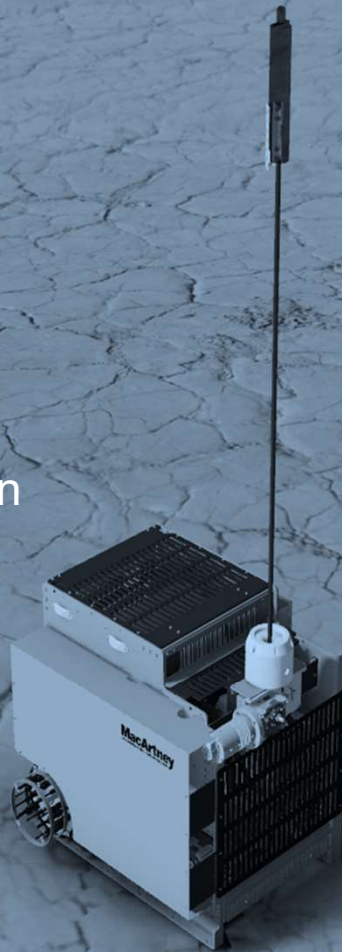
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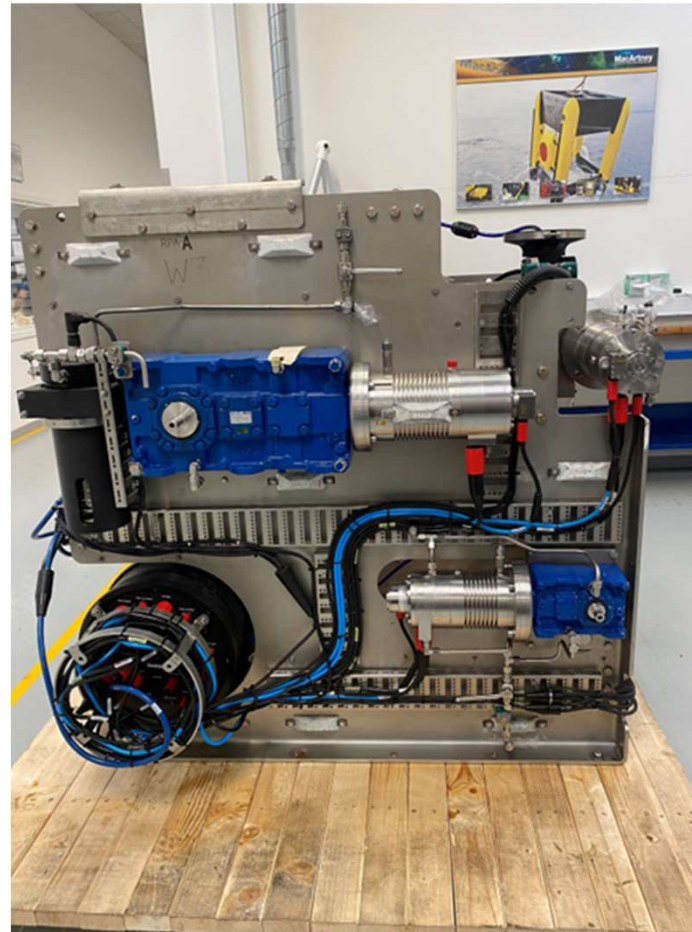
- Length: 1490 mm
- Height: 1451 mm
- Depth: 1511 mm
- Weight: Approx: 1200 kg
- Cable length (Ø 16 mm) : 475 m
- Power: 560 VDC
- Pull (Bottom layer): 1,9 kN
- Speed (Bottom layer): 0 – 16 m/min
- Working depth: 750 m
- Surface tracking with pinch wheel

**Subsea winches for  
autonomous operations.**

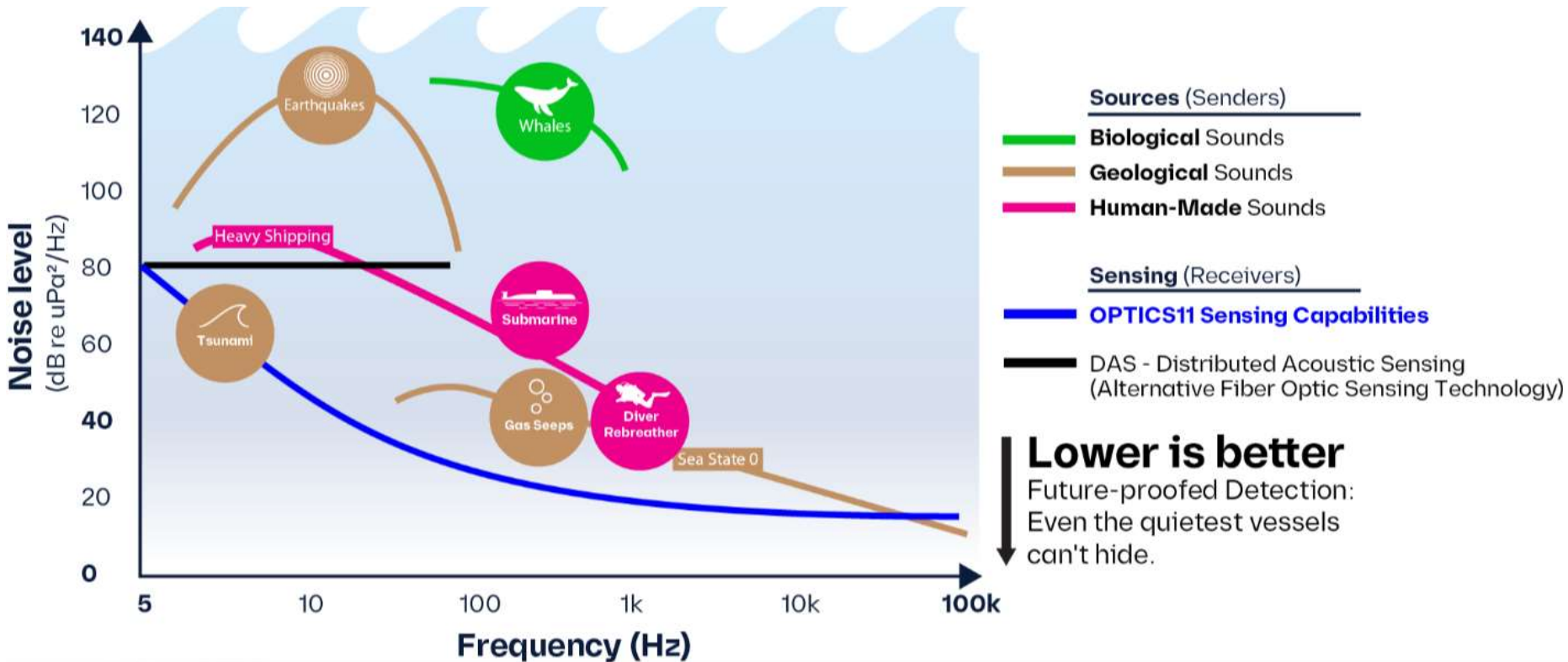


## Subsea winch:

- Cable or Battery powered
- Double redundancy for critical components
- Intelligent control system

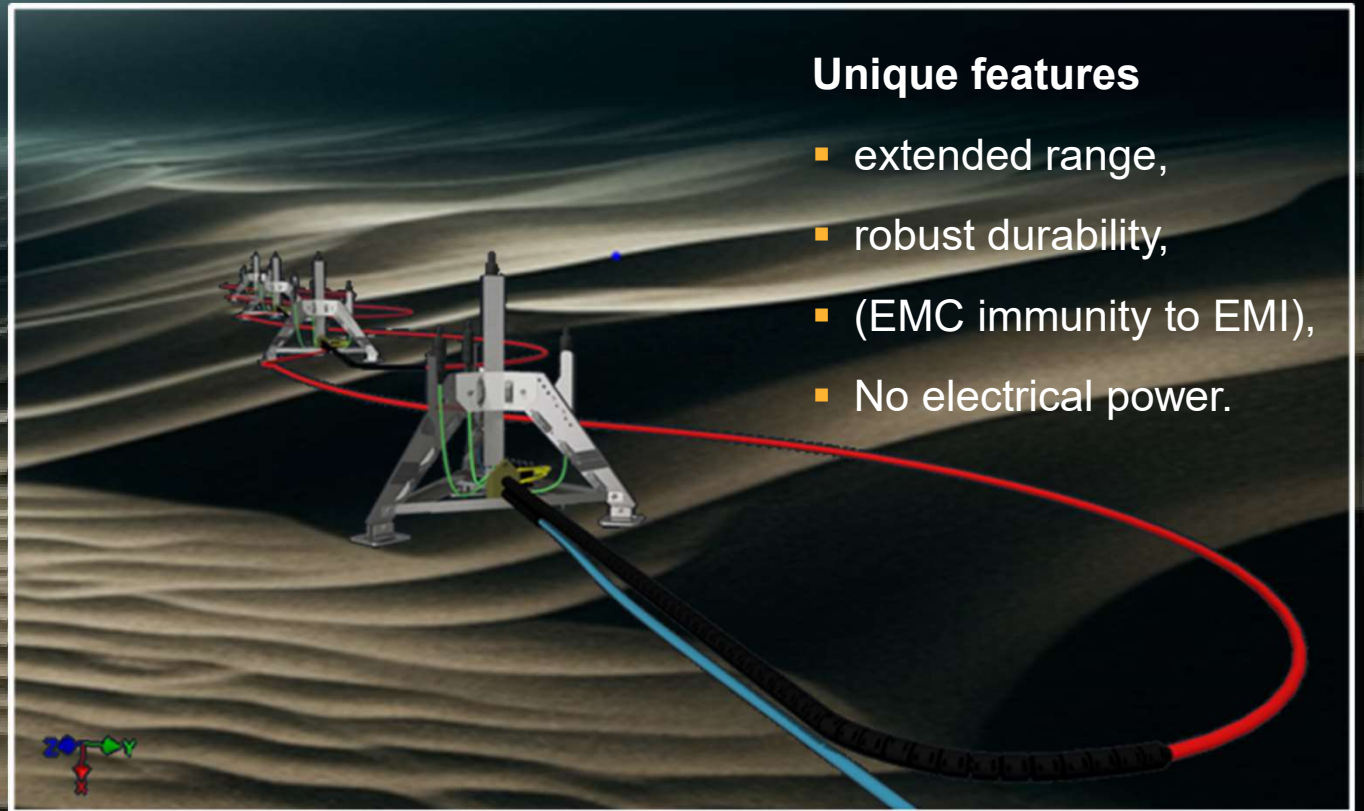
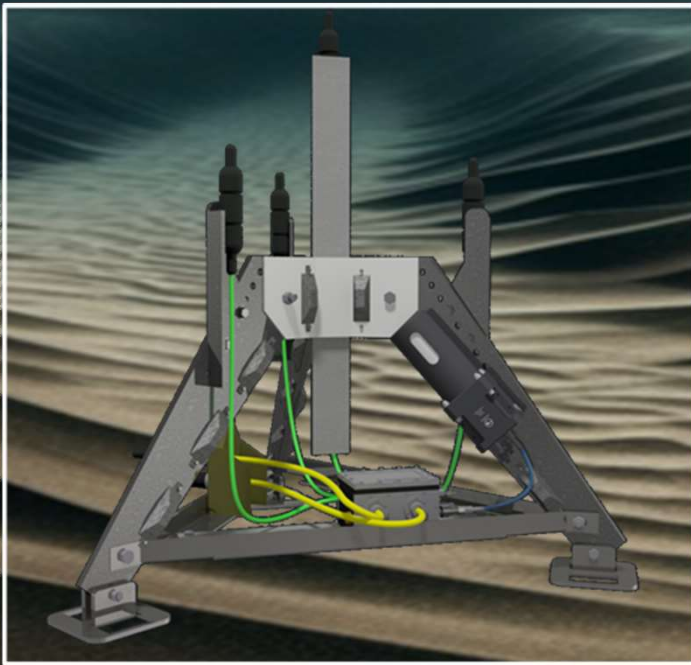


# MacArtney and Optics 11 developed a highly scalable hardware and software system for environmental noise detection and measurement in subsea domain





## Fiber Optics pioneering system for subsea monitoring



### Unique features

- extended range,
- robust durability,
- (EMC immunity to EMI),
- No electrical power.



## How could EMSO help you tackle your challenges?

- MacArtney is a manufacturer company and looks at EMSO as a service provider for products test and certification in challenging environment.

## Do you need new types of Services from EMSO?

- MacArtney is looking forward to specific aging test for our materials used in the subsea connectivity used for long standing on the seabed or in the water column.



An underwater photograph showing sunlight filtering through the surface of the water, creating a bright, shimmering effect. The water is a deep blue color, and the light rays are visible as they penetrate the depths.

# MacArtney

*Connecting oceans of knowledge*