

### Seabed Survey for Coastal Resilience & Ocean Science

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### The world is changing faster than ever before...





Population growth

2.0B

Additional people between now and 2050

2



Urbanisation

2.5B

People move to cities between now and 2050



Technology

**80B** 

Additional connected devices between now and 2050



**Climate change** 

1.5-2.0°C

Predicted maximum temperature rise by 2050



**Engaged society** 

92%

Population expect ESG-inclusive company behaviour

The time is now to improve our understanding of the world's oceans

TUGRO





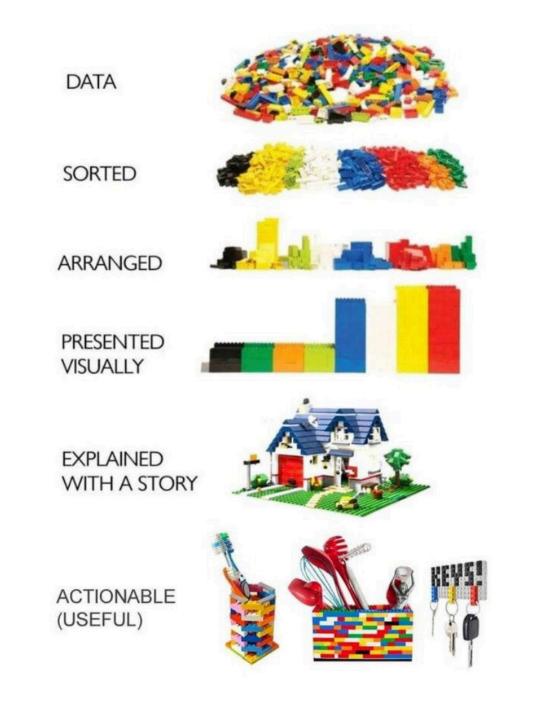
# Why is Geo-data important?

- Facts and statistics
- Measurable and responsible
- Improve decision making



### Unlocking insights from geo-data

Simplifying the complex





-fugro

### Why does this matter?





~75% of the seabed is currently unmapped by direct observations.



### What's Fugro's role?



Understanding oceanography
Environmental protection
Navigation and safety
Scientific research

Fugro vessels have contributed **2.36 million km<sup>2</sup>** of bathymetric data to Seabed 2030, an area approximately the size of Algeria



### How we do it: leveraging existing systems

We leverage the equipment on our specialised vessels during transit opportunities

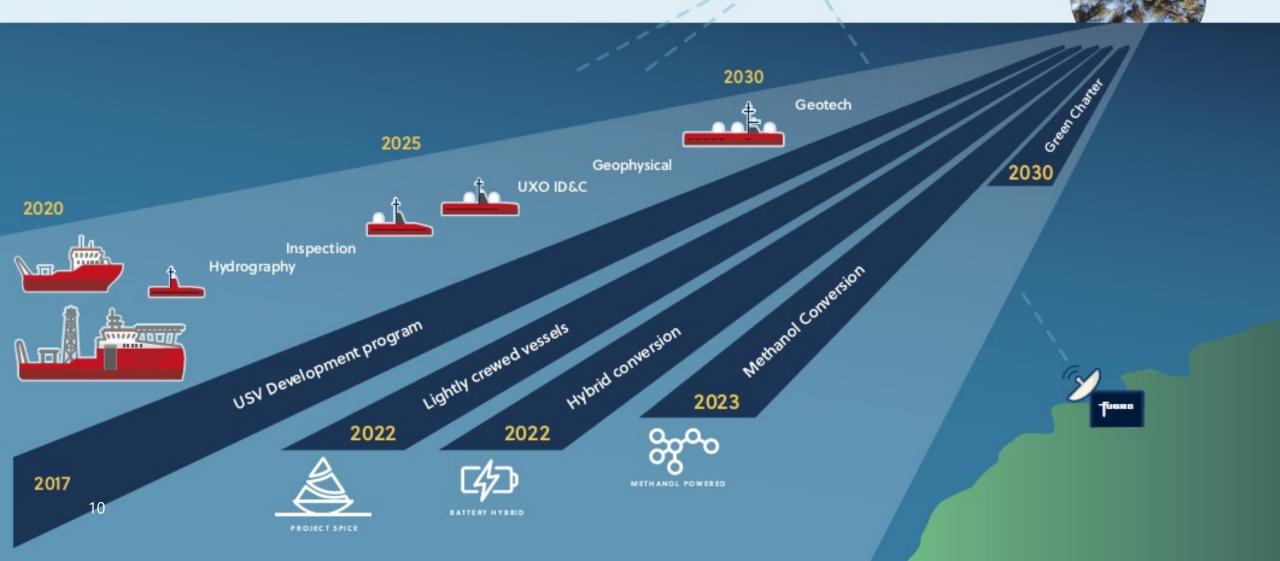


Remote operation centres



### Changing the way we operate Safer, more sustainable fleet





### Benefits of a wholly mapped and observed ocean





#### **Environmental Benefits**

- Climate models
- Weather prediction
- Ocean acidification models



#### **Socio-Economic Benefits**

- Fisheries / Aquaculture
- Energy
- Minerals
- Commerce /



#### **Risk Mitigation Benefits**

- Marine geo-hazards
- Tsunamic models
- Flood inundation models



#### Knowledge Economy Benefits

- Scientific research
- Cultural heritage
- Medicine / Pharma



### Tuvalu example



Tugro

### Challenges in the Middle East



UGRO

- Shallow waters
- Territorial/ restricted waters
- Data security
- Lack of funding
- Competition



## The final chapter is ours to write. We know what we need to do. What happens next is up to us.

Sir David Attenborough







# Thank you

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