

# Future Installation Aids

Andrew Hunt  
Principal Engineer  
(Renewables)

# Future Installation Aids

- Current Issues
  - Cable Threats
  - Future MEC Farms
  - How do you connect?
  - How do you protect?
- Future Installation aids
  - Innovating and Evolving
  - Vessel Considerations
- Concluding Remarks



*Cable installation at EMEC – Falls of Warness. Image Courtesy of EMEC*

# Cable Threats – MEC Test Sites



- Loading
- Suspensions
- Fishing Activity
- Anchoring



# Cable Threats - Installation

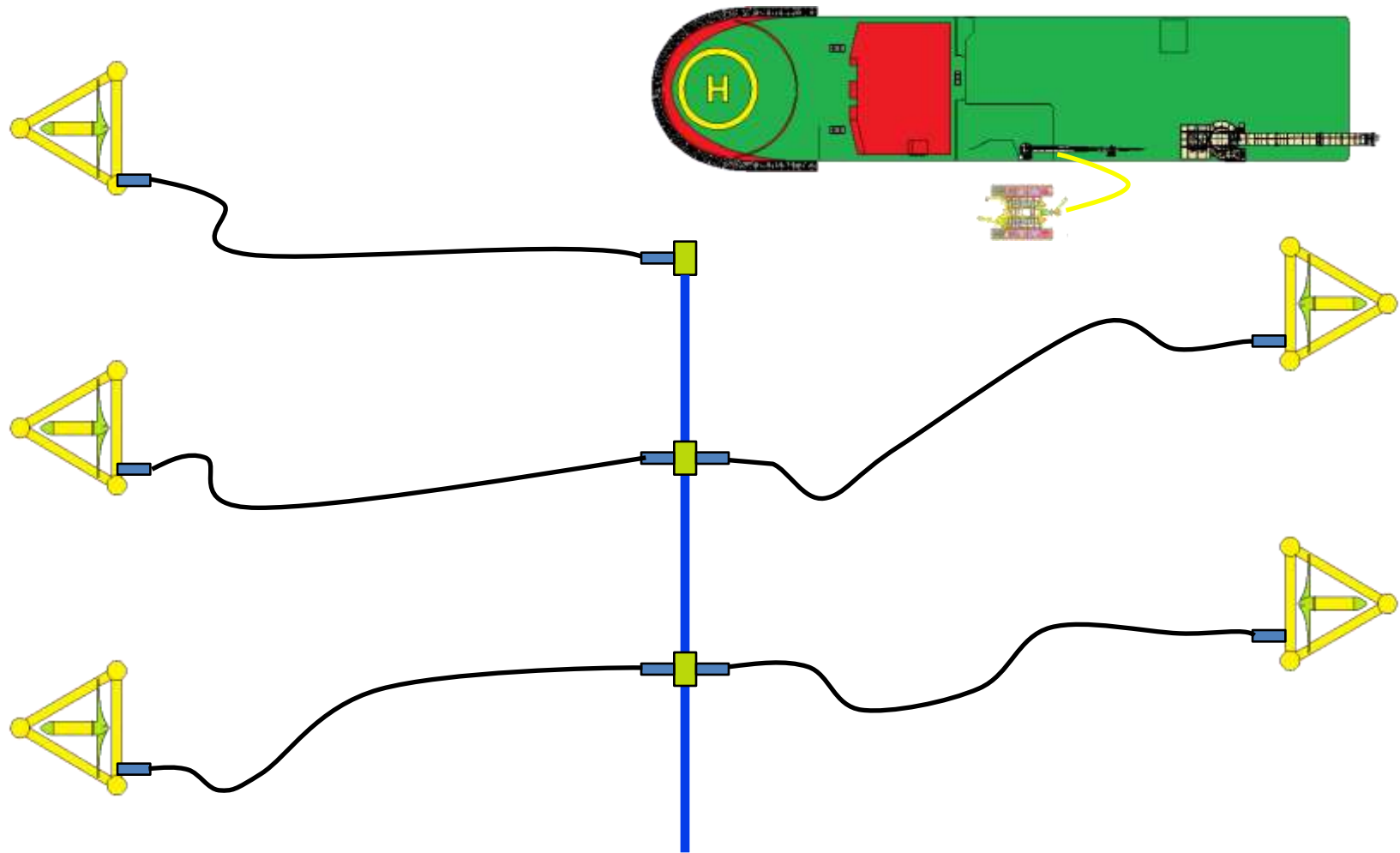
- Cable issues (examples from tidal sector)



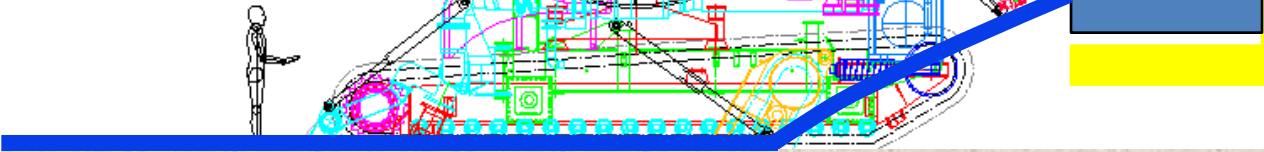
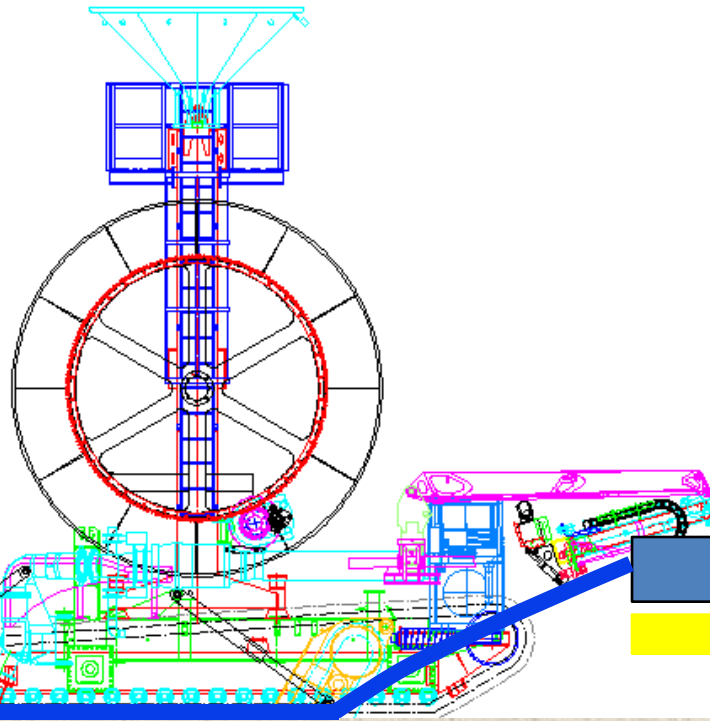
*Images courtesy of EMEC*

- The Learning curve!
- Making do with existing equipment / vessels
- Lack of supply chain involvement

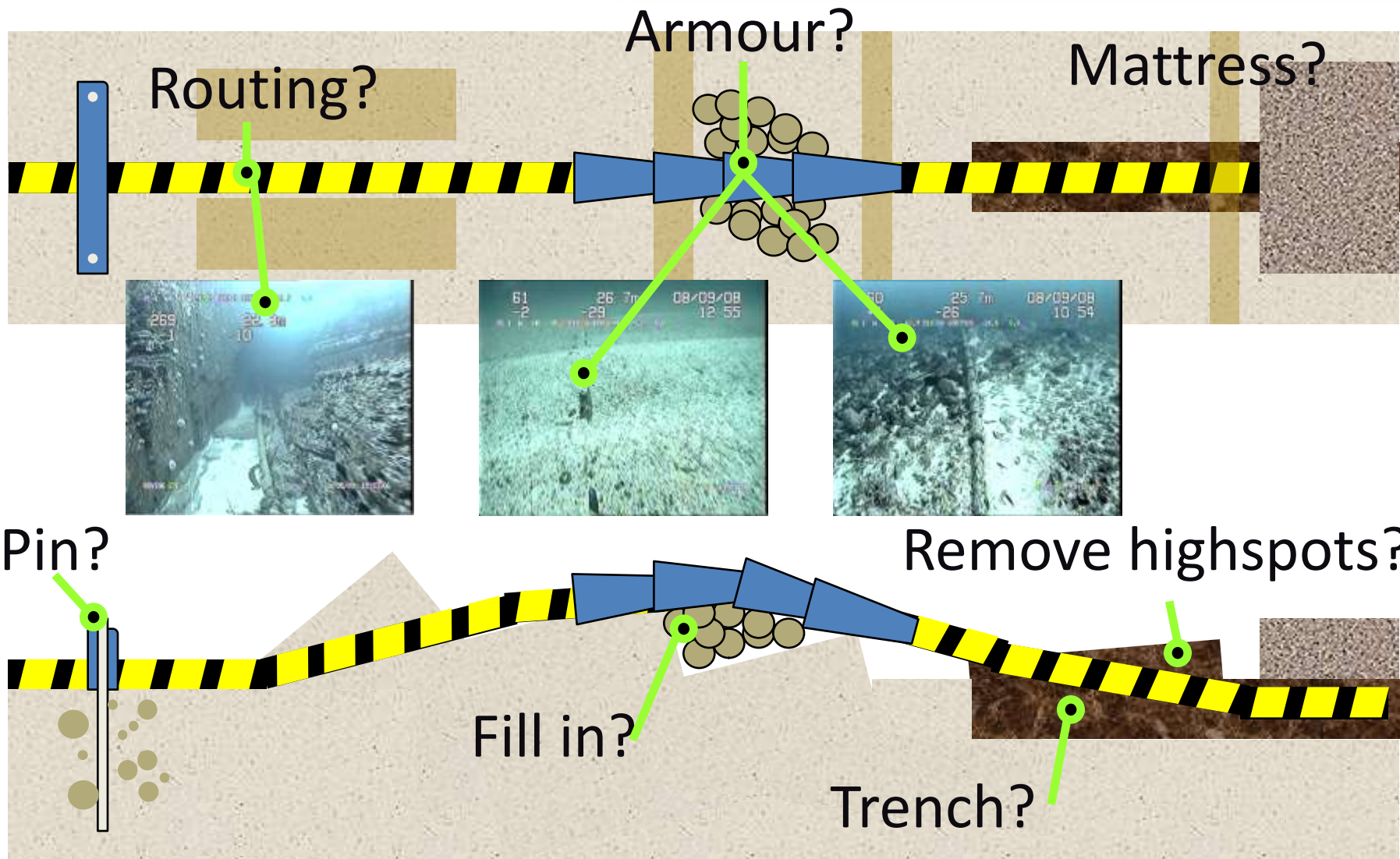
# MEC Farm Layout - TidEL



# How do you connect?



# How do you protect?



# Innovating and evolving



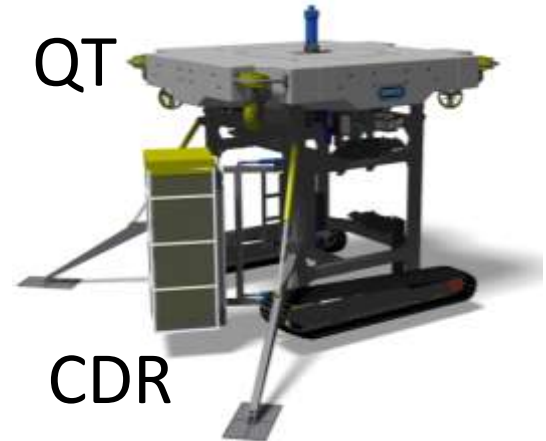
+



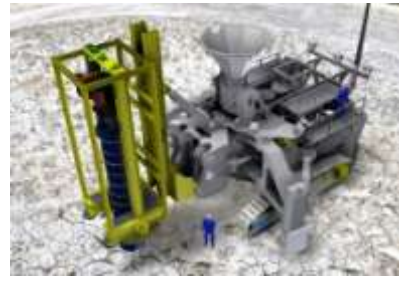
+



=



# Vessel Considerations

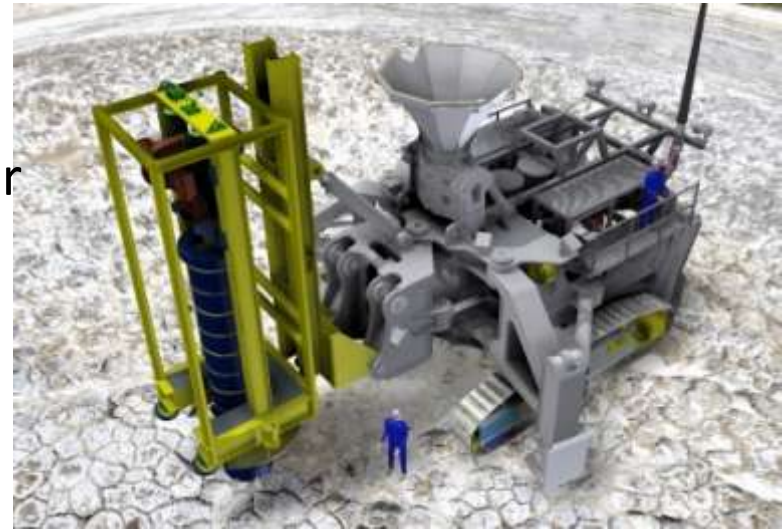


**BEAUFORT FORCE 6**  
WIND SPEED 23-27 KNOTS  
  
SEA WAVE HEIGHT 3-4M (9.5-13 FT)  
LARGER WAVES BEGIN TO FORM. SPRAY IS FREQUENT.  
WHITE FOAM CRESTS ARE EVERYWHERE



# Concluding Remarks

- New industries, new requirements
- Some installation aids are already available
- Designs evolving – especially in offshore wind sector
- Design innovation – especially in embryonic tidal sector
- Holistic approach is required
  - Installation contractor, vessel operators, device developers, site developer, **installation equipment manufacturers**, cable manufacturers all need to talk – the earlier the better
- SMD is already building the next generation of subsea installation aids



[www.smd.co.uk](http://www.smd.co.uk)

