



New Energies Terminals (NET)

Our Mission and Portfolio of Jetty-less solutions

SBM Offshore - Track record of Innovation & Risk management



Risk management of High Pressure, Explosive, Toxic, or Cryogenic products:

from Technology qualification to Offshore Operations

CATENARY ANCHOR

MOORING



SBM Offshore pioneered offshore systems, Committed to:

- 1) Safety
- 2) Cost Efficiency

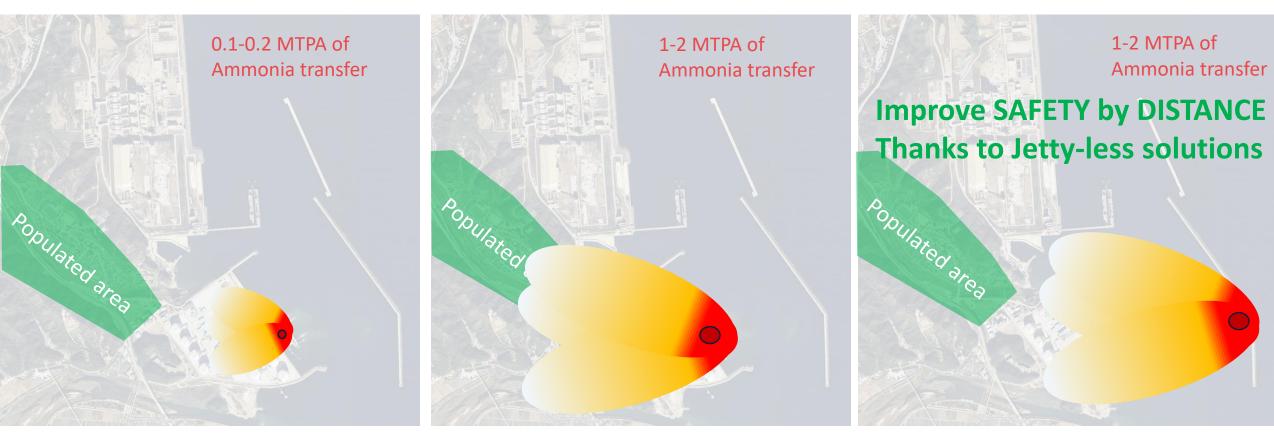
From CALM buoy — which is our name Single Buoy Mooring
To our Today core business lease & operate of FPSOs
large & complex Floating Production Storage Offloading



Larger flow & higher Frequency IMPACT on QRA

III Imodco

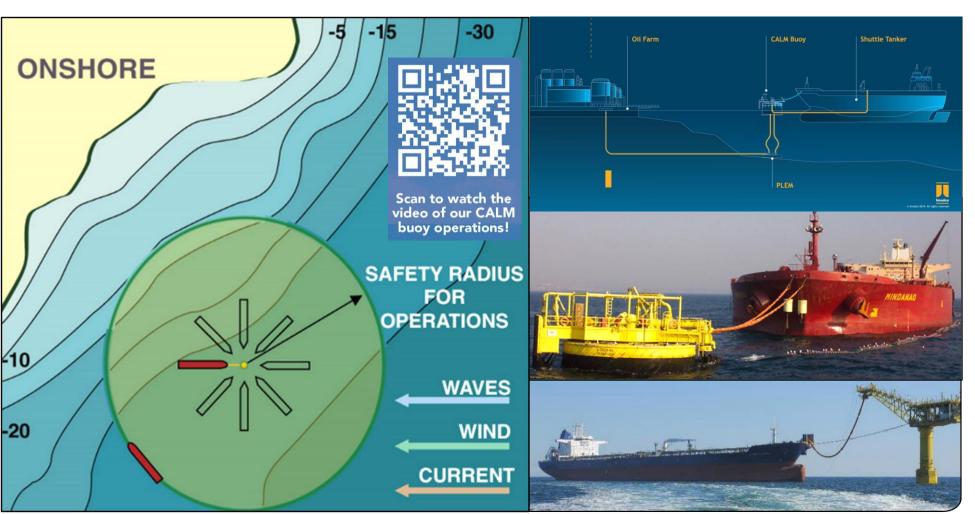
- Larger flow rate => large release potential => larger toxic cloud
- Higher frequency => larger overall safety radius (more scenarios to consider)



Safety is not negotiable => only question: what concept optimizes the project NPV ? => Jetty-less concepts often lead to best CAPEX/OPEX/Uptime combination

Onshore Storage: the Jetty-less Terminal berths the off-taker carrier





<u>Jetty-less Advantages</u>

- No port
- Simpler construction permitting
- No dredging
- Lower cost
- Shorter delivery time
- High Uptime
- Simpler decommissioning
- No limit on carrier size/length

Floating Storage (permanently moored) receives off-taker carrier



<u>Further advantages</u>: this jetty-less FSO (Floating Storage & Offloading) concept can optimize project economics for challenging projects: long pipeline, lack of space, permitting issues,...



Shallow water weather-vaning FSO

e.g. in open sea



Very Shallow water & Short Footprint FSO

e.g. within lee side of existing breakwater allowing for fixed heading

Contacts & QR codes for free downloads





Philippe Lavagna New Energies Terminals Product Account Manager

Philippe.lavagna@sbmoffshore.com



Scan to watch the video of our CALM buoy operations!

III Imodco



Scan to find out about our Jettyless SPM Fluid Transfer Solutions!

III Imodco

