



STCW Comprehensive Review

Presentation by
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P E R S I U S.

P R O L O G

To the First SATYR.

I Never did on cleft Parnassus dream,
Nor taste the sacred Heliconian Stream;
Nor can remember when my Brain inspir'd,
Was into Madness fir'd.

Prologue

Campbell Bay

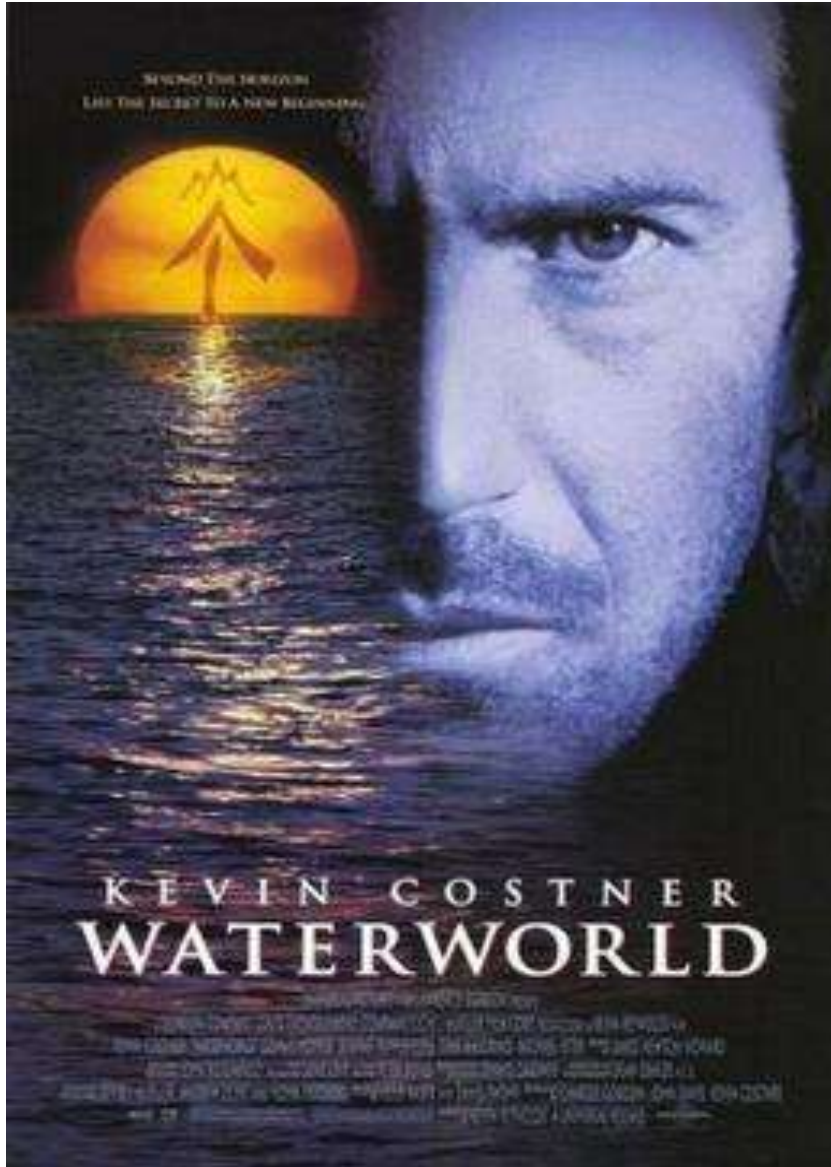




2010



'Mariner for Future'- Need of STCW Review



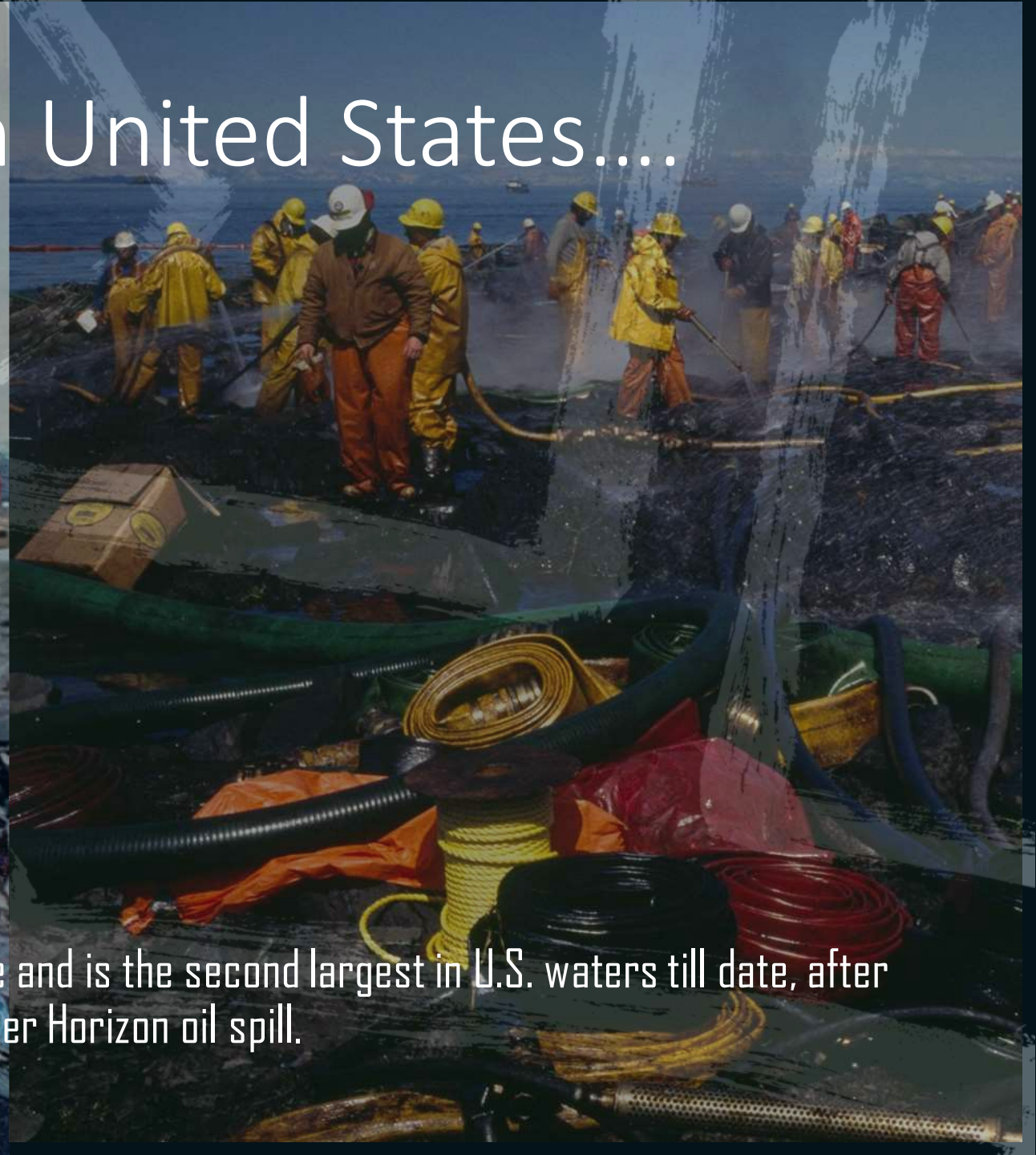
Waterworld is a 1995 American action film directed by Kevin Reynolds, starring Kevin Costner.

Exxon Valdez Disaster-1989



- On March 24, 1989, Exxon Valdez, an oil supertanker owned by Exxon Shipping Company, bound for Long Beach, California, struck Prince William Sound's Bligh Reef, Alaska at 12:04 a.m.
- The tanker spilled approximately 37,000 tonnes of crude oil over the next few days.

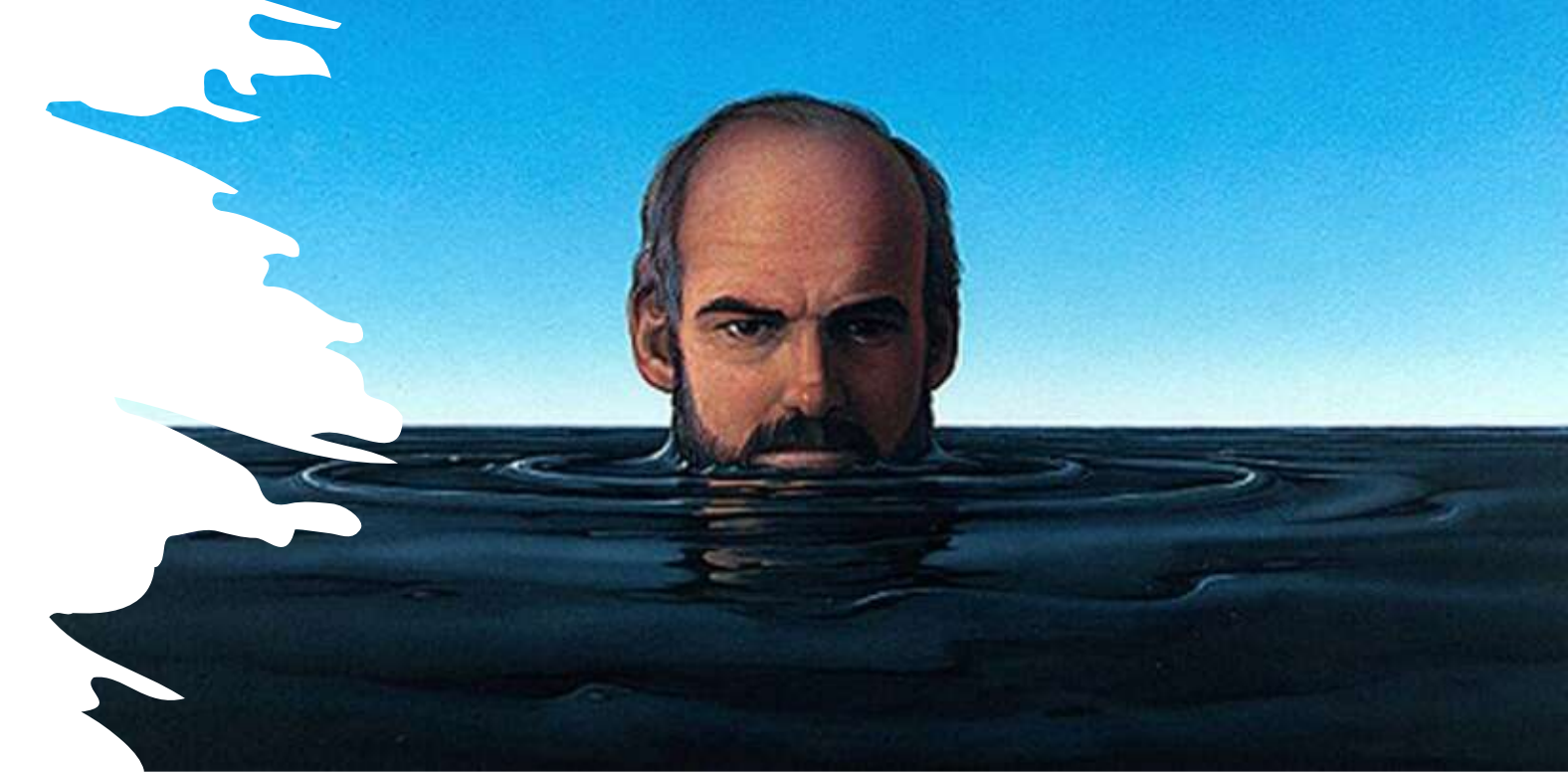
Largest Spill in United States...



The Exxon Valdez spill was the largest spill at that time and is the second largest in U.S. waters till date, after the 2010 Deepwater Horizon oil spill.

- The man cast as the villain in the nation's most notorious environmental disaster was the Captain of the oil tanker Exxon Valdez, **Joseph Hazelwood**.

- He was vilified as a drunk who abandoned his post, and thus was to blame for one of the worst oil spills in U.S. history.



Capt. Hazelwood was cleared of all these charges at his 1999 trial after 21 witnesses testified that he was sober around the time of the accident.

He was however convicted of misdemeanor negligence for discharging oil, fined \$50,000, and sentenced to 1,000 hours of community service.

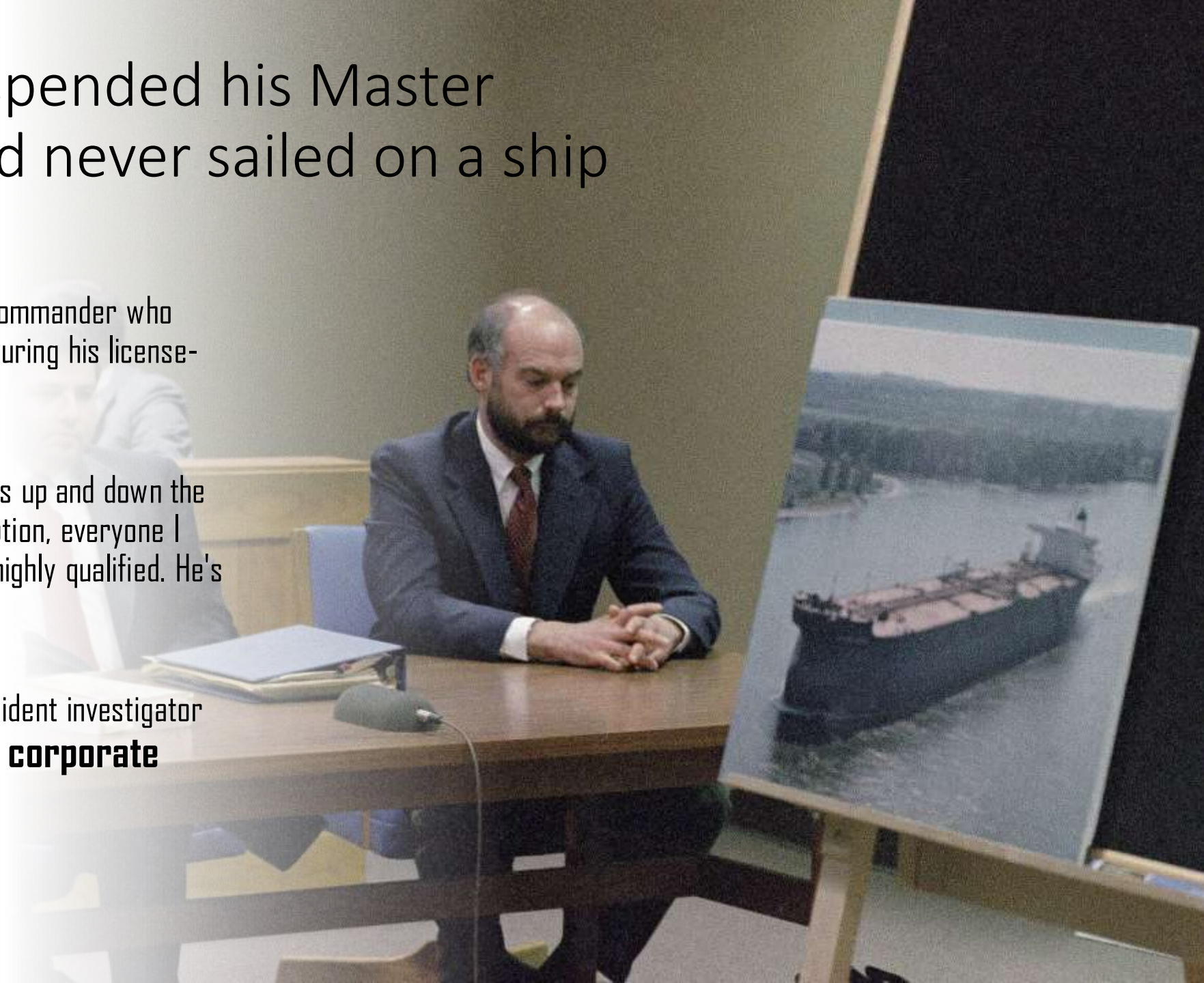


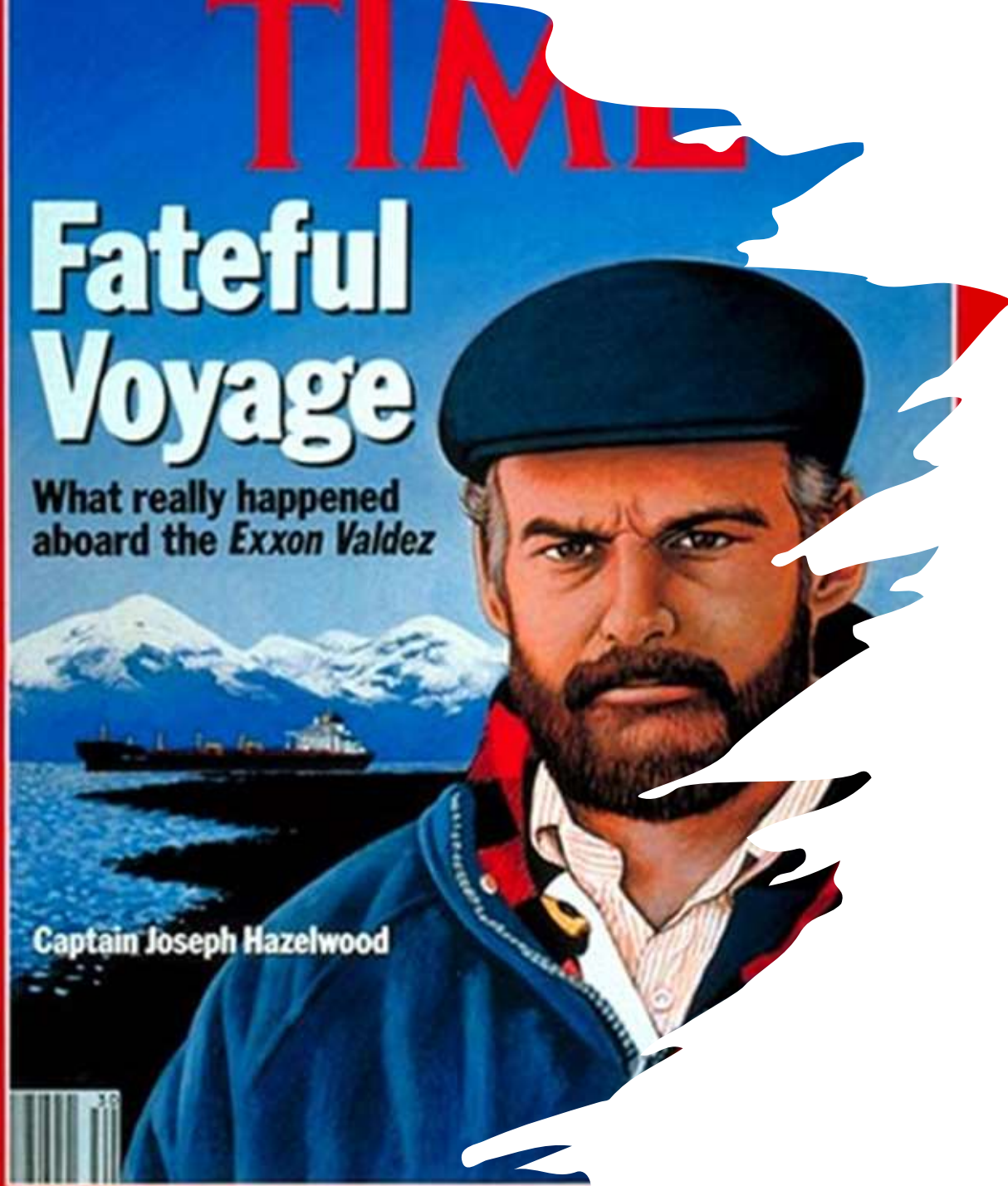
In 1991, USCG suspended his Master Licence...and could never sailed on a ship thereafter...

Paul Larson, a retired U.S. Coast Guard commander who investigated and prosecuted Hazelwood during his license-revocation hearing said;

"I spoke to people from pilot organizations up and down the coast, at different port and without exception, everyone I talked to indicated he was highly skilled, highly qualified. He's basically being blackballed."

National Transportation Safety Board accident investigator Bill Woody termed him as a **victim and corporate scapegoat**





" I apologize to every citizen of Alaska.....

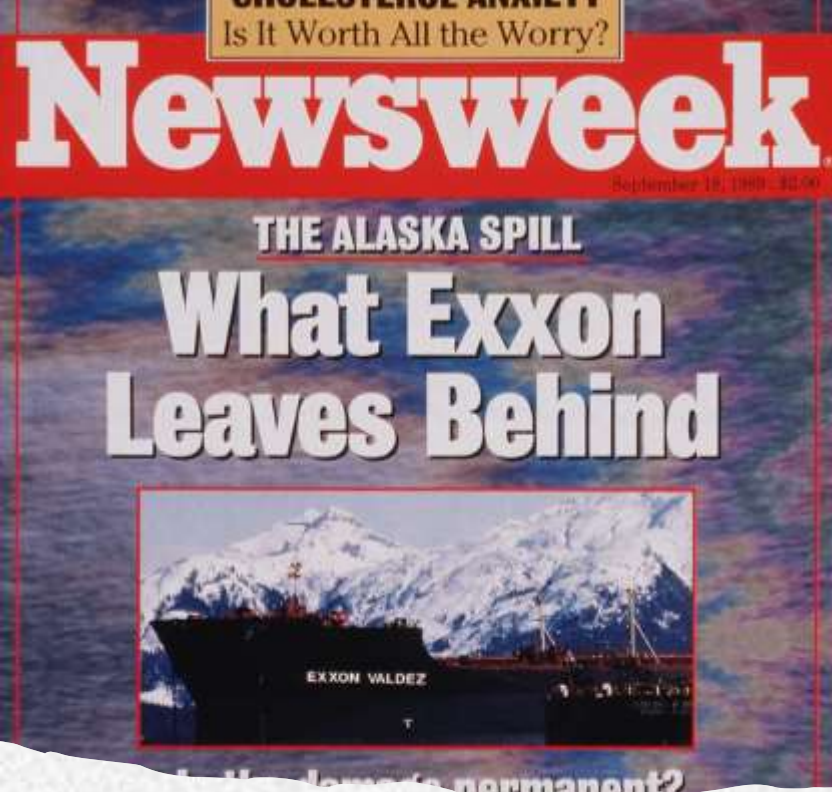
For them I am an Antichrist.....

But the true story is out there for anybody who wants to look at the facts, but that's not the sexy story and that's not the easy story".

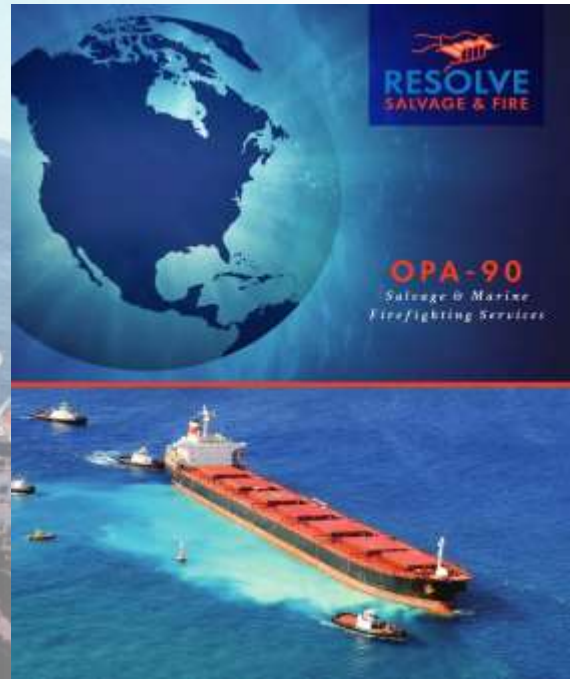
Valdez Blockade...



Ending a class-action lawsuit by Alaska Mayor charging Exxon Mobil for employing 'incompetent crew', the Supreme Court in 2008 cut punitive damages imposed on Exxon Mobil from \$2.5 billion to \$500 million. Incidentally, the court's conservative majority relied on a pre-war legislation and employed a formula that could limit maritime corporate punitive damages.



If you can't lead, Get the hell out of the Office..



**Federal Oil Pollution Act
1990
(OPA90)**



STCW '95

35 years later.....



26th March 2024

- Presidential Election
- Victim Compensation
- Incompetent Crew
- Crew Negligence
- Pre-war liability limitation
- USCG
- NTSB

A scene from the movie 'Dali' showing an all-Indian crew on a ship at night. The crew members are depicted in a state of panic and distress, with some covering their faces and others shouting. The ship's interior is dimly lit, and the background shows a dark sea with distant lights. The text 'Dali- the all-Indian Crew Ship.....' is overlaid in yellow at the bottom of the image.

Dali- the all-Indian Crew Ship.....



It is not the Bridges getting larger..
It is not the Channels getting
wider..
But it is
the Ships that are getting
Bigger....

National Transportation Safety Board Chair Jennifer Homendy

Heard this before???



"The Canal's revenues were taking a \$14m-\$15m hit for each day of the blockage.

With the **Ships getting Bigger and Bigger**, we need to have to review our strategies to safely deal with them..."

29th March 2021

Suez Canal Authority Chairman

Osama Rabie

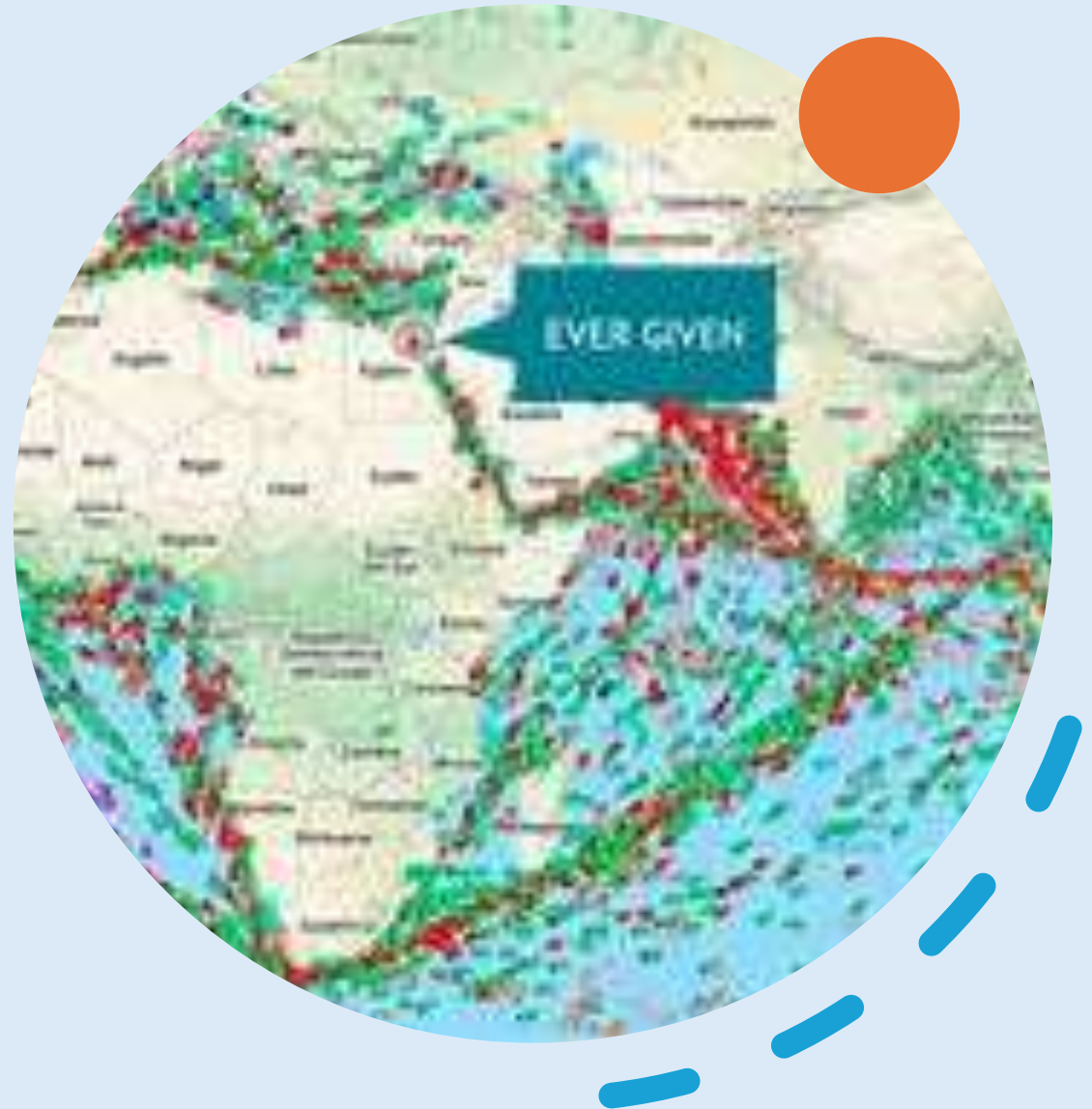


The Great Suez Blockade.....

- On 23rd March 2021, the Suez Canal was blocked for six days by the Ever Given, an all Indian crew container ship that had run aground in the canal.
- Egyptian authorities attributed "technical or human errors" as the cause of the incident.

The Costliest 'Human Error' in Shipping history.....

- Lloyd's List showed over 383 stranded ships holding up an estimated \$9.6bn of trade along the waterway each day. That equates to \$400m and 3.3 million tonnes of cargo an hour, or \$6.7m a minute.
- Looking at the bigger picture, German insurer Allianz estimated a **'Single human error'** on the ship could have cost global trade between \$6bn to \$10bn a week and reduce annual trade growth by 0.2 to 0.4 percentage points.



“Qmax” series carry over 160 million CM of LNG.



“The energy content of a single standard LNG tanker (125MCM) is equivalent to seven-tenths of a megaton of TNT, or about **fifty-five Hiroshima bombs.**”

LNG Tankers.....the floating Bombs...



Boston Mayor Thomas Menino :

Quote: The attacks of September 11, 2001, came from the sky, but the next terrorist attack on the United States could come from the sea - like the one on the *USS Cole* in October 2000- in the form of an enormous liquefied natural gas tanker. LNG carriers are perhaps the single most dangerous substance routinely plying our coastal waters and coming into our ports.- the floating nuclear bombs.

Unquote

Seafarers are the custodians of our High value Assets.....

“Do we want our high-risk, high-value ships to be run by personnel rejected by other industries?”

Doesn't the shipping industry deserve a competent crew to operate our ships and the very best talents to manage them ?

That's why we need a Convention that is not only robust but also inviting and inspiring for future generations.”



Efthimios Mitropoulos
(2003-2011)



Periodical Review of STCW Convention



**This Decade is a Moment of Choice:
Which Future Will We Choose?**

The future ships.....

CONDITION MONITORING

- Intelligent systems - self diagnosis
- Smart maintenance schemes
- Remote support
- Maintenance robots

REMOTE CONTROL/OPERATION

- Monitoring
- Machinery control
- Navigation & piloting
- Operation of payload systems

DECISION SUPPORT

- Navigation (routing)
- Situational awareness
- Collision avoidance
- Safety support

OPERATIONS OPTIMISATION

- Onboard energy optimisation
- Fleet optimisation
- Revenue optimisation

ONBOARD AUTOMATION

- Automatic reporting
- Automatic mooring
- Full autonomous operation





AUTONOMOUS Ships



EEDI

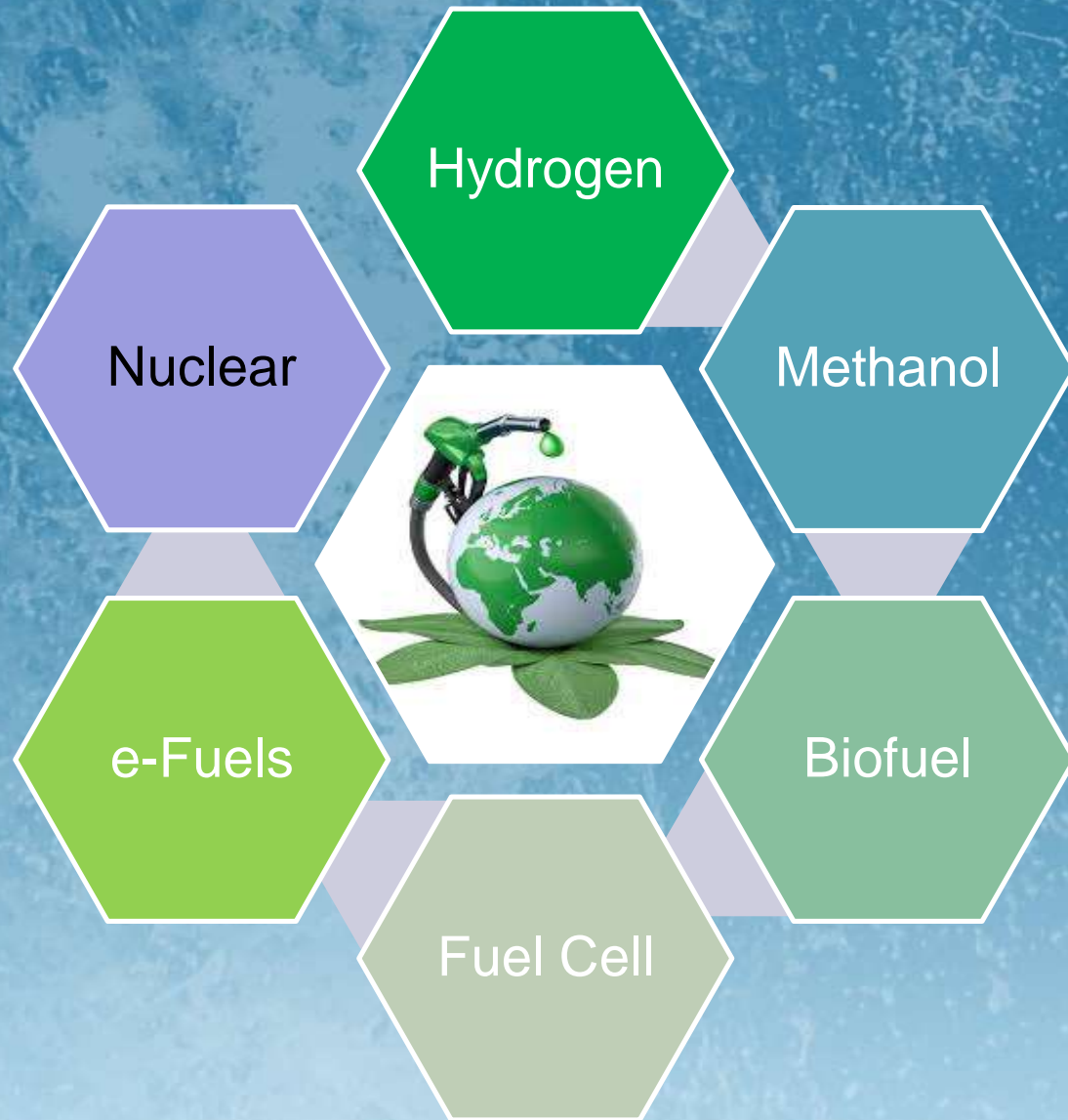
EEXI

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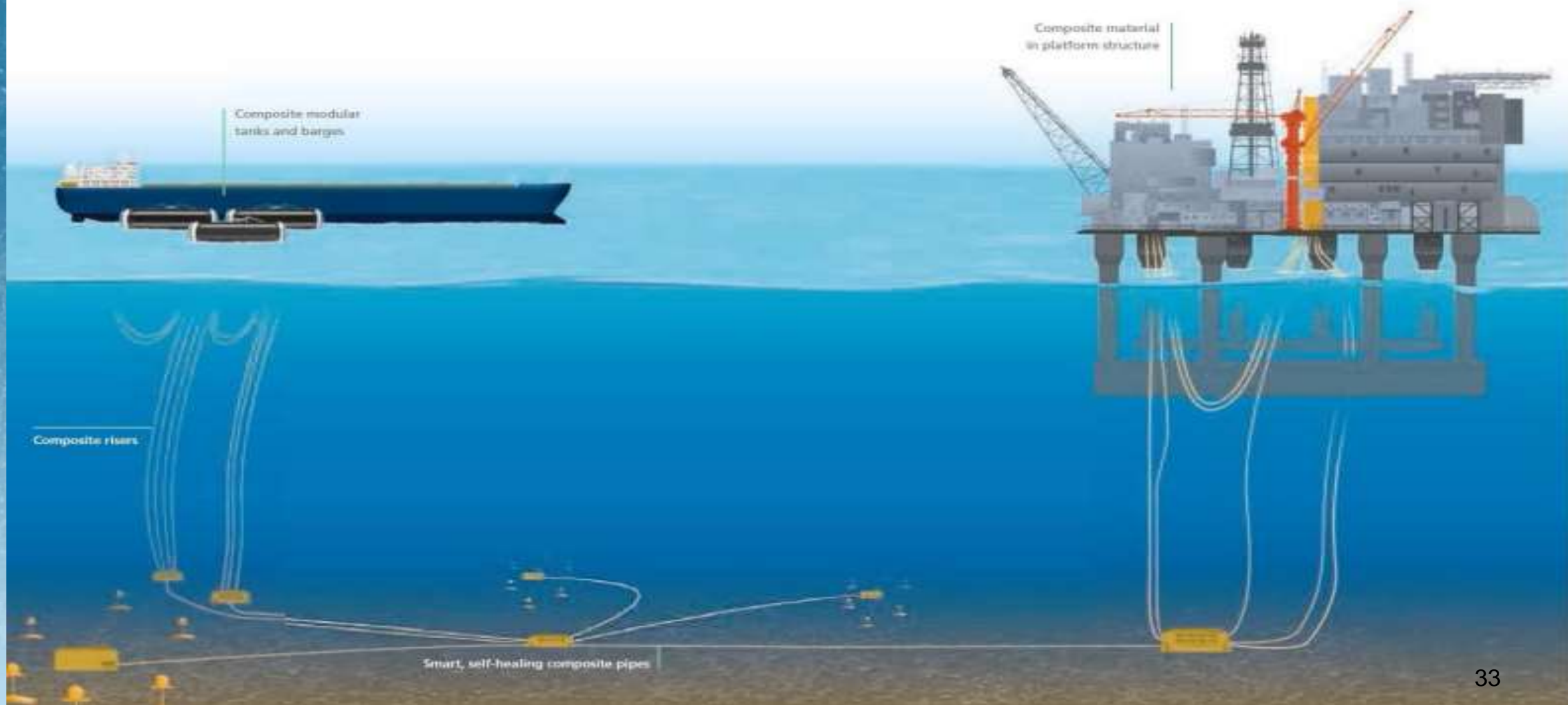
Carbon Levy

ETS

Feebate



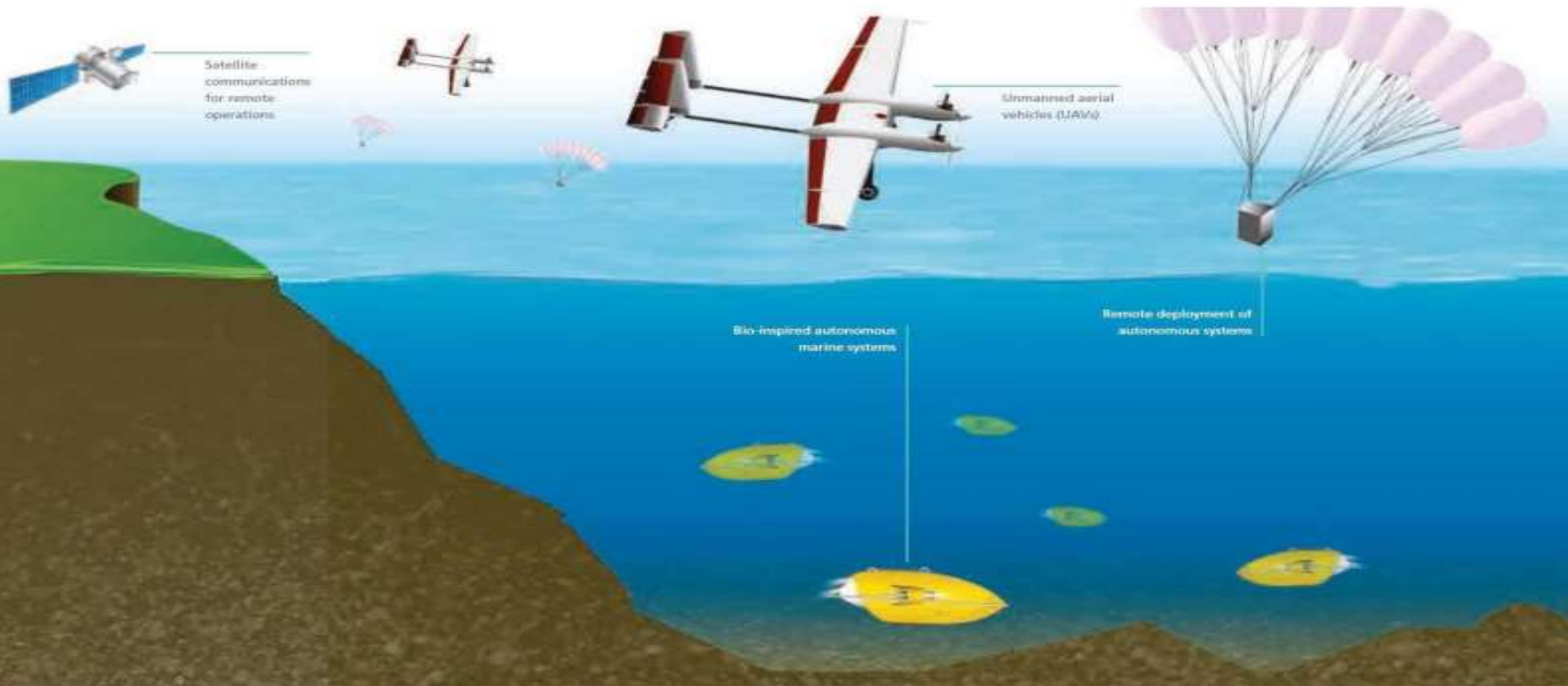
Advanced Materials



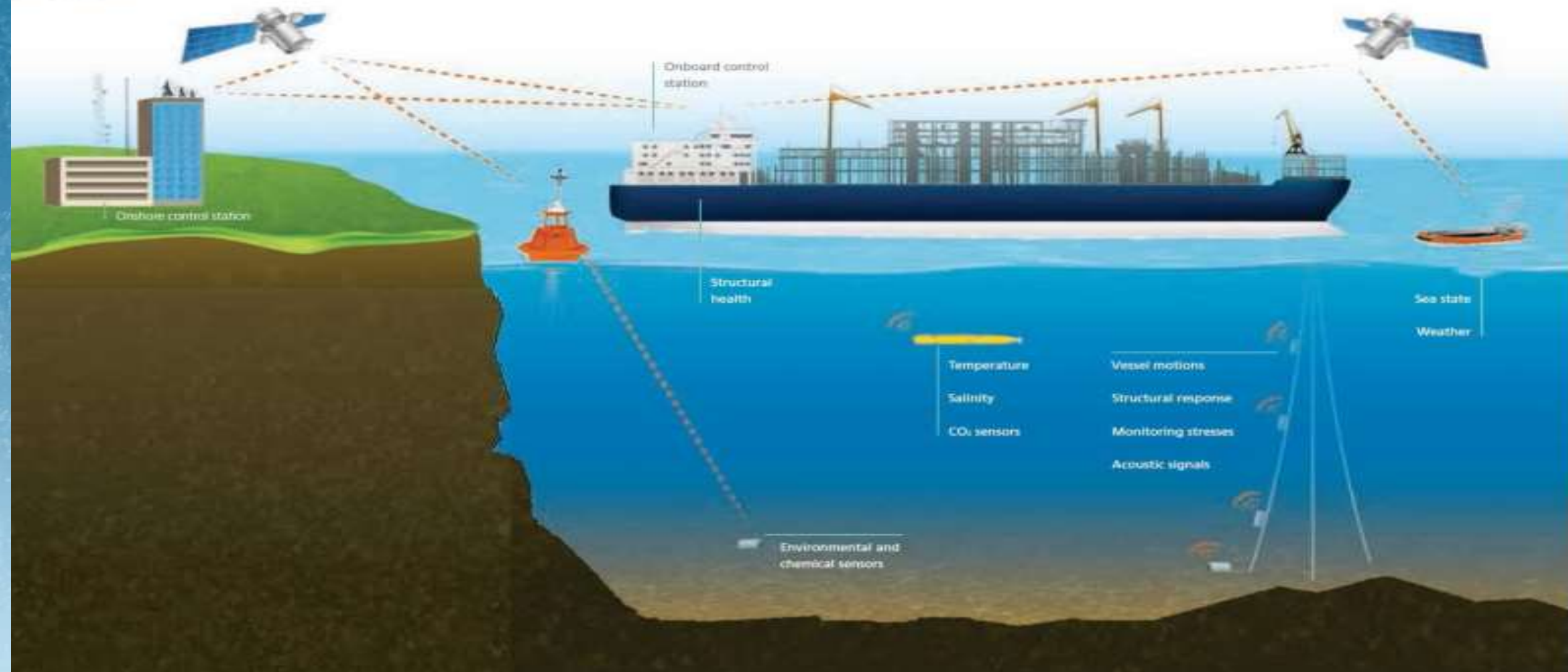


New Manufacturing Technologies

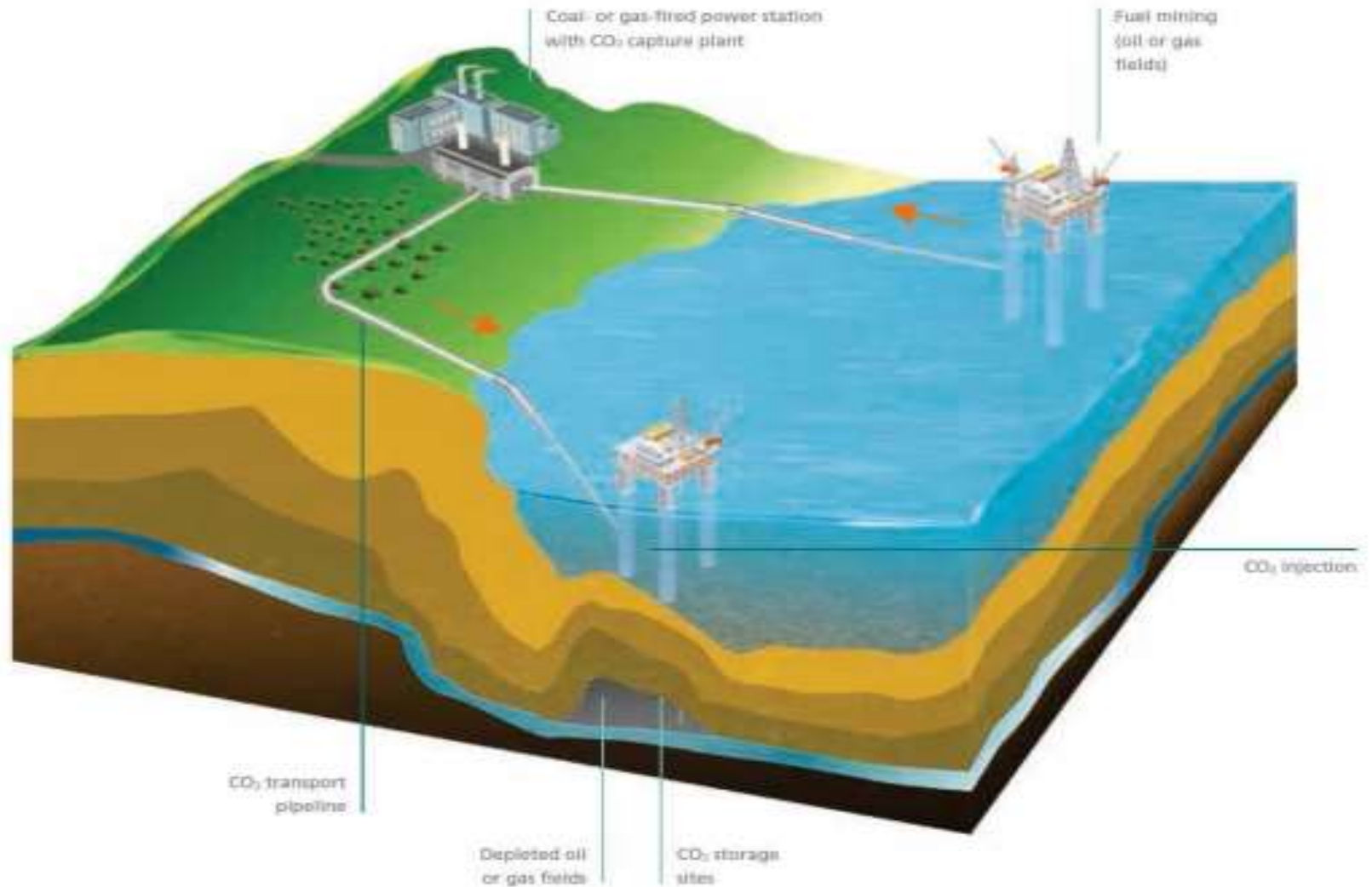
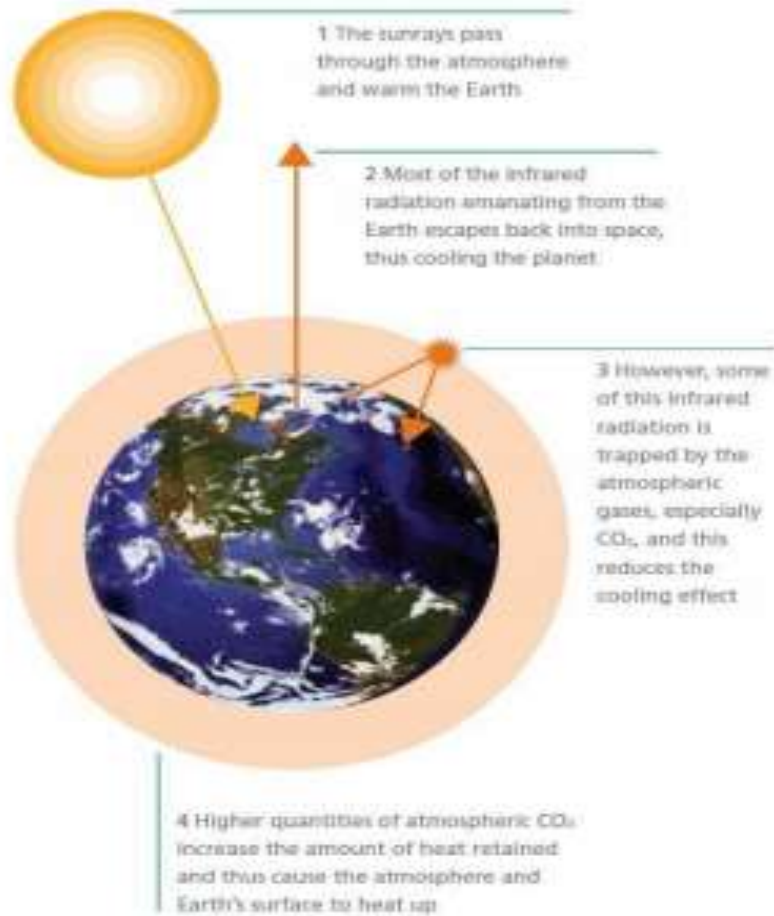
Autonomous Systems



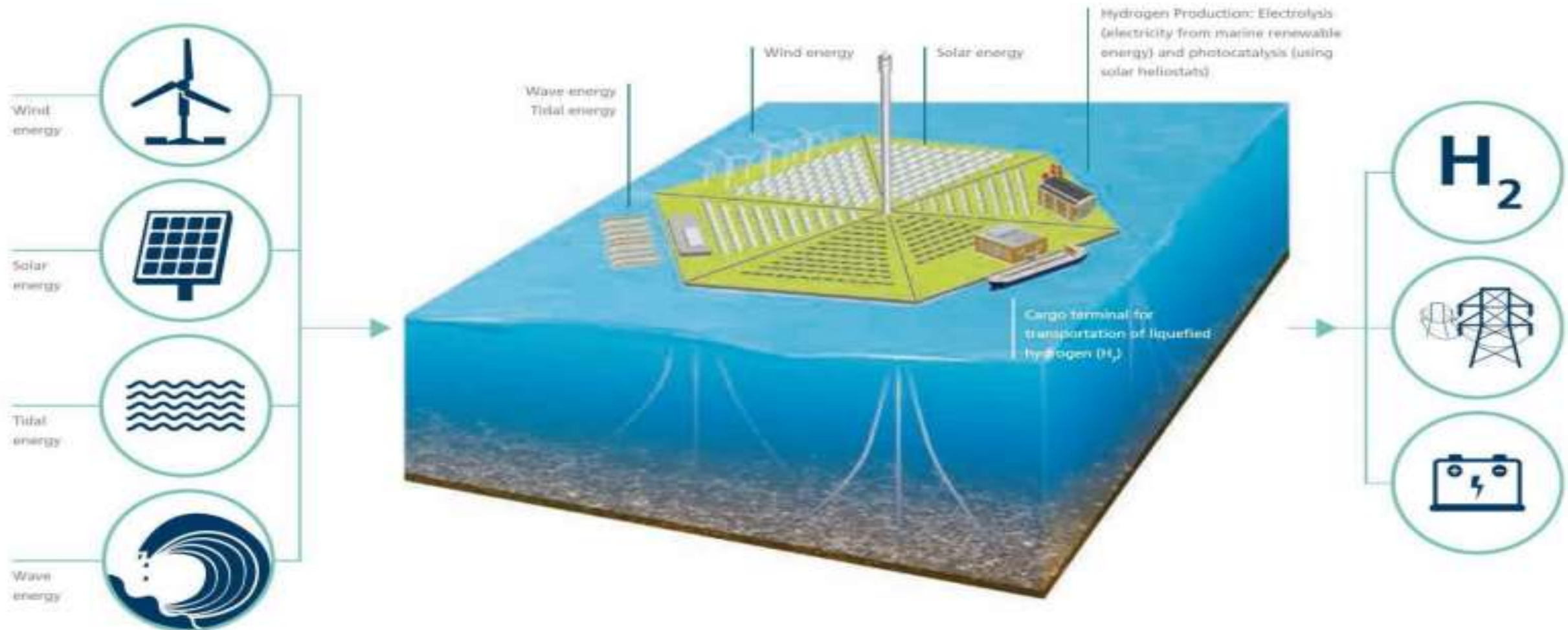
Sensors and Communications



Carbon Capture and Storage



Sustainable Energy Generation



Tracking
(Cargo, ship)

Peer to peer
transacting

Marketplace

Block Chain

Identification

Automated Clearing
& Settlement (Smart
Contracts)

Documen-
tation

Secure Data
Sharing



Cyber Security



Redefining Future Maritime Training & Education



**IMO Secretary-General
Arsenio Dominguez.**

- “While compliance with its standards is essential for serving on board ships, the skills and competence of seafarers, and indeed, the human element ashore, can only be adequately underpinned, updated and maintained through effective maritime education and training”





Roadmap STCW Comprehensive Review

At its 10th session held at the IMO headquarters in London from 5 to 9 February, the Sub-Committee on HTW outlined a methodology and a list of specific areas to review.

Focused Approach...



Focused Areas for Review: 22 specific areas of the Convention and Code to be reviewed, including emerging technologies on ships, e-certification, mental health and gender sensitization, among others;



A two-step methodology:



Phase 1: Review of the Convention and Code to identify gaps.



Phase 2: revision stage to develop amendments to address those gaps.

EPILOGUE

It's a FUNNY THING to be the product of a fairy-tale romance.
It's another thing to think you might find one yourself. You
can read the stories and watch the movies, and you can think
you know how it's all supposed to unfold.
But the truth is, love is as much fate as it is planning, as
much a beauty as it is a disaster.

Finding a prince might mean kissing a lot of frogs. Or
kicking a lot of frogs out of your house. Falling might mean
running headfirst into something you've been scared of your
dipping your toe into something you could be waiting in a field a
whole life. Happily ever after could be waiting in a field a
mile wide. Or a window as narrow as seven minutes.

the
serv
anyth
And
my head
I love y
—K

Epilogue....

Future Maritime Education...



Dalian Maritime University

42 undergraduate programs, 14 doctoral programs and 66 master's degree programs.

The student strength is approximately 17,000 and more than 4,000 overseas students

192 professors, more than 100 doctoral supervisors, 5 first-class discipline leader, 42 second-class discipline leaders, 96 academic leaders 39 chair professors, and 148 visiting professors.

More than half of their students are girls, because "Sailing" is only one of the options before them, while they specialise in a variety of maritime related subjects ranging from Maritime History, Ship Management, Maritime Administration, Logistic, Transportation Engg, Port Management, Marine Environment Engg, MIS for Maritime sector, Naval Architecture, Ship building etc. etc and contribute for the overall development of maritime sector.

Maritime Training Beyond STCW.....

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Maritime
Training

150+ DGS approved MTIs, conducting Over 100 mandatory maritime courses approved by DGS, India train capacity of around 15000 officers and 10000 ratings annually

Seafarer
Employment

Through 500+ RPSL Companies, we have around 240000 employed Seafarers, of which around 3000+ are women seafarers.

Manpower development in Shipping does not start and end with seafaring or STCW. Shipping provides employment and lively hood for millions directly and indirectly through hundreds of its ancillary industries. Hence Human Resource Development in maritime is not complete till we have a comprehensive and holistic maritime training and education system.

The future Seafarers.....



“Customer decides the future....”

Quote: the "Seafarers for the future" will be the call of the ship owners / operators who are going to hire them and not that of the maritime administrations or maritime training institutes and certainly not the least that of the recruiting agents of today. If smart ships are the future, then ship owners would need seafarers with that kind of technical acumen to man them, and we, as a seafaring nation would have no choice but to re-engineer our production line and quality assessment towards that and not the other way round. **Unquote**



Who will Bell the Cat???

An Anecdote.....



After several changes of Flags and Ownerships, refitted and converted as Ore Carrier, renamed as '**Oriental Nicety**', Exxon Valdez was finally sold to an Indian scrap yard for \$16Mn in 2012.

Following several rounds of litigations by environmentalists at the Supreme Court, the vessels was finally scrapped at Alang in India on 2nd August 2012.



Proud to be an Indian..

Thank you...