



Energising the MORU Sector: Maritime Finance and a MORU Finance Convention

15 May 2026
CMI Brazil 2026

USS Lexington

December 17, 1929 to January 16, 1930



USS Lexington

Following a severe drought that crippled local hydroelectric dams, the USS Lexington came into port and provided 4.5 million kWhs to the city of Tacoma, Washington (approx. 25% of the city's demand)



USS Sturgis



The Karpower Fleet



By Karadenizsosyal - Own work, CC BY-SA 4.0,
<https://commons.wikimedia.org/w/index.php?curid=71103004>



By Sumbebekos – Own Work, CC BY-SA 4.0

Four theses:

1. Although MORUs float, are towable, and in some cases have been registered as a “ship” or “vessel” under various flags, they may or may not legally be “ships” or “vessels” for a specific purpose or context.
2. As a result, the application of various laws to MORUs may be uncertain in some contexts.
3. Unmitigated legal uncertainty may lead to unnecessary contractual complexity, higher finance costs, and economic inefficiencies for an emerging maritime sector
4. At the same time, maritime law opens up new possibilities for greater uniformity.



MORUs: Generating Assets

Floating Wind Turbines



Credit: Photo of the Kincardine Offshore Wind Farm project courtesy of Principle Power

Floating Tidal Energy Converters



Credit: Scottish Government, CC BY 2.0 <<https://creativecommons.org/licenses/by/2.0/>>, via Wikimedia Commons

Floating Wave Energy Converters



Credit: Mocean Energi Ltd

MORUs: Generating Assets (cont.)

Floating Solar Energy Converters



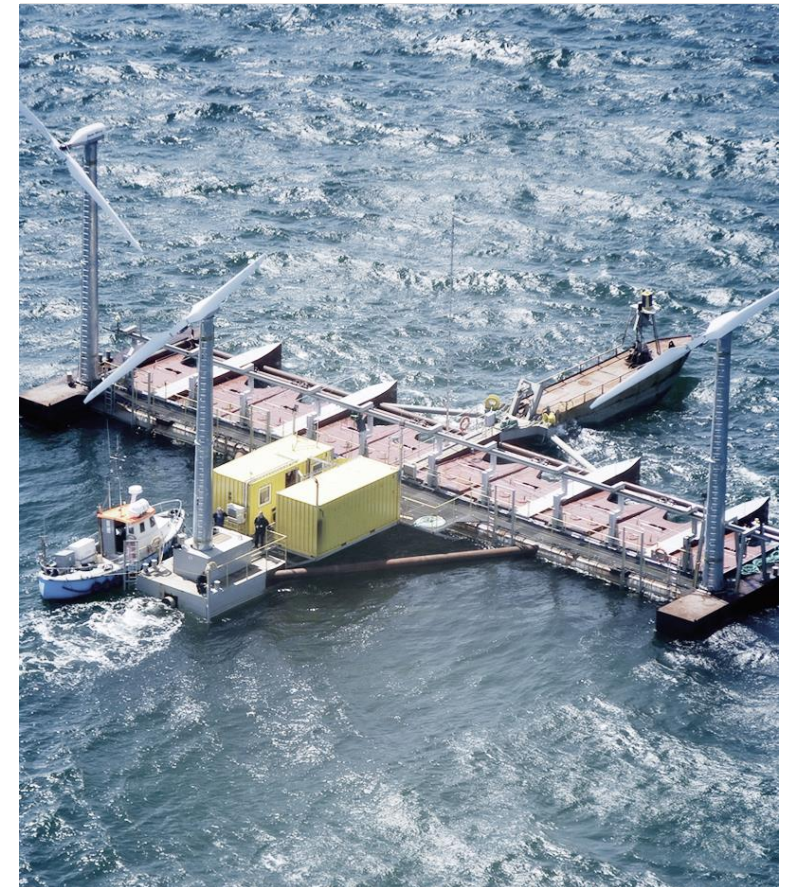
Credit: Ocean Sun

Floating Ocean Thermal Energy Converters



Credit: Global OTEC

Hybrids



Credit: Floating Power Plant

MORUs: Auxiliary Units...

Floating Substations



Credit: Fukushima Offshore Wind Consortium

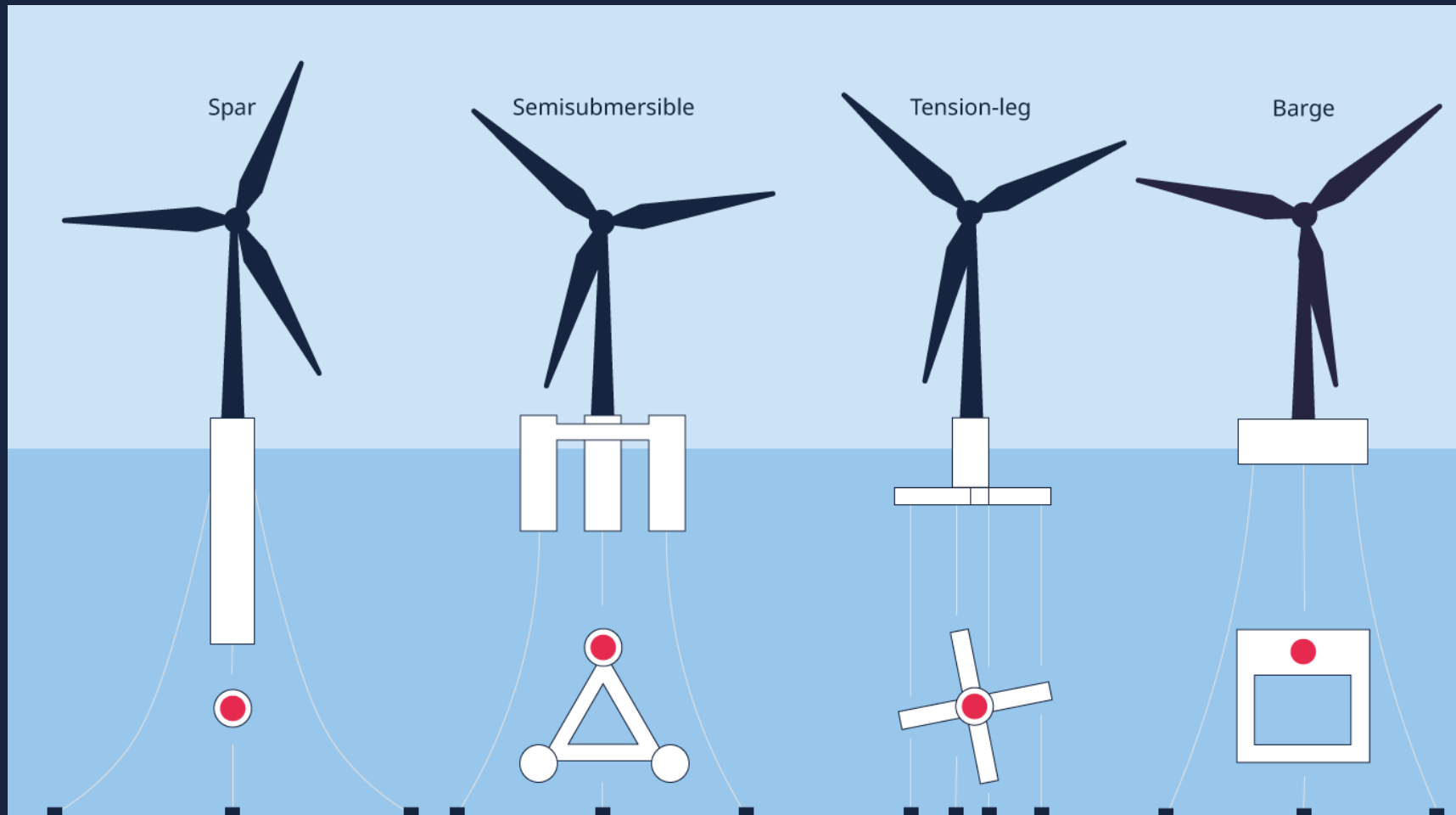
Offshore Power-to-X



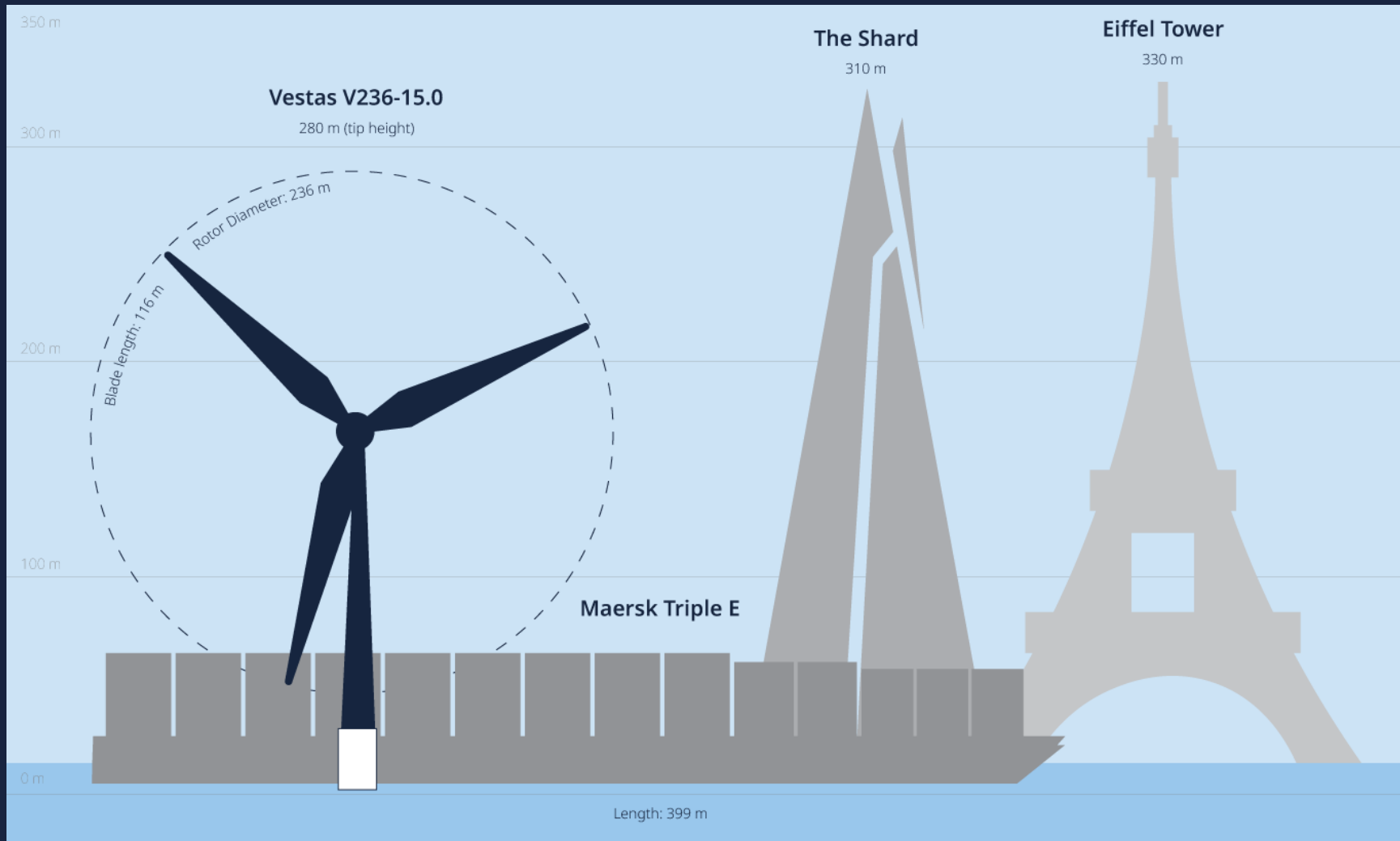
Credit: HydePoint AS and Vergia AS

*Floating Wind Turbines:
Floating Towards the Future*

Most floating wind turbines fit within a few common archetypes, derived from offshore oil and gas technology



Credit: DLA Piper Denmark 2023



Credit: DLA Piper Denmark 2023



Image source: Mingyang Smart Energy

OCEAN^X

Y系列

- 额定功率: 50 MW
- 技术路线: 半直驱
- 设计等级: IEC S
- 风轮直径: 290 m
- 排水量: 约39000t
- 设计水深: >40 m

585m

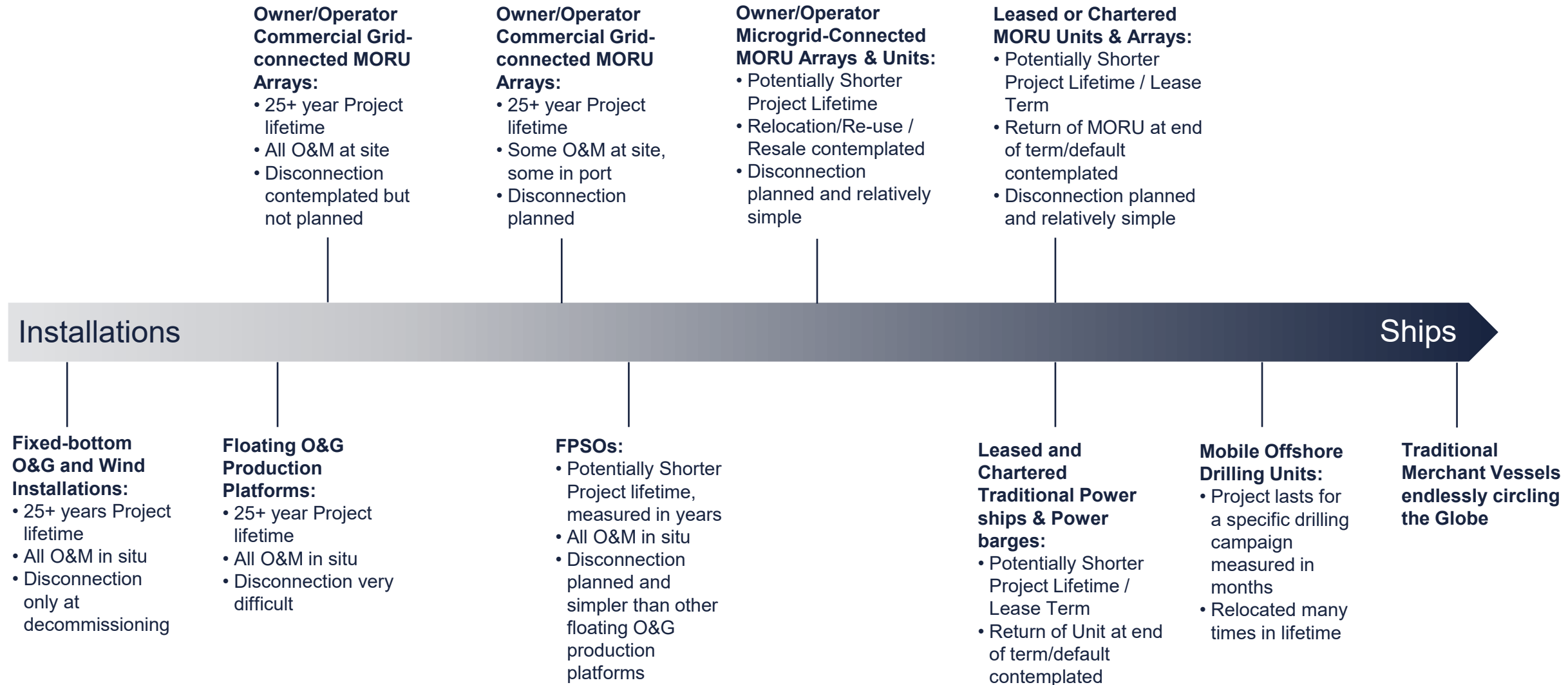
143m

190m

Ports and tows



MORUs: Is Their Mobility Closer to an “Installation” or a “Ship”?



Flagging MORUs under domestic maritime law

Classing MORUs with a Class Society

Domestic law registration of MORUs by a Maritime Authority in a Flag State (i.e. "flagging")



- Norway was the first to register a FOWT
- *Unitech Zefyros* (ex *Hywind Demo*)



- The Marshall Islands have subsequently registered at least five FOWTs



- France has enacted primary legislation which would allow registration of a number of different floating platform classes, inc. FOWTs

- "other floating construction"
- Registered in Norwegian Ordinary Register (NOR)
- Ad hoc approval
- Apparently, it would also be possible to register FOWTs in the Norwegian International Ship Register (NIS) and the Norwegian Construction Register

- "wind turbine installation (floating)"
- Registered in Marshall Islands International Registry

- "Maritime Multipurpose Platform" or "MMP"
 - Broader than FOWTs
- Primary legislation contemplates separate registers for ships and MPPs
- Secondary legislation still outstanding
- Not aware of any registrations yet

Possible advantages of Flagging MORUs

- Clearer title on a high-value mobile asset which may cross maritime boundaries
- Security on the asset: the Ship Mortgage is a globally recognized form of security interest on maritime assets, with priority over most other maritime claims.
 - In some jurisdictions, possible to register/flag/mortgage a "ship" under construction
- Alternate finance structures possible:
 - Traditional Ship Finance (Banks, ship mortgage, borrower/operator)
 - Different reps and warranties, terms and conditions vs. Project finance
 - Loan-to-value vs , Balloon payments, term,
 - Leasing (Operating or Bareboat charter)...developer is not owner.
 - Operating Lease: MORU is returned to the owner at lease end
 - Bareboat Charter: Owner assumes full operational control
 - Sale/leaseback? Options to extend? Purchase? ...repower possibilities?

Possible advantages of Flagging (cont.)

- With new finance structures comes new possible sources of finance
- Certificates and Port State Control Issues
 - Administrative ease entering and leaving ports
- Valuing the asset vs. Valuing the project
- Political advantages of "flying the flag"?

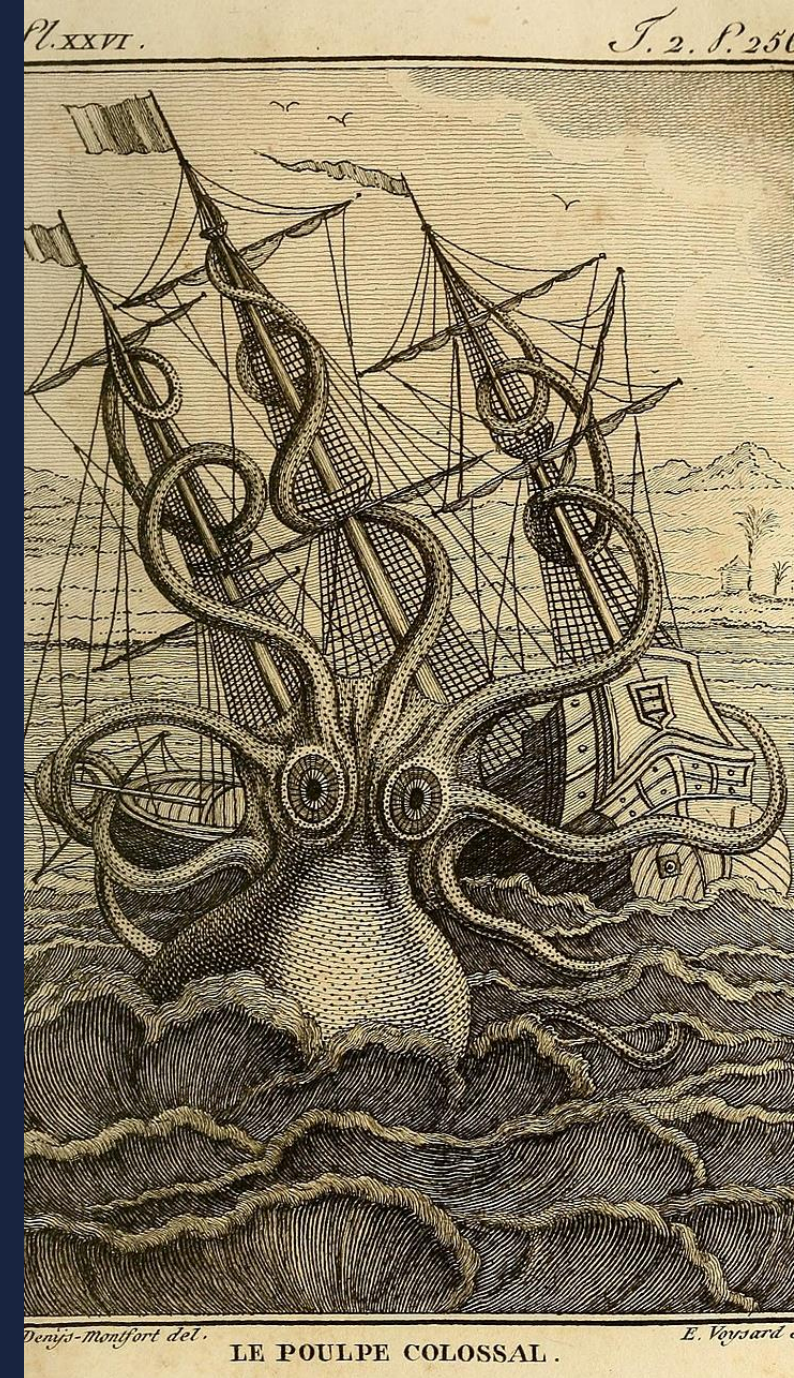
Possible Advantages of Classing FOWTs

- Class rules for FOWTs with a variety of Class Societies
 - DNV, ABS, BV, ClassNK, CCS...
 - Offshore Renewables Developers already working with Class Societies on Project Certification
- Unit Classification can compliment Project Certification
 - Many overlapping activities by Class Society in two processes
 - If both Classification and Project certification done, may be synergies in cost with the Class Society
- Classification well known / trusted in maritime finance and insurance (if not an outright requirement)
 - Should provide financiers greater comfort...lower borrowing rates? Lower Insurance rates?

Inevitably, Bad Things Will Happen...

- MORUs will be towed to foreign waters and ports
- Ownership and creditor rankings will be contested
- Contractual breaches and defaults will be committed
- Arrests will be attempted
- Bankruptcies will result
- Accidents and environmental incidents will occur
- Criminal acts will be (allegedly) perpetrated
- Collisions, allisions, and losses will happen
- The Kraken will be released...

But then what?



An Incomplete List of Potential Sources of FOWT Maritime Claims and Disputes in the future...

Borrower defaults and bankruptcies

*Canadian floating wave power company went bankrupt

Disputes over Title and Priority of Registered Security Interests

Assertion of Maritime Liens

*maritime liens asserted against floating wave turbine

Arrests

*Canadian floating wave turbine arrested

Disputes over Civil Jurisdiction

Disputes over Criminal Jurisdiction

Collisions, Allisions, and Losses

*at least one FOWT has sunk so far

Environmental claims

Salvage claims

*sunk FOWT was recovered

Abandonment

Mobile Offshore Renewable Units, Maritime Conventions, and the CMI Mobile Offshore Renewables Unit International Working Group

“Ship nomenclature” as it relates to maritime conventions:

Is a MORU (legally) a “ship”, “vessel”, or something else, for purposes of domestic maritime law and/or the various binding multi-lateral maritime conventions?

The CMI's prior work on oil and gas units and its relevance to MORUs

Topic		Rio 1977 ¹	Norwegian Alternative 1977 ²	Sydney 1994 ³	Vancouver 2001 ⁴	Relevant to MORUs?
Nationality/Registration		Yes	Yes	Yes	Yes	Yes
Liens		Yes	Yes	Yes	Yes	Yes
Mortgages		Yes	Yes	Yes	Yes	Yes
Vessels under construction		Yes		Yes		Yes
Arrest		Yes	Yes	Yes	Yes	Yes
Other creditors' remedies					Yes	Yes
Judicial Sales						Yes
Collisions		Yes	Yes	Yes	Yes	Yes
Civil jurisdiction					Yes	Yes
Penal jurisdiction					Yes	Maybe?
Removal					Yes	Yes
Salvage		Yes	Yes	Yes	Yes	Yes
Safety					Yes	Yes
Limitations of Liability		Yes	Yes	Yes	Yes	Yes
Liability for pollution		Yes	Yes	Yes	Yes	Maybe?
Limitation Fund					Yes	Maybe?
Apportionment of liability					Yes	Yes
Financial responsibility / maintenance of Insurance					Yes	Yes

1 Under the Rio draft, Convention parties which were also parties to certain maritime topical conventions would agree amongst themselves to apply those referenced conventions to "craft" as well.

2 Under the Norwegian alternative, "craft" shall be "subject to the rules applicable to sea-going ships under the law of a State Party to this Convention", (i.e. the parties would treat MOUs as vessels as they would under their own law (including international obligations).

3 Under the Sydney draft, Convention parties which were also parties to certain maritime topical conventions would agree amongst themselves to apply those referenced conventions to "craft" as well, and if not a party to those conventions, apply State Party law applicable to vessels generally.

4 The Vancouver draft ended the incorporation of topical convention by reference approach as unworkable, and provided stand-alone substantive provisions governing Offshore Units on selected topics.

MORUs and international maritime conventions

Convention	Applicable	Comments
UNCLOS 1982		Yes, but how?
...registration as a ship under Art. 91?		At least 6 MORU flagged to date.
...regulation as an installation under Art.		Coastal States regulate operational MORUs
...innocent and transit passage.		
Maritime liens and mortgages 1926		
Maritime liens and mortgages 1993		
Collision 1910		
Penal jurisdiction 1952		
Arrest of ships 1952		
Arrest of ships 1999		
Civil Jurisdiction (collisions) 1952		
COLREG 1972		
MARPOL 1973		

Convention	Applicable	Comments
SOLAS 1974		MORUs unmanned
LLMC 1976 & Protocols		Does not apply to O&G units, but to MORU?
SUA 1988 & SUA Protocol 2005		Yes, but which? Does it matter?
Salvage 1989		
ISM Code 1993		Passenger, tanker, cargo ships, & MODU.
HNS 1996		HNS not carried as cargo on MORU
Bunker 2001		Covers lubricants, other hydrocarbon oils
ISPS Code 2004		Passenger, tanker, cargo ships, & MODU
Ballast Water Management 2004		
Wreck removal 2007		
Hong Kong ship recycling 2009		
MODU Code 2009		Relevant to MODU only.
Beijing judicial sales of ships 2022		

What is the current focus of the CMI MORU IWG:

The CMI MORU IWG's current activities center primarily on the international aspects and issues of MORU finance and bankability, including:

- (i) Encouragement and mutual recognition of other States' registration of ownership of, mortgages, and hypothèques in MORUs in a publicly accessible register;
- (ii) Recognition of maritime liens and creditors' remedies for a new class of mobile maritime asset;
- (iii) Clarification of civil jurisdiction and establishment of appropriate authorities for MORUs by coastal states;
- (iv) Access to limitations of liability;
- (v) Corresponding requirements for insurance;
- (vi) Freedom of navigation for MORUs; and
- (vii) Where appropriate, recognition of different approaches in different legal traditions.

What is NOT the current focus of the CMI MORU IWG:

- (i) Topics relevant to manned vessels and platforms:
 - (i) SOLAS
 - (ii) MODU Code
 - (iii) STCW Convention
- (ii) Criminal acts:
 - (i) Penal jurisdictional, SUA / SUA Protocol
- (iii) Port state control:
 - (i) ISPS Code ...
- (iv) Other topics already governed by a Maritime convention in force which already (arguably) applies to MORUs:
 - (i) Pollution regulation: MARPOL, Bunker, Ballast Water Management
 - (ii) End of life: Salvage, Wreck Removal, Ship Recycling
 - (iii) Judicial Sales

The First CMI MORU IWG Questionnaire:



The first draft of a future MORU Finance Convention



So what next...

DRAFT (For CMI Internal discussion only)

08-December-2025

**CONVENTION TO FACILITATE THE REGISTRATION AND FINANCING OF MOBILE OFFSHORE
RENEWABLES UNITS, 20___. (MORU FINANCE CONVENTION 20__)
[INSERT Date] Draft**

WHEREAS the Parties to this Convention, BELIEVE that maritime law should be universal for reasons of certainty and predictability, as well as for the facilitation of the sustainable and economic use of the ocean and its renewable energy resources and for the avoidance of disputes and conflicts of laws; AND are therefore moved to establish uniform rules for the regulation of certain matters, as hereinafter set forth, and protection of those engaged in offshore activities and potentially affected by those offshore activities and incorporate mobile offshore renewable units into the body of law governing offshore activities; AND believe that this would be best achieved through a Convention covering all mobile offshore renewables units and structures, RECOGNIZE the need to reconcile interests of States and participants in mobile

Initial high-level issues mentioned in the NMLAs' written responses the MORU IWG has already received

Tension between:

- Flag State
- Coastal State as MORU project licensor and regulator
- Coastal State as state of Transit
- Coastal State as Port State

How do we make the MORU Finance Convention work for jurisdictions where MORU cannot / will not be registered as a MORU?

How should we assign civil jurisdiction over different types of claims:

- Maritime liens,
- Mortgages,
- Other Claims?

How does this work with Beijing Convention on Judicial Sales of Ships?

Need to monitor issues arising from a mismatch in State Parties to a hypothetical MORU Finance Convention and other Conventions which already arguably include MORUs

Appendix





Alexander Severance

Partner

Aarhus, Denmark

T +45 33 34 02 97

alexander.severance@dk.dlapiper.com

Education

- LL.M., New York University, 2008
- LL.M., National University of Singapore, 2008
- J.D., Boston College, 2002
- B.A., Texas A&M University, 1997

Admissions

- Admitted to the State Bar of Texas (USA), 2005

Rankings

- Alexander is recognized within 'Energy' and as a 'Green Ambassador' by the Legal 500

Alexander Severance is a US qualified lawyer whose energy and renewables practice has a special focus on the supply, installation, and maintenance contracts for fixed and floating offshore wind projects. He has worked almost exclusively in the offshore wind space since 2011.

Prior to joining DLA Piper, Alex was an in-house lawyer from 2010-2022 with Siemens Gamesa Renewable Energy, the leading offshore wind turbine OEM. During his time with Siemens Gamesa, he served as a Lead Counsel Offshore from 2019-2022, leading the Denmark-based multinational team of seven qualified attorneys dedicated to exclusively to offshore wind projects around the world. He has provided primary legal support and negotiated a variety of framework agreements, turbine supply agreements, service and maintenance agreements and related supporting agreements for some of the largest, most complex, innovative, and award-winning offshore wind projects built. With 12 years of in-house wind industry experience covering thousands of MWs of fixed and floating offshore wind nameplate capacity, he has a wealth of practical knowledge, and a deep understanding of how offshore wind deals are done, what real world risks and realities exist on the ground, in the ports, and on the water, and what offshore wind projects need to reach financial close and commercial operation.

Alex is a global Co-Chair of the Comité Maritime International's international working group on Mobile Offshore Renewables Units (including floating wind turbines). He also regularly writes on the domestic and international legal issues facing the fixed and floating offshore wind sector, including a series of articles on maritime law's impact on floating wind, and the US chapter of *Offshore Wind Licensing* (ed. Anchustegui & Hunter, 2024). He is co-editor of a forthcoming volume on the law and policy of floating wind turbines (*anticipated 2026*).

Selected relevant experience

- **Hywind Tampen*** (the world's largest floating wind farm) (Norway),
- Regulatory and legislative advice to a government authority regarding floating offshore wind and tidal sectors (Confidential)
- **Baltica 2&3** (2,500 MW) (Poland)
- **Bay State 1*** (1,800 MW) (United States) including: **Southfork, Revolution, and Sunrise**
- **Borssele 1&2*** (752 MW) (Netherlands),
- **Galloper*** (336 MW) (United Kingdom),
- **Gode Wind 1&2*** (582 MW) (Germany),
- **Westermeerwind*** (EPC Nearshore Project) (144 MW) (Netherlands)
- **DONG 6MW Master Agreement*** (2,000 MW) (United Kingdom), including: **Hornsea 1** (the World's largest offshore wind farm when built), **Walney Extension East, Racebank** and **Westermost Rough**
- **Taiwan Round 3** Project (Confidential),
- Negotiation and drafting of the supply agreements for monopiles and transition pieces for developer of a 900+ MW German offshore windfarm
- Multi-project, multi-jurisdiction framework agreement for turbine supply, service and maintenance, and long-term support of offshore wind projects (Confidential)
- Multi-year framework for tower supply to leading wind OEM (Confidential)

This publication is intended as a general overview and discussion of the subjects dealt with, and does not create a lawyer-client relationship. It is not intended to be, and should not be used as, a substitute for taking legal advice in any specific situation. The authors will accept no responsibility for any actions taken or not taken on the basis of this publication. Prior results do not guarantee a similar outcome.