



NEWPORT SHIPPING

**Turnkey decarbonization solutions:
RETROFIT INVESTMENTS aligned to strategic and commercial goals**

Marine Money
Presentation at the 2022 London Ship Finance Forum
Apr. 11th, 2022

NEWPORT AT A GLANCE

Who we are?

More than 50 years of solid experience in Design & Engineering for ship repair and retrofits

Worldwide dedicated commercial & technical service teams in all major shipping hubs, headquartered in UK

Global partnership with 15 shipyards with 38 repair docks

In-house design and engineering solutions for LNG retrofit

Experienced & professional team located globally with extensive knowledge

What we offer?

Turnkey services for all ship repair and retrofits

Newport supports shipowners, by

- a) Providing competitive drydock/repair cost budgets in a network of well-established high quality yards globally
- b) Allowing the aforementioned cost to be repaid over an extended period (up to 24 months), alleviating the cash-flow breakeven of the shipowners

LNG retrofitting solutions for tankers, bulk carriers and container vessels: Approval in Principal (AIP) obtained from DNV & BV for conceptual design

Other future proof solutions for zero-emission shipping

NEWPORT'S COMPETITIVE EDGE IN THIS DEMANDING INDUSTRY

- Newport has established a solid shipyard network across the globe which allows for optimal vessel positioning
- Good negotiation power with the shipyards through scale
- Dedicated drydocking expertise with significant good track record
- Newport provides ship owners a highly attractive pay-as-you-earn model
- Newport provides quality on-site project management at all partner yards
- Digital platform option for easy access / data storage

CLIMATE CHANGE IS THE BIGGEST CHALLENGE AND BIGGEST OPPORTUNITY OF OUR LIFETIME



Shipowners will have to invest in their fleets, through new builds and **retrofits**, in order to comply with emissions regulations and to retain their license to operate.

Moreover, they are facing more and more pressure from their clients and consumers to provide clean transport.



TURNKEY LNG RETROFIT SOLUTIONS

SHIPPING COMPANIES ARE LOOKING TO FUTUREPROOF THEIR FLEET BY RETROFITS (1)



LNG retrofitting solutions for Tankers, Bulk Carriers and Container Vessels.

Approval in Principal (AIP) obtained from DNV & Bureau Veritas for conceptual design.

SHIPPING COMPANIES ARE LOOKING TO FUTUREPROOF THEIR FLEET BY RETROFITS (2)



Class approved, fast and cost effective LNG retrofit for Tanker and Bulk Carrier Vessels.

DNV

APPROVAL IN PRINCIPLE

Particulars of Product

Designer:
Product:

Newport Shipping UK LLP
LNG gas fuel retrofit concept for Capesize and VLCC

This is to verify:

That the fuel storage and supply concept system has been assessed by DNV and found to comply with current Rules of the Society, as specified below.

Basis for Approval

The documentation specified in letter M-SA-CL/HJO/29 Other-J-15009, dated 2021-05-12, has been assessed with respect to:

- DNVGL Rules Pt.6 Ch.2 Sec.5 "Gas Fuelled LNG"
- IMO IGF Code

Conditions and Assumptions for Approval

- The conditions for approval in principle are given in letter M-SA-CL/HJO/29 Other-J-15009, dated 2021-05-12.
- Before construction and installation onboard any particular ship or object subject to classification, a complete set of detailed documentation relevant for the particular ship is to be approved by the Society according to normal classification procedures.

Place: Høvik Date: (2021-05-18)

for DNV

Digitally Signed By: Dalibor Bukarica
Location: DNV Høvik, Norway
Signing Date: 18.05.2021

Dalibor Bukarica
Head of Section

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV"), arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstances be limited to 300,000 USD, and any claims made against DNV (based upon alleged defective services provided by DNV to designers, yards, manufacturers or other stakeholders in the rebuilding process shall under any circumstance be time-barred if made later than 12 months from delivery of the vessel. Based upon written request to the DNV legal entity which has issued this document, a higher limitation of liability may be agreed on a case-by-case basis.

Form code: APR 311
Revision: 2021-03

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SHIPPING COMPANIES ARE LOOKING TO FUTUREPROOF THEIR FLEET BY RETROFITS (3)



Class approved, fast and cost effective LNG retrofit for Container Vessels.



**BUREAU
VERITAS**

APPROVAL in PRINCIPLE
DA-SAFE/21/00228 rev. 01

At the request of:

MARINE SERVICE GMBH & NEWPORT SHIPPING UK LLP

BUREAU VERITAS MARINE & OFFSHORE, acting within the scope of its general conditions ⁽¹⁾, declares hereunder that the design of the:

LNG Fuel Gas Supply System – Portable LNG Tanks

is **Approved in Principle**, with respect of the aim of the classification as defined in Part A, chapter I of the latest edition of our Rules and in the conditions stated in Annex 1.

The present Approval in Principle covers the design of the ship as shown on the documents listed in Annex 2.

The validity of this approval may have to be reconsidered, in case of any major modification likely to invalidate the principles shown on these documents. The approval would become null and void should BUREAU VERITAS MARINE & OFFSHORE not be kept informed of such modifications.

Prior to the classification of a ship, all relevant drawings, calculation notes, test reports and other documents required by the Rules or necessary to address the technical issues listed in Annex 3 are to be submitted for review.

Issued at Paris, on 10th June 2021

Damien de CASTELET

⁽¹⁾: see Appendix

THE SHIPPING INDUSTRY IS PUSHING TOWARDS THE NEW NORMAL: ZERO EMISSIONS

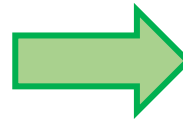
WHAT DOES THIS MEANS?

Shipping is the most fuel- and cost-efficient mode of transport and it has the highest environmental efficiency per ton-mile meaning it's here to stay

International shipping is –due to its size –a major polluter; GHG emissions by the maritime industry exceed 1 billion tons per annum

The current trajectory of GHG emissions is not in line with IMO (or EU) reduction targets of 40% by 2030, or 50% by 2050

Increasing regulatory requirements and customer focus on the environmental impact of the shipping industry calls for solution



Shipowners will have to invest in their fleets, through new builds and **retrofits**, in order to comply with emissions regulations and to retain their license to operate.

TURNKEY LNG RETOFIT INVESTMENT ALIGNED

NEWPORT'S turnkey decarbonization program ensures that the LNG RETOFIT INVESTMENT is aligned with strategic and commercial goals.

Advantages:

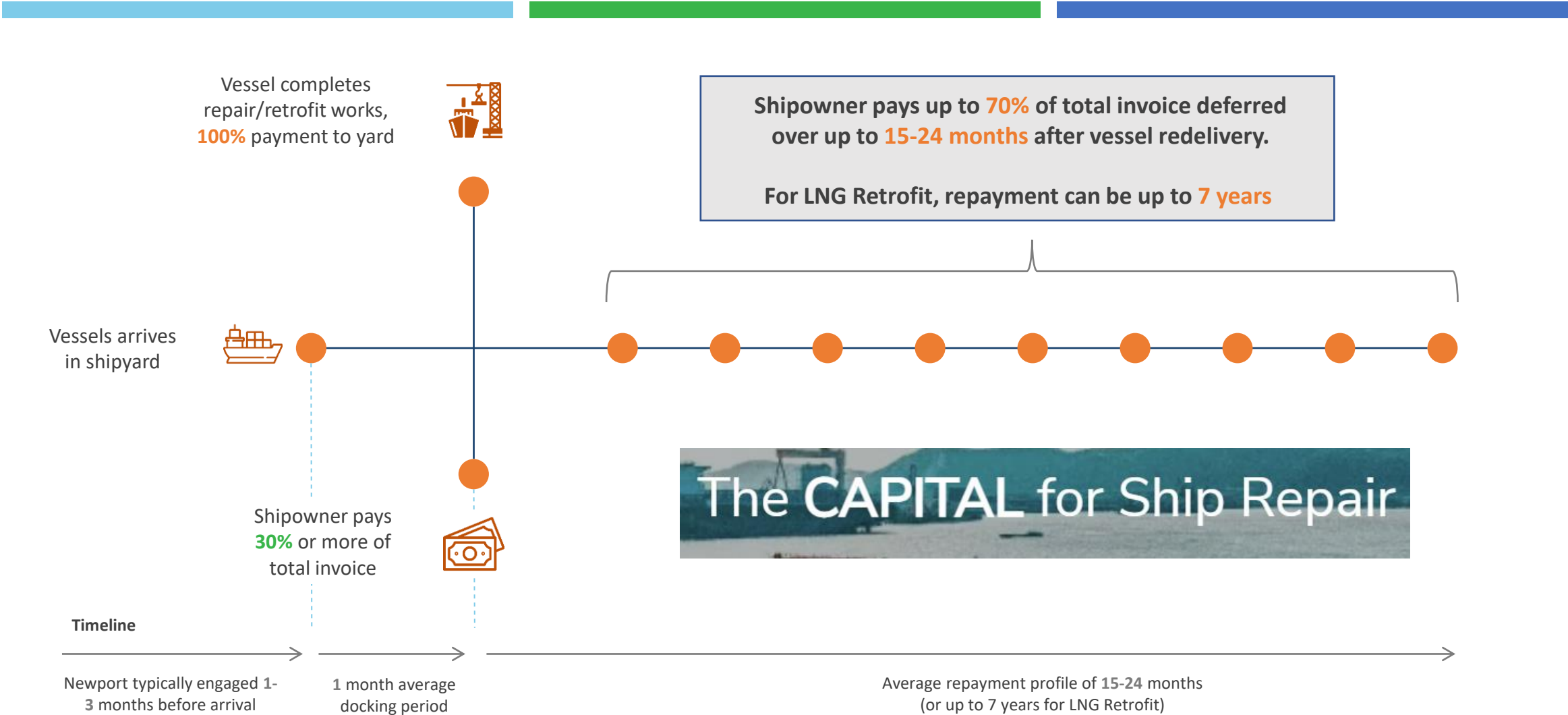
- Proprietary design with AIP status (Bureau Veritas and DNV)
- Detailed evaluation of RETROFIT OPTIONS for each vessel in your fleet
- Access to TURNKEY EXECUTION from our partner yards and suppliers
- Access to **FINANCE** to support the retrofit investment
 - NEWPORT can structure customized financing solutions for the Retrofit project (subject to credit evaluation)





ENHANCED PAYMENT STRUCTURE FOR SHIP TECHNICAL SERVICES

ADVANTAGES OF ENHANCED PAYMENTS OPTIONS FOR SHIP TECHNICAL SERVICES



ADVANTAGES OF NEWPORT'S DEFERRED PAYMENT OPTIONS FOR SHIP TECHNICAL SERVICES

- Optimization of treasury & working capital planning + better forecasting
- Time better focused on core business operations
- 'Pay as you Earn' payment scheme that minimizes cash outlay for shipowners
- Increased debt capacity
- Tailor-made solutions structured to cater to your needs
- 'All in One' invoicing to include cost for i.e. equipment, spare parts and painting
- No requirement for collateral or mortgage which frees up working capital for owners
(for LNG retrofit, addition collateral may be required)
- Security in form of signed Irrevocable Payment Guarantee

GREEN SHIP FINANCE FOR DECARBONIZATION

With sustainability demand growing maritime is moving towards a global green ship finance market with a major demand expected for retrofit funding.



Image: Pixabay

Green financing in shipping is here to stay!



KEY TAKE AWAYS

KEY TAKE AWAYS

- **Time to act is now!**
- Newport has the necessary Turnkey decarbonization solutions
- LNG Retrofit = Class approved, fast and cost effective
- Newport = One stop shop for retrofitting solutions
- Newport makes sure that the LNG retrofit investment is aligned with strategic and commercial goals
- **Collaboration is needed to reach the goal!**



Image: <https://affenfaustgalerie.de/de/shop/item/eike-koenig-now-yes/>

**MANY THANKS FOR
YOUR ATTENTION**





APPENDIX:

TECHNICAL DETAILS + CASE STUDY

Key Parameters for Bulker (Capesize)

VESSEL PARTICULARS

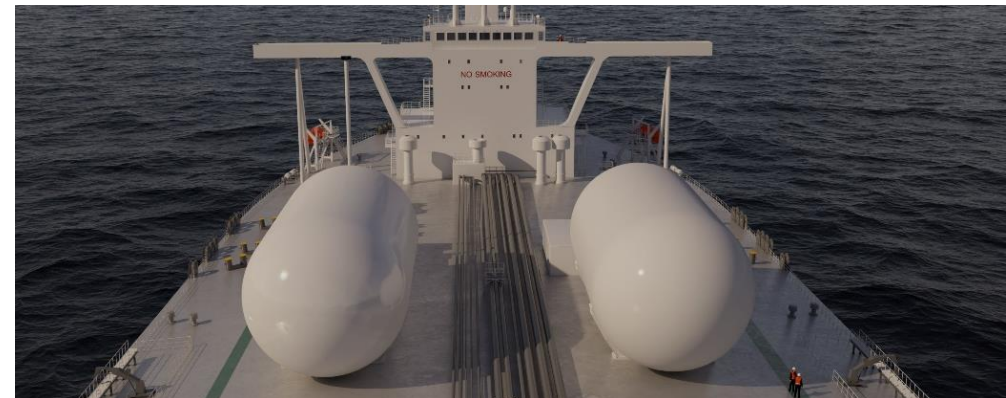
- IMO type C
- LNG tank: 1x3500 m³
- Engine: 6S70ME-C10.5-GI
- MCR: 18660 Kw
- NCR: 15861 Kw
- SGC: 134.8 g/Kwh
- M/E Cons.: 2138 Kg/h
- Speed: 14.0 Kn
- Endurance: 22 days
- Range: 7500 nm



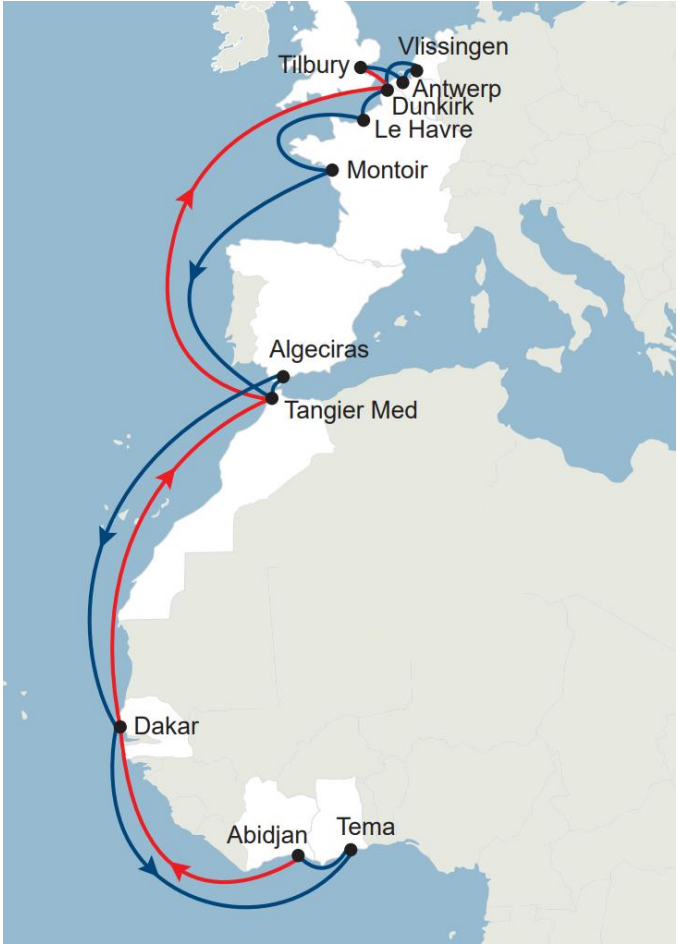
Key Parameters for Tanker (VLCC)

VESSEL PARTICULARS

- IMO type C
- LNG tank: 2x2300 m³
- Engine: 7G80ME-C10.5-GI
- MCR: 24330 Kw
- NCR: 20681 Kw
- SGC: 126,1 g/Kwh
- M/E Cons.: 2608 Kg/h
- Speed: 14.5 Kn
- Endurance: 24 days
- Range: 8500 nm



Containership: Case Study (route source CMA-CGM)



Europe – West Africa (EURAF)
6 Vessels – 42 days



Europe – Mediterranean (LEVANT)
5 Vessels – 35 days

Containership: Case Study – Assumptions, Results and Benefits



▪ Assumptions

- 11 retrofits in total (5500 TEU)
- 20 knots speed
- EURAF each 5 days
- LEVANT each 6 days
- 30 mins on/off + 3 hrs Land
- Le Havre as Main Hub

▪ Results

- EURAF 96 LNG-container/ship
- LEVANT 84 LNG-container/ship
- EURAF 576 LNG Containers
- LEVANT 420 LNG Containers
- Shadow 96 LNG Containers
- In Total 1112 LNG Cont. (20% resv.)

▪ Benefits

- Reduced Retrofit Period
- Standardized Structure
- Flexible & No need Bunker Tanker
- EURAF 1.5kt-CO2/ship/trip less
- LEVANT 1.3kt-CO2/ship/trip less
- **Save 137k t-CO2 abt. €11m p.a.**

Containership: Case Study - Potential Vessel Candidates

SIZE ☐	4000-6000 TEU	6000-8000 TEU	8000-10000 TEU	10000-12000 TEU	12000-14000 TEU	14000-16000 TEU	>16000 TEU
TOTAL (<10 years)	240	72	259	122	158	119	156
MAN MC	77	22	12	2	20	18	0
WARTSILA	5	2	19	12	6	36	8
MAN ME	119	16	213	105	111	65	145
WARTSILA FLX	39	32	15	3	21	0	3
Max MCR [kW]	51390	57222	72240	72240	80905	72240	75570
Avg MCR [kW]	30994	43852	52071	51806	61198	54797	60749
Min MCR [kW]	11810	27060	36032	34223	40200	46360	46620
Max Srv. Speed [kNots]	25.0	25.5	25.8	25.2	25.3	25.1	24.1
Avg. Srv. Speed [kNots]	22.3	23.2	23.3	22.9	23.9	22.4	19.9
Min Srv. Speed [kNots]	14.5	19.0	21.0	21.0	20.9	18.0	14.5
POTENTIAL (*)	158	48	228	108	132	65	148

❖ Total candidates for current fleet **887** vessels.

❖ Also **222** potential new building orders