November 2026

Shipping Market Review



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Foreword

Every owner comes to the same question: whether, and when, to renew the fleet.

The question is simple; the decision is not.

It requires a view on **when to order or buy**, **which fuel the next ship should burn** and **who will finance her**. This review is organised around that decision. Each of its four chapters examines one part of it.

Each chapter can be read on its own. Read together, they describe the conditions under which the next generation of ships will be **ordered, fuelled and financed**.

Christopher Rex
Head of Sustainability & Research

ONE DECISION, FOUR CHAPTERS

1

THE MARKET *Shipping Markets at a Glance*

How much of today's strength may last?

Shipping is earning more than it has for a long time, and for longer. But earnings that rest on detours and disruptions can fade quickly.

2

THE FUEL *Clean Shipping Fuels*

Which fuels are likely to reach ships, and when?

European rules now put a price on carbon and raise it over time, but they leave the choice of fuel to the owner.

3

THE LENDER *No Ship Is Financed Alone*

What does a carbon budget mean for an owner seeking a loan?

Since January 2026 European banks have had to treat the gap between their borrowers and the EU's 2050 climate-neutrality goal as a financial risk. Each must show its supervisor how it will manage that risk, and a plan that does not convince can cost it capital. In effect, every EU bank now lends against a carbon budget. An older or less efficient ship draws more of it. The budget is set for the portfolio, not the ship, so a bank can keep lending against older tonnage only as long as it keeps adding young ships that draw less. Age and fuel now shape how a ship is financed, alongside what she earns. Lenders outside the EU carry no such budget.

4

THE SHIPYARD *Shipbuilding*

Who can build what, and when?

Yards have sold ships faster than today's berths can build them, so the orderbook can be delivered on schedule only if capacity grows. Until it does, an owner ordering today buys a place in a queue, at prices set by scarce berths rather than by cost, and for the scarcest types the next open berths are in 2029.

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Chapter 1

Shipping Markets at a Glance

Shipping's record has lasted longer than any boom since 2000, yet buyers are pricing it to fade. This chapter asks whether they are right.

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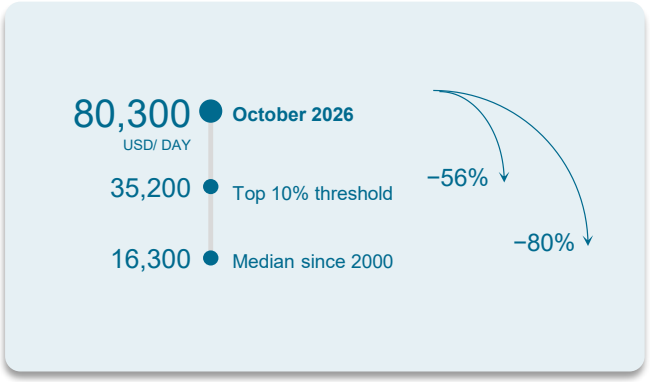
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The answer

Buyers are paying for months of record earnings, not years

Shipping's record has lasted longer than any boom since 2000, yet buyers are pricing it to fade. This chapter asks whether they are right.

Higher, and for longer

Booms in shipping tend to be short. The current one is not: the ClarkSea Index has been in its top decile for eight months in a row, the longest run since 2000, and it is still climbing. It is at a record level from which there is no way up to measure against, only a way down, and the way down is long: the index would have to fall 56% just to leave its top decile, and 80% to return to its long-term median.



Old and new ships, priced up alike

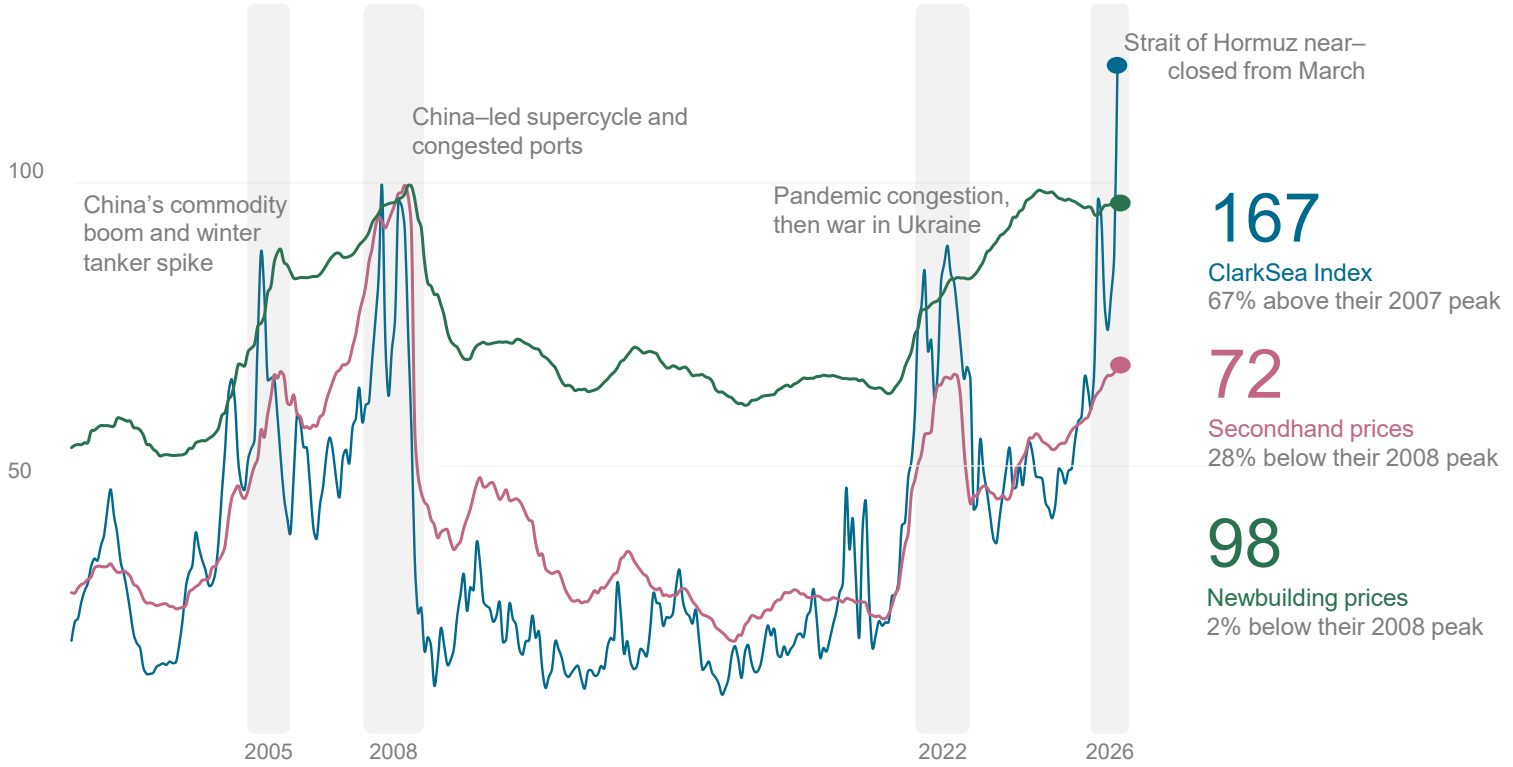
In past booms, ship prices have followed earnings, all the way to the top in 2007–08 and some of the way in 2021–22. This time, the overall price index has lagged, but Crude Tanker prices, where much of the record is earned, have climbed with it. How they have climbed is telling: new and old Tankers have been priced up by the same amount of money. A Suezmax has gained about USD 40 million since February, whether it is new or 15 years old. Had buyers believed the record would last, the young ship, with two more decades of work ahead, would have gained far more. Instead, they are paying for a windfall that lasts months, not years.

Earnings rank
Measured since 2000
ClarkSea index
100%

Secondhand price rank
Measured since 2000
Secondhand price index
94%

Newbuilding price rank
Measured since 2000
Newbuilding price index
94%

Exhibit 1 Earnings and vessel prices since 2000 (index, 2007–2008 peak = 100)



Source: Clarksons and Danish Ship Finance, each series indexed to its own 2007–08 peak, and the threshold and median measured since 2000. Monthly data to October 2026.

Ships have found work in longer journeys, not more cargo

Since 2019, fleets have grown faster than the volumes of cargo they carry, but longer round trips are now keeping about one ship in ten in work.

Fleets have outgrown their cargo

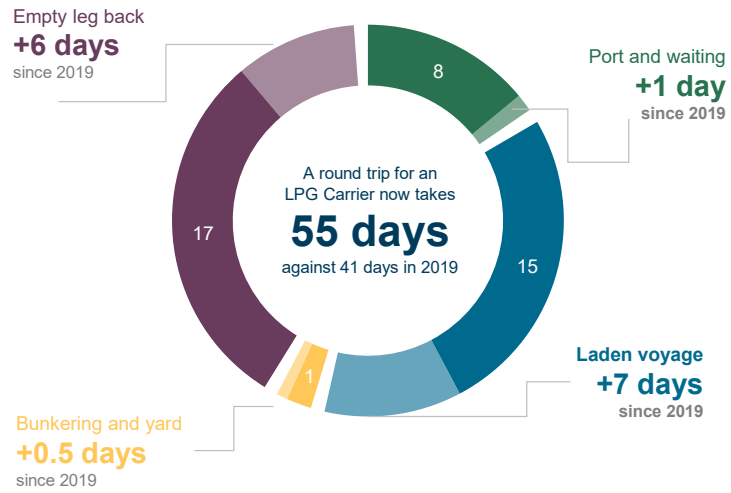
Since 2019, every fleet has grown far faster than the volume of cargo it carries. Gas Carrier fleets have grown three times as fast as their cargo, and Tanker fleets have grown while their cargo has shrunk. That would normally leave ships idle and earnings under pressure. Instead, most of the added ships have found work, because the work itself has changed.

Every ship follows a loop: it loads, sails, unloads, heads off empty to the next cargo, waits its turn in port and loads again. That loop is its round trip, and every day of it counts, whether the ship sails full, sails empty or waits in port. Today, the round trip takes longer for every fleet. An average LPG Carrier that needed 41 days in 2019 now needs 55, a third more, so it carries a quarter less cargo in a year.

Longer round trips keep part of every fleet in work

Three changes have caused round trips to lengthen. The map has expanded, as Asia is buying more from the Atlantic and ships are sailing round the Cape. The number of empty legs has grown, as sanctions and the closure of the Strait of Hormuz have left the next cargo an ocean away. And ships have slowed, at sea and in port.

Each ship then lifts fewer cargoes a year, so the same cargo needs more ships. Run today's cargo through the round trips of 2019, and about one ship in ten would have nothing to do. These are the extra ships, in work only because round trips are longer. They account for all of the added ships in the LPG Carriers segment, most in Bulkers and about two–thirds in LNG Carriers, but only about a third in Tankers, where much of the rest is the sanctioned fleet, working in a market of its own.



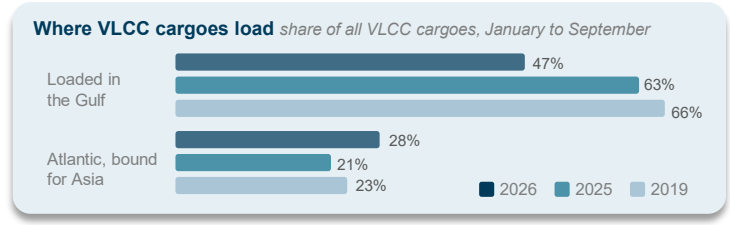
	Growth since 2019		2026 / Lost since 2019	Share of each fleet in work only because trips are longer
LPG Carriers	Cargo +18%	Fleet +55%	6.7 / 2.2	**1 in 4** about 240 ships
LNG Carriers	Cargo +19%	Fleet +61%	9.2 / 2.1	**1 in 5** about 115 ships
Dry Bulk	Cargo +12%	Fleet +26%	6.5 / 0.7	**1 in 11** about 1,090 ships
Product Tankers	Cargo −11%	Fleet +20%	9.3 / 1.1	**1 in 10** about 245 ships
Crude Tankers	Cargo −6%	Fleet +20%	6.8 / 0.7	**1 in 11** about 140 ships

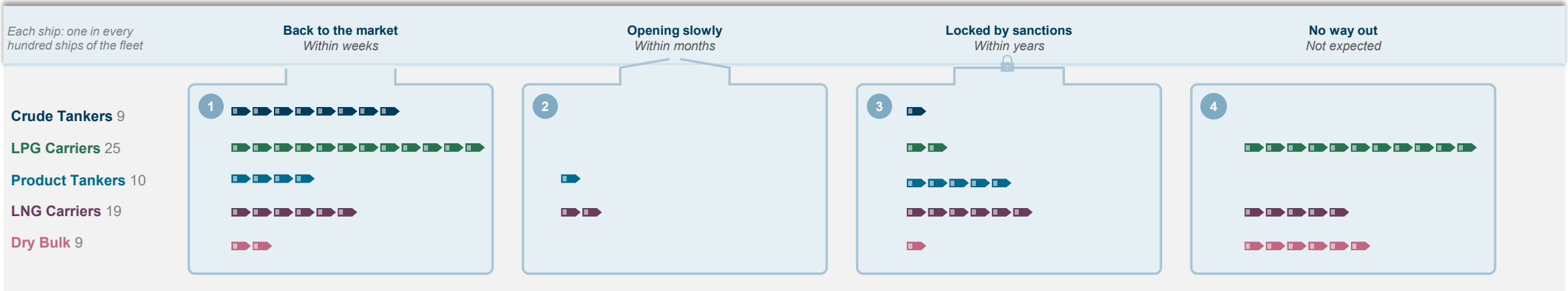
Source: AXSMarine, Clarksons and Danish Ship Finance. Cargo: seaborne trade in tonnes, 2026 estimate against 2019. Fleet: capacity at the start of 2026 against the start of 2019. Round trips: voyages completed May to September; capacity–weighted; domestic trade excluded.

Much of the extra work could last; the newest layer could go fast

Three disruptions and one lasting shift have lengthened round trips, and each disruption would let its ships go at its own pace.

Longer round trips mean more ships are needed to carry the same cargo; these are the extra ships. Each ship below represents one in every hundred ships in its fleet. The extra days have not been added all at once but in layers, each laid down by a different event. The newest layer is the easiest to date: whatever has lengthened the round trip over the past year is associated with the closure of the Strait of Hormuz, with Asia turning to the Atlantic for the oil and gas it used to load in the Gulf. Beneath this layer lie the detour round the Cape, since 2024, and the sanctions on Russia, since 2022, each found on the routes it changed. At the bottom are lasting shifts: trade that has moved for good, and ships that are sailing more slowly. Crude Tankers stand out: of every hundred, nine are extra and eight of those are on the newest layer alone, so a reopening could send them back to the market within weeks. In most other fleets, the extra ships are mainly on the older layers – their extra work looks set to last for years.





1 Strait of Hormuz since 2026

Asia is now fetching the oil and gas it used to load in the Gulf from the Atlantic. This is keeping six in ten of the extra Crude Tankers in work and almost half the extra LPG Carriers. Crude Tankers would be the first to go first after a reopening; Gas Carriers would follow as Gulf plants restarted.

2 Red Sea since 2024

The detour round the Cape is keeping about one in ten of the extra Product Tankers and LNG Carriers in work, and fewer of the others. Ships would return to the Suez one at a time, as insurers and owners accepted the route again, so the release would take months rather than weeks.

3 Russia since 2022

Russian oil and gas is now sailing to buyers further away, and Europe is sourcing its fuel from further away too. This is keeping six in ten of the extra Product Tankers, four in ten of the extra LNG Carriers and three in ten of the extra Crude Tankers in work. This change only with the sanctions, and Europe has already replaced what it used to buy from Russia.

4 Lasting shifts building before 2019

Asia is buying more ore, bauxite and gas from the Atlantic, and ships are sailing more slowly than in 2019. This is keeping seven in ten of the extra Bulkers, four in ten of the extra LPG Carriers and three in ten of the extra LNG Carriers in work. For Crude and Product Tankers, trade has moved to shorter routes instead, so none of their extra ships are here.

Source: AXSMarine, Clarksons and Danish Ship Finance. Each ship represents a tenth of its fleet's extra ships, those kept in work by round trips longer than in 2019; voyages completed May to September.

Crude Tankers are the most exposed; LPG Carriers are adding the most ships

Risk is greatest where there are record earnings and prices, support that could go fast and new ships beyond renewal. No fleet is experiencing all four risk factors.

If the Strait reopens, Crude Tankers will feel it first. Within weeks, eight in every hundred Crude Tankers could be back on the market, with earnings and ship prices at record levels. On paper, the ships on order merely replace old Tankers. But that would need a quarter of the fleet to be scrapped by 2029, a far faster pace than in recent years, and Suezmaxes have ordered more ships than they could scrap even then. Old Tankers trading with Russia, Iran or Venezuela will not make room as long as sanctions remain in place. LPG Carriers face the opposite risk: their extra work would go slowly as Gulf plants restarted, but their fleet is growing faster than any other. The other fleets have less at stake, as less of their extra work would go quickly, and their new ships will mostly be replacing old ones. Only LNG Carriers are adding many new ships, and into a market that is already weak. Timing matters too. Crude Tankers will gain most of their new ships in 2028 and 2029. If the Strait reopens before then, those ships would be entering a market that has already lost its extra work.

Full dot: met (top tenth since 2000; half or more of the extra ships; net growth of 10% or more). Half a dot: partly (top fifth; a quarter; 5% to 10%). Empty: not met.

	Earnings near record percentile since 2000	**Ship prices near record** percentile since 2000	**Extra work could go fast** extra ships free within weeks	**New ships beyond renewal** % of the fleet by end of 2029 (on order; 20 years or older; of which are trading with Russia, Iran or Venezuela)	**Where the four risk factors meet**	**What it means**
Crude Tankers	100th	100th	8 in 9	25% / 36% — Renewal only	3 of 4	Three out of four. Most extra ships could go within weeks, and the ships on order will only be replacing old ones if a quarter of the fleet goes for scrap by 2029.
LPG Carriers	100th	89th	12 in 25	37% / 26% — Net growth +13%	2 of 4	Record earnings and the most new ships beyond renewal, a net 13% of the fleet. Its extra work would go slowly as Gulf plants restarted.
Product Tankers	100th	100th	4 in 10	19% / 41% — Renewal only	2 of 4	Record earnings and prices, and four in every hundred ships could go fast, but the ships on order will only be replacing old ones.
LNG Carriers	18th since 2015	50th since 2021	2 in 10	31% / 24% — Net growth +9%	0 of 4	New ships beyond renewal, a net 9% of the fleet, will be entering a weak market: earnings are in the bottom fifth of the level over the past decade.
Dry Bulk	81st	92nd	1 in 10	13% / 22% — Renewal only	1 of 4	Ship prices in their top decile, but not earnings; little extra work could go fast, and the ships on order will only be replacing old ones.

Source: Clarksons, AXSMarine and Danish Ship Finance. Earnings and prices: the latest month (October 2026) ranked against all months since 2000; LNG earnings since 2015, prices since 2021. Fleet and orderbook: September 2026.

The ships on order outnumber the ships that could go

In the VLCC, Suezmax, Capesize and large Gas Carrier segments, scrapping every ship over 20 would not offset the orderbook, and older ships would lose most of their price.

Scrapping cannot make room

Fleet–wide figures blur the imbalance, because old ships and new orders may be in different sizes. Split by size, the orderbook is larger than the whole fleet over 20 years within VLCCs, Suezmaxes, Capesizes and the large Gas Carriers, so their fleets will grow even if every old ship goes for scrap. Only Aframaxes are below the line, before adding the size of the LR2 orderbook.

VLCCs are close to the line: 33% of the fleet is on order and 20% is over 20. Scrapping every old VLCC would still leave the fleet 13% larger, and the 60 or so VLCC–sized ships in work only because the Strait is closed take that to about a fifth. Few old ships are going anyway: about eight a year over the past decade, and three in the past two.

That is a structural case for weaker freight rates, and older VLCCs would pay most. Buyers have paid about USD 100 million more since 2025 at every age. If that goes and a weaker market cuts five years off working lives, a ten–year–old VLCC could lose up to two–thirds of its price, a 15–year–old four–fifths and even a five–year–old half.

What a VLCC is worth today, and what it would lose

USD million by age. Price today; after losing the premium paid since the 2025 average; after a year of weaker freight and five fewer working years

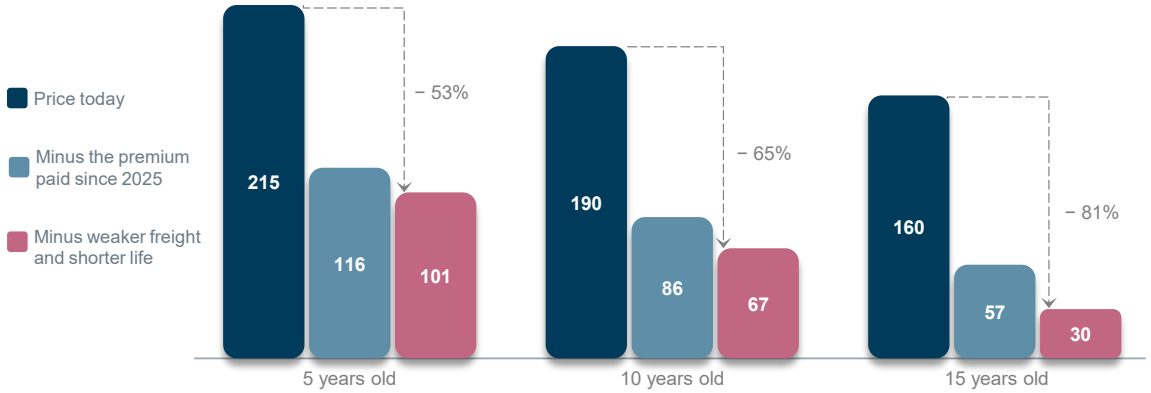
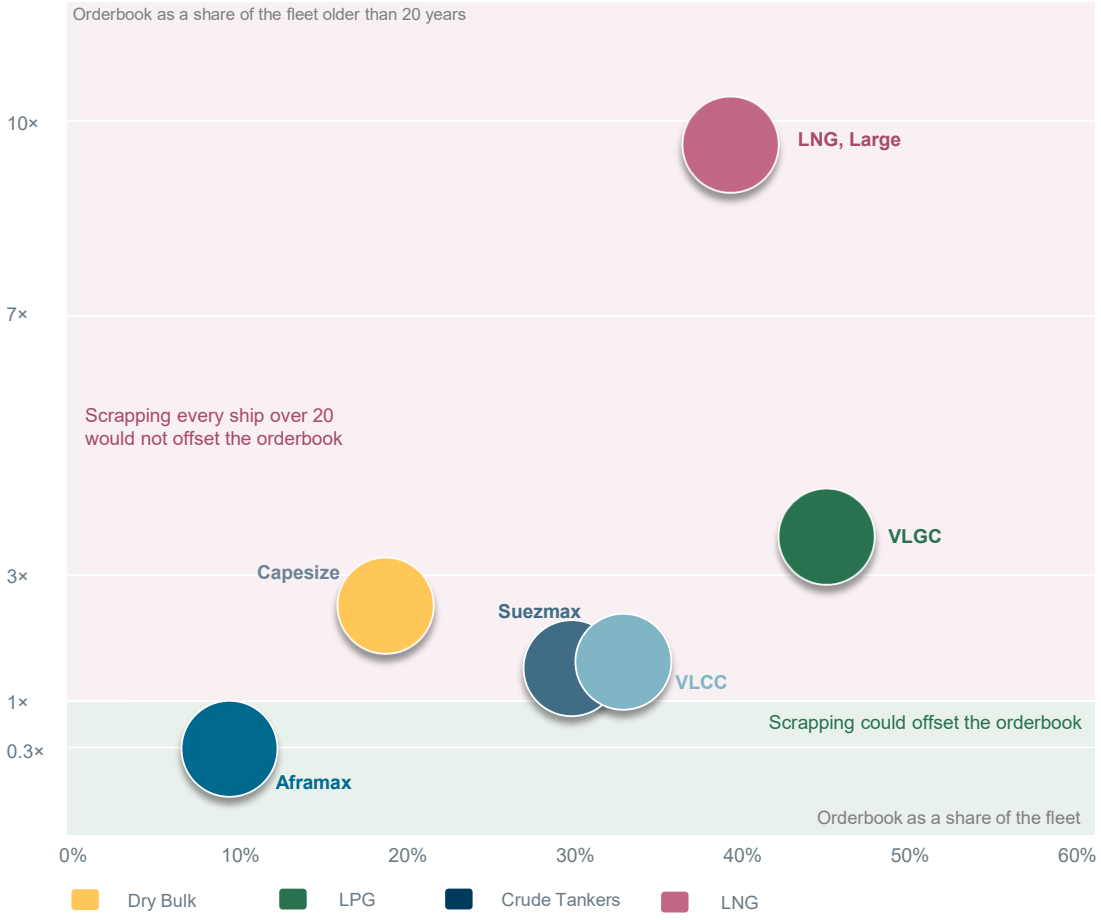


Exhibit 2 Orderbook–to–fleet ratio



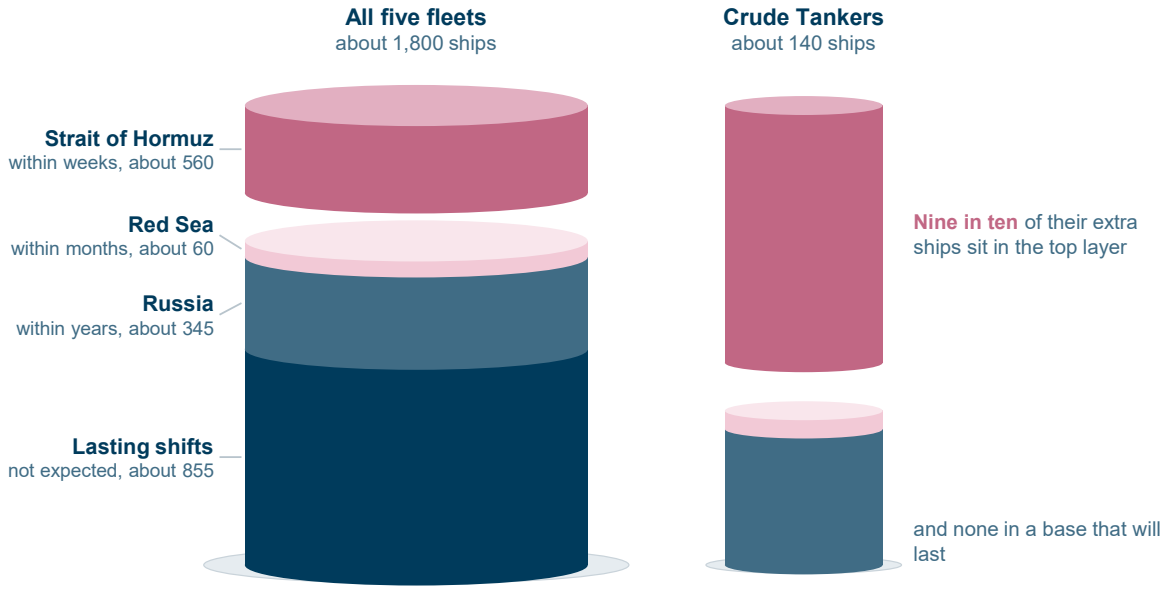
Source: Clarksons (fleet and orderbook by ship type, capacity terms, October 2026), AXSMarine and Danish Ship Finance. Whole orderbook against the fleet aged 20 or more today. Returning ships: extra Crude Tankers on the Hormuz layer in Shipping Markets at a Glance, as VLCC equivalents. The dark–trade adjustment awaits Kpler or Vortexa vessel lists.

Ship buyers are right to look for a windfall, most of all in Crude Tankers

One ship in ten is in work only because round trips are longer, and almost half of that work looks set to last, but not in Crude Tankers.

The count

The extra work as a layer cake: each layer as thick as its share of the ships, the newest on top. Both cakes are drawn to the same height.



3,370 ships on order for delivery by 2029, almost twice as many as in the whole cake. Even if every ship turning 20 by then went for scrap, about 195 would add to the fleet, and far more in some subsegments.

The answer

Are buyers of ships right to hold back?

Almost half of the extra work looks set to last. About 1,800 ships across the five fleets are in work only because round trips are longer than in 2019. Almost half of them rest on shifts that look set to last, mostly in Dry Bulk, and a fifth on the sanctions on Russia. Almost a third rest on the closure of the Strait of Hormuz.

But the top layer could go within weeks. Crude Tankers lean on it most, and have no base that will last, as the small cake shows. Gas Carriers would follow as Gulf plants restarted (months or years).

And earnings would move before the ships. Freight rates would react to the news of a reopening, while ships would return over weeks and years, and the yards would keep delivering. Buyers of secondhand ships are right to pay for months of the record, not years, most of all for Crude Tankers.

What would prove us wrong

1. Asia keeps its new Atlantic suppliers after a reopening, to reduce its dependence on the Strait, so Crude Tankers keep their long hauls.
2. Cargo grows faster than the fleets, as restocking after the closure might last for a while.
3. Gulf gas plants restart faster than expected, and Gas Carriers lose their extra work sooner.

Looking ahead

Three numbers will show which way the record goes: how much of Asia's crude loads in the Gulf again, how many ships return to Suez, and how fast old ships go for scrap. The first will decide Crude Tankers' record, the second how fast the Red Sea layer comes off, and the last whether the ships on order replace old ships or add to the fleet. Until the first moves, the record rests on a Strait that is mostly still closed.

Source: AXSMarine, Clarksons and Danish Ship Finance. Each ship stands for a tenth of its fleet's extra ships, those kept at work by round trips longer than in 2019; voyages completed May to September.

Chapter 2

Clean shipping fuels

The goal and the route

Regulators have told shipping where to arrive, not how to get there. Into the 2030s a ship can stay within the rules with its own emissions little changed – and the fuel that would change that is late.

I **Who asks what**

II **What a ship can do**

III **Who pays for new fuel**

IV **What to expect**

The story in one sentence

Regulators have set shipping a goal but not a route. Into the 2030s a ship can stay within the rules by paying, blending and burning a little less, **while its own emissions barely move – the fuel that would move them is late.**

I · Who asks what

The rules set a goal, not a route

80%

below the 2020 average: the EU's limit when a ship ordered today is 21

The EU prices and limits, the IMO sets a goal and rates, and banks measure. No rule names the fuel.

II · What a ship can do

Compliance can be bought

92%

of ships met the EU's limit on fuel through pools in 2025

Burn less, blend, pay or switch. Only a new fuel reaches the later limits; paying changes nothing on board.

III · Who pays

New fuel needs a long signature

10–15 yrs

the contract a new–fuel plant is financed against

Freight is sold for a voyage or a year, and public money goes to defence and to uses at home.

IV · What to expect

Little binds outside Europe

≈1/8

of international shipping's energy is reached by the EU's rules

Compliance without new fuel to 2030, scarce and regional fuel in the 2030s, and signatures needed for the 2040s.

Why it matters

Compliance is not reduction

Paying satisfies the EU and leaves the ship's emissions where they were; the reduction happens on the ships that sell cover.

The market moves emissions

Into the 2030s a ship's speed, distance, ballast legs and waiting move its emissions more than any rule does.

The bank answers in public

Banks measure every voyage of the ships they finance and publish the result. Waiting for new fuel does not move it.

Three parties ask something of a ship: the EU prices and limits, the IMO sets a goal and rates, and the banks measure

Only the EU's rules carry a price today. The IMO's goal binds no individual ship, and its draft limit on the fuel's score is being renegotiated.

Exhibit 2 Who asks what of a ship: the measure used, the voyages covered, how binding it is, and what happens if the ship falls short

WHO ASKS	RULE OR AGREEMENT		TONNES	FUEL'S SCORE	CARBON INTENSITY	VOYAGES COVERED	HOW BINDING	IF THE SHIP FALLS SHORT
EU	**Emissions trading (2024)**	A	●	○	○	EU voyages and ports	Law	Buys an allowance per tonne
	FuelEU Maritime (2025)		○	●	○	EU voyages	Law	Cover from another ship, or a fine per t CO2e
IMO	**Goal for 2030, 2040, 2050**	B	●	○	○	The fleet as a whole	Goal	Nothing: the goal is not divided among ships
	Fuel report and A–to–E rating (2019, 2023)		○	○	●	All voyages	Law	A plan to improve after three years at D or one at E
	Net–Zero Framework		○	●	○	All voyages	Draft	USD 380 per t CO2e above the limit, USD 100 in a band below (April 2025 text)
Bank	**Poseidon Principles (2019)**	C	○	○	●	All voyages	Voluntary	Enters the score the bank publishes

A — Only the EU charges today

Prices every tonne since 2026 and limits the fuel since 2025, for ships above 5,000 gt of any flag.

B — The IMO's goal binds no ship

At least 20% below 2008 by 2030, 70% by 2040 and net zero by about 2050 – for the fleet, not for each ship.

C — The bank is not a regulator

It asks the owner for data, and answers in public for emissions it does not control.

The third party is the bank: signatories with nearly three–quarters of ship finance hold each ship to a path to the 2050 goal

The Poseidon Principles are the banks' own agreement of June 2019, not a rule. Eleven banks founded it.

Exhibit 3 How the Poseidon Principles work, and where the signatories' portfolios stood for 2024

The owner reports (A)

Files its fuel report every year under the IMO's rule. A standard clause in new loans obliges it to give the data to the bank.

The bank measures

Works out each financed ship's carbon intensity from the fuel it actually burned – well–to–wake, on all its voyages.

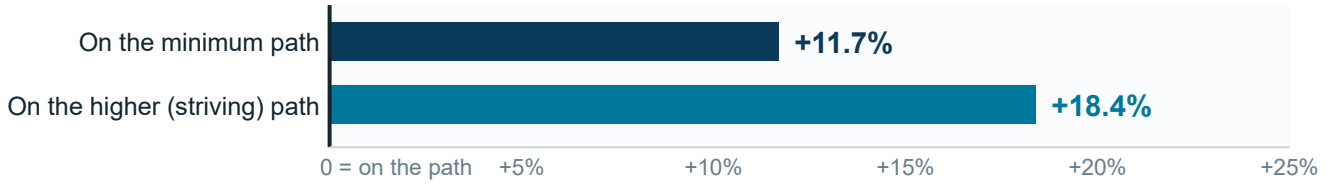
Against a path to 2050 (B)

Compares it with a path for that ship type and size leading to the IMO's goal: one for the minimum, one for the higher ambition.

The result is public

Each signatory publishes its portfolio score every year: 0 means on the path, +10% means 10% above it.

Signatories' average portfolio score for 2024, % above the path (C)



11 → 36

founding banks in June 2019 → banks and other financiers that have signed today

≈3/4

of the world's ship finance is held by signatories, by the Principles' own estimate

A — What the owner gives is data

The measure rests on the fuel the ship actually burned, from the report it already files with the IMO.

B — Ship by ship, to 2050

Where the IMO's own rating looks no further than 2030, the Principles hold each ship to the 2050 goal.

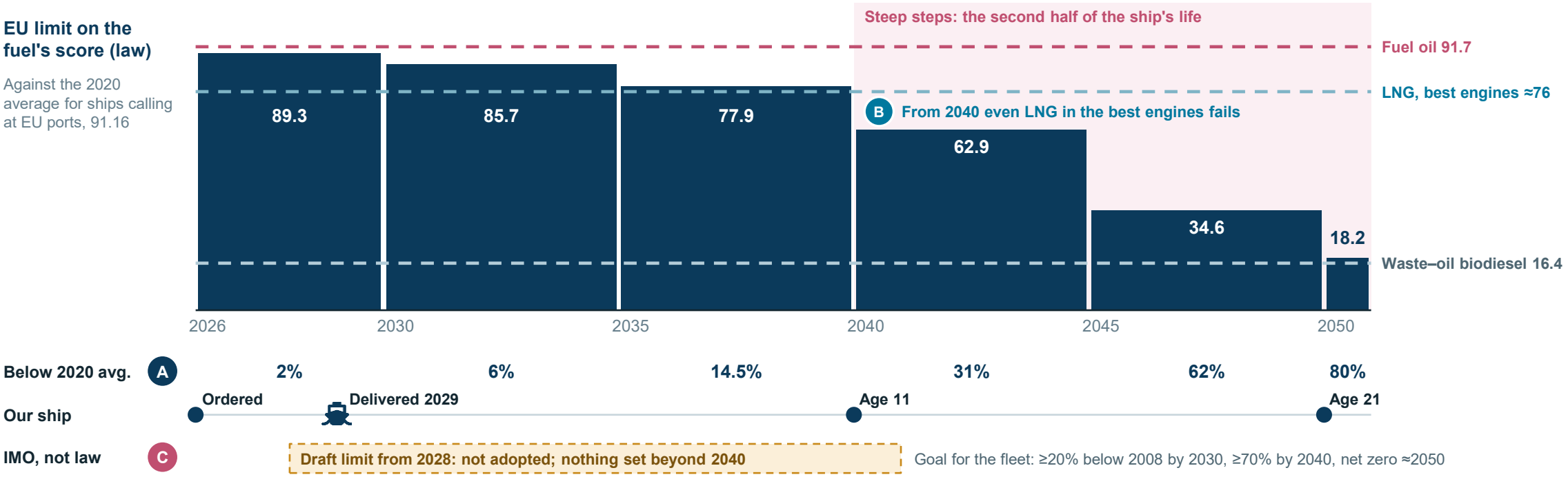
C — Portfolios sit above the path

11.7% above the minimum path and 18.4% above the higher one for 2024 – helped by a revised method.

A ship ordered today meets the easy years first: the EU's limit is 6% below the 2020 average at age 1, 31% at 11 and 80% at 21

The demands tighten on dates that are already known. Beyond 2030 only the EU's dates are law; the IMO's draft is not adopted and has no new timetable.

Exhibit 4 The EU's limit on the fuel's score over the life of a ship ordered in 2026, gCO2e/MJ, against three fuels



A The first years are easy

2% below the 2020 average now and 6% when the ship is one: a small blend or some cover does it.

B LNG runs out mid–life

LNG scores 3–17% below fuel oil and meets the limit only until 2039, ten years into the ship's life.

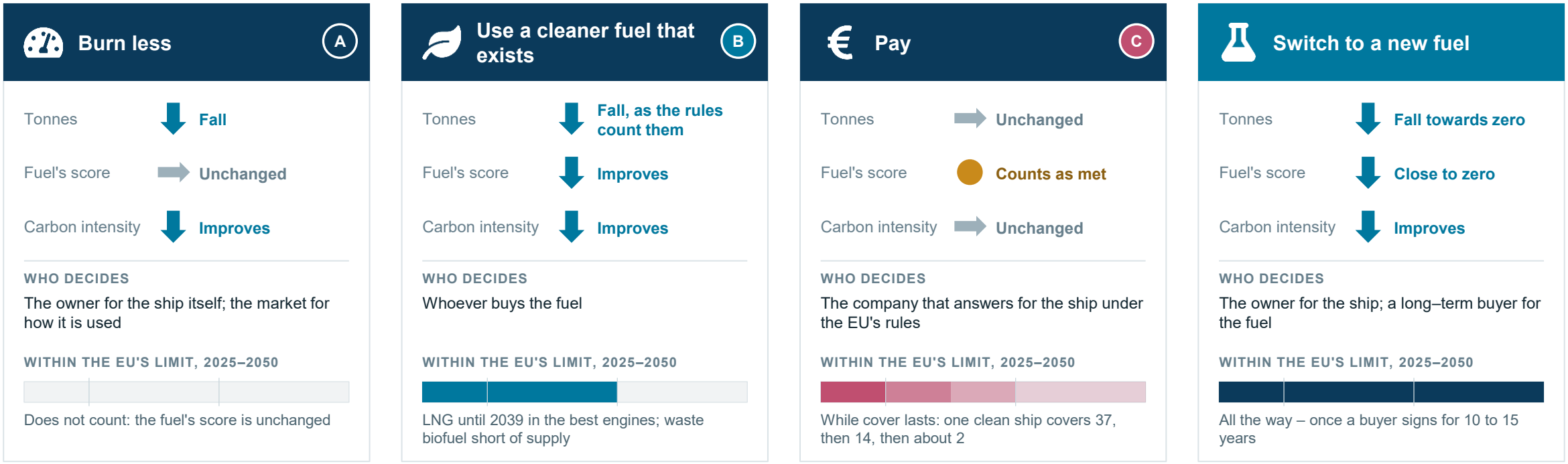
C Only the EU's dates are law

The IMO's rating bar is set only to 2030, and its draft limit awaits a session due on 4 December 2026.

A ship can respond in four ways; only a new fuel reaches the later limits, and paying changes nothing on board

Burning less does not touch the limit on the fuel's score, existing fuel runs out as the limit tightens, and new fuel needs a buyer who signs for years.

Exhibit 5 Which measure each response moves, who decides, and how long it keeps a ship within the EU's limit



A **Burning less leaves the score**

Efficiency lowers the carbon bill and holds the rating, but the fuel scores the same at any speed.

B **Existing fuel has a ceiling**

Aviation and road want the same wastes, and LNG meets the EU's limit only until 2039.

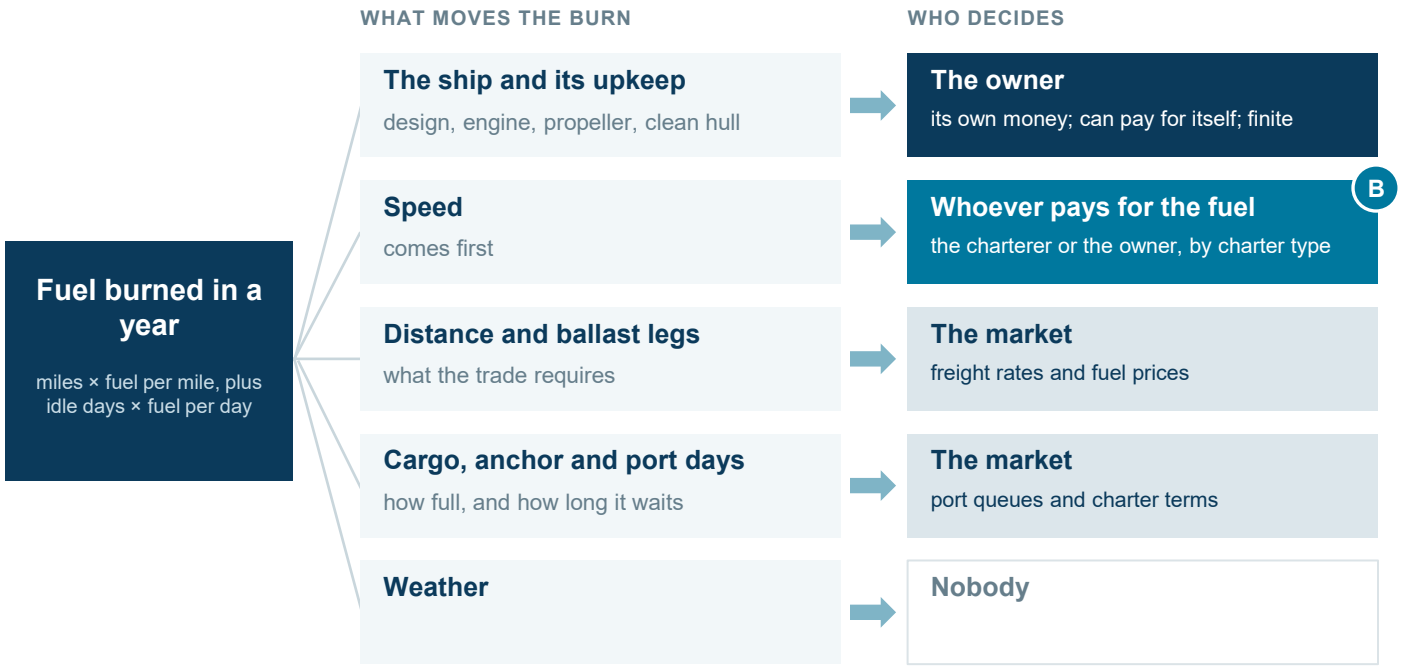
C **Paying is not reducing**

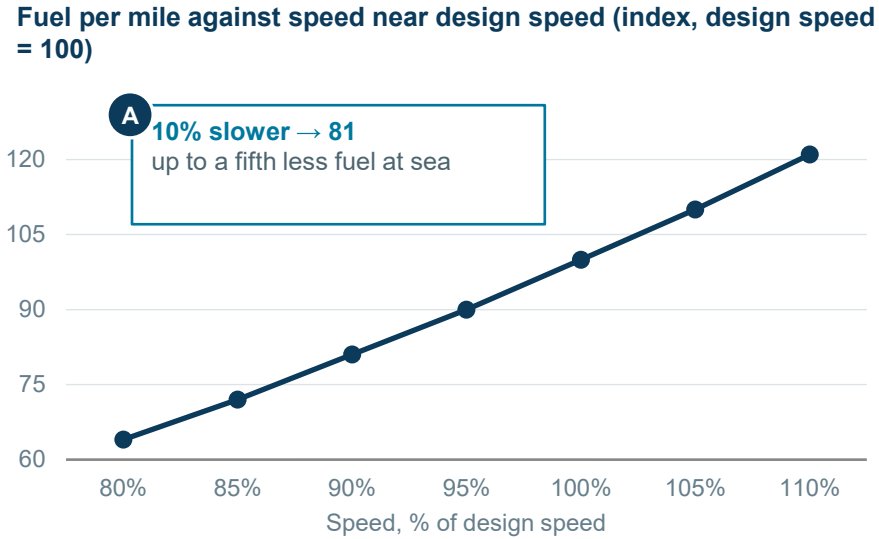
The cleaner fuel is burned on another ship; the payer falls behind on the IMO's bar and the banks' paths.

Once a ship is built, how it is used moves its emissions more than any rule asks before 2040 – and the market decides the use

No rule sets a speed, a route or a waiting time; the rules price or record the result. Ships slowed in the weak markets after 2008, and most stopped after 2015.

Exhibit 6 What sets a ship's fuel burn once it is built, who decides, and how much speed matters





Weaker at the lower speeds many ships sail today.

C **The EU's carbon price adds ≈EUR 260 to each tonne of fuel burned between EU ports.**

A Speed first

Near design speed, fuel per mile varies with the square of speed: 10% slower burns up to a fifth less at sea.

B Whoever pays for fuel decides

The charterer on a time charter, the owner on a voyage charter. The weather is nobody's decision.

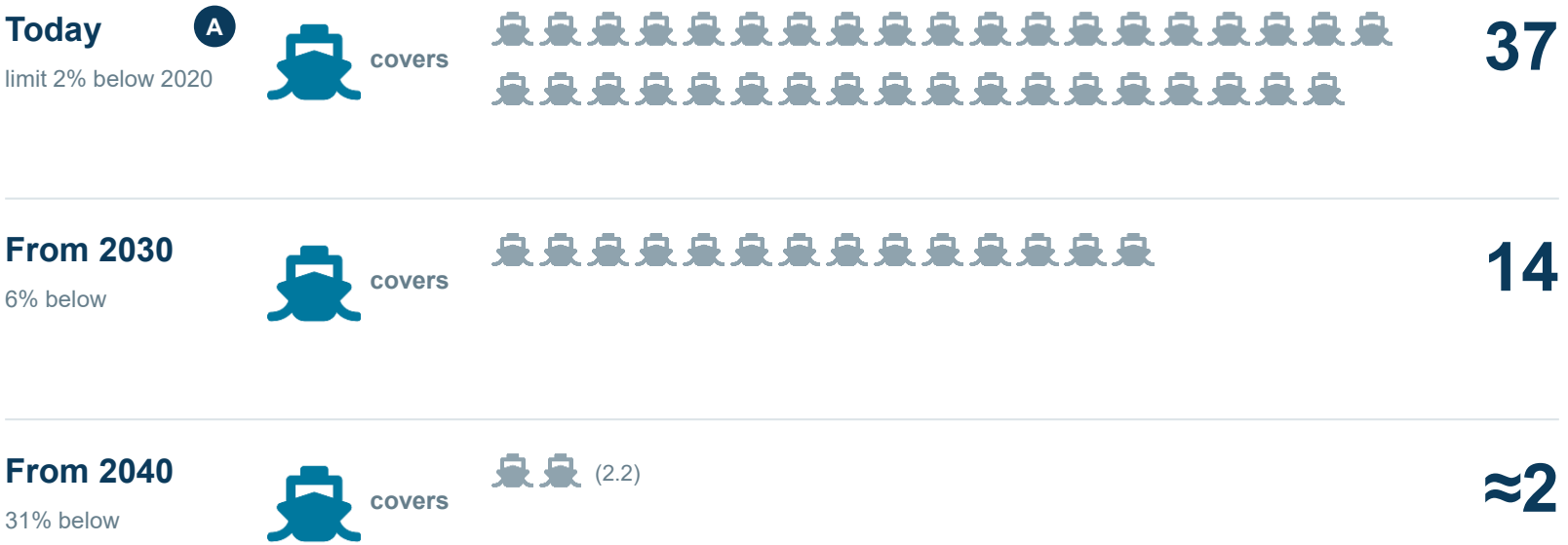
C Rules price or record the result

The EU's price is a reason to sail slower on EU voyages; the IMO's rating and the banks only record it.

Cover grows scarce: one ship on a zero–score fuel covers 37 ships on fuel oil today, 14 from 2030 and about two from 2040

Under the EU's rules a ship need not change anything on board: it can pool with ships below the limit and pay them for cover. As the limit tightens, every buyer needs more and every seller has less to spare.

Exhibit 7 Ships of the same size on fuel oil that one ship on a zero–score fuel can cover, by step of the EU's limit



Teal ship: one ship on a fuel that scores zero. **Grey ships**: ships of the same size on fuel oil it can cover.

Paying changes nothing on board

C

Our ship's IMO rating, sailing as it does today

	A	B	C	D	E
2026		■			
2030			■		

The bar rises every year, and the ship that pays emits what it did. The C for 2030 is close to the line: 3.5% less fuel per mile would keep a D.

B **No cover?** A fine of about EUR 640 per tonne of CO2e for a ship on fuel oil, 10% more for each further year in a row.

A — Cover thins at every step

Every buyer needs more and every seller has less to spare as the limit falls in 2030, 2035 and 2040.

B — The fine is the backstop

A fuel–oil ship with no cover pays about EUR 640 per tonne of CO2e, more each further year in a row.

C — The bar moves anyway

The ship that pays falls behind on the IMO's rising bar and on the banks' paths.

So far the rules have changed the bill more than the behaviour; only two things would change what ships burn

Owners pass the carbon price on, meet the fuel limit through pools and order ships for the fuel that exists. The reward for burning cleaner fuel – the price of cover – has almost halved.

Exhibit 8 What the first years of the EU's rules show, and when burning cleaner fuel starts to pay (illustrative)

92%

of ships used a pool in 2025 to meet the limit on fuel

1–5%

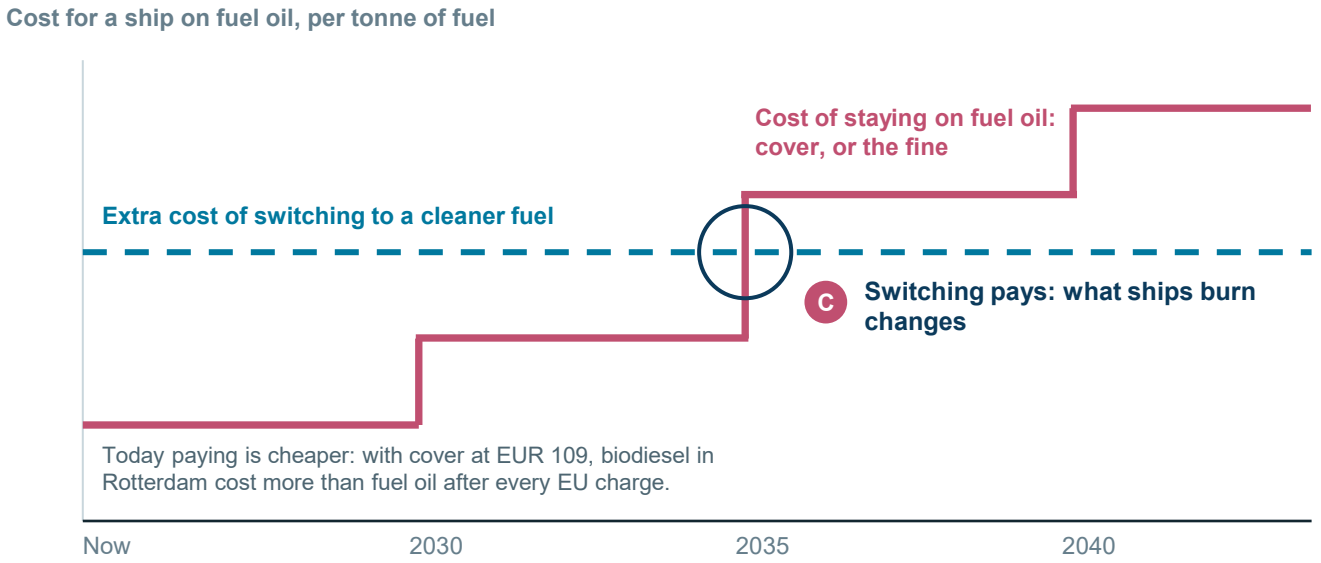
added to container freight: the carbon price is passed on

€200 → €109 A

price of cover per tonne of CO2e, 2025 to September 2026

9.5% → 5.7% B

share of tonnage ordered that can burn the new fuels



The second trigger: a carbon price on every route. Today only EU trades are priced – enough for a little under half of biofuel's extra cost within Europe, less in and out, nothing beyond.

A The reward fell

The price of cover, the reward for burning cleaner fuel, fell from about EUR 200 to EUR 109 a tonne.

B Orders follow existing fuel

The LNG–capable fleet is set almost to double by 2030; new–fuel ships fell to 5.7% of orders.

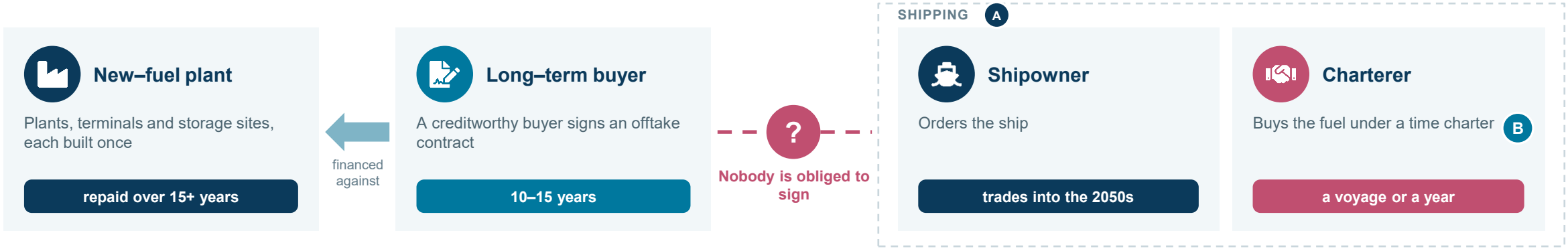
C The limit is built to tip it

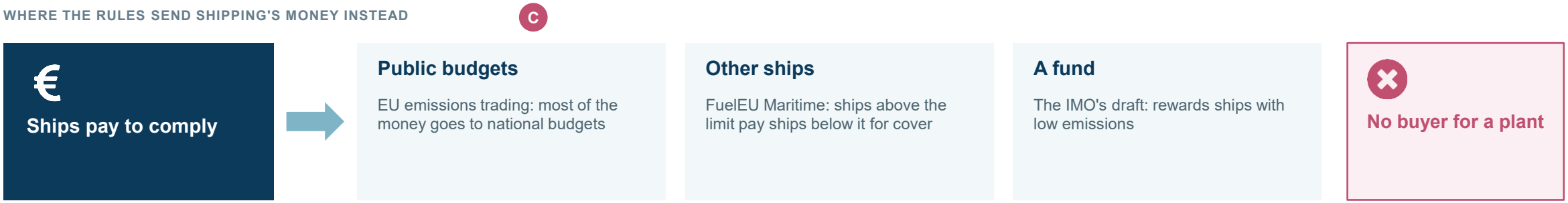
As the EU's limit steps down from 2030, cover becomes dearer than avoiding the shortfall.

New fuel is built where a creditworthy buyer signs for 10 to 15 years – a signature shipping finds hard to give

The plant is financed against that contract. Freight is sold for a voyage or a year, and under a time charter the owner orders the ship while the charterer buys the fuel.

Exhibit 9 The missing link between a new–fuel plant and the ship, and where the rules send shipping's money instead





A Short contracts, long assets

Freight is sold for a voyage or a year, while the ship trades into the 2050s and the plant needs 15+ years.

B The fuel buyer is not the owner

Under a time charter the charterer buys the fuel, for less than the life of the ship or the plant.

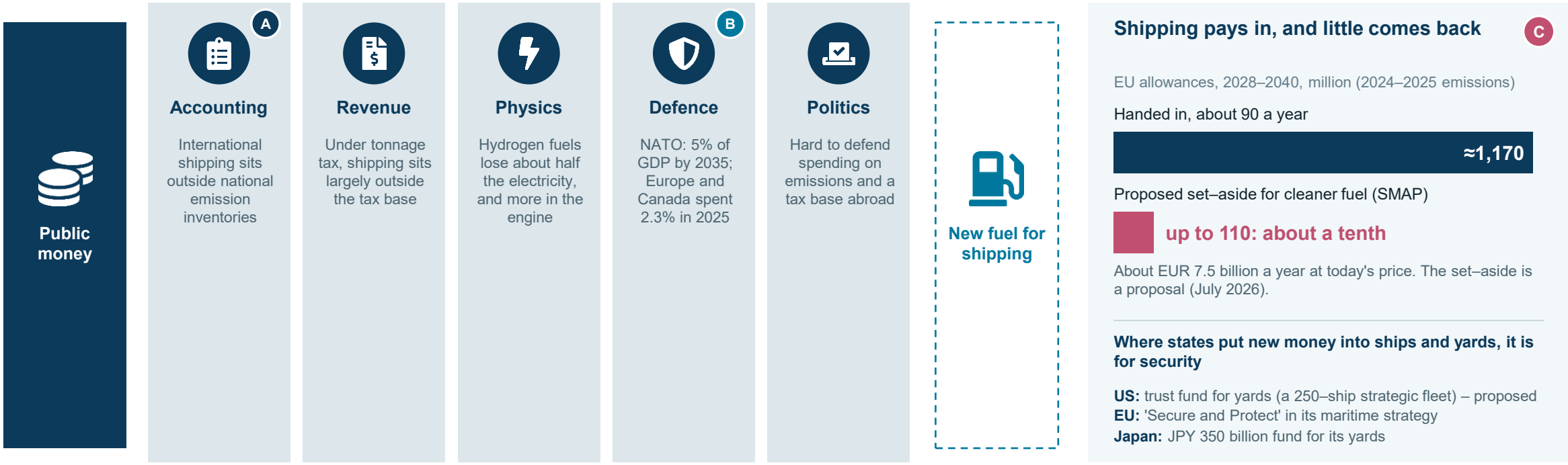
C Rules move money, not buyers

Neither the EU's rules nor the IMO's draft obliges anyone to sign for a fuel offtake agreement.

Public money could fill the gap, but five things keep it away

The carbon price shipping already pays takes about EUR 7.5 billion a year out of the sector from 2027, at autumn–2026 EU allowance prices, most of it into national budgets as general revenue. The one fund proposed to send some of it back would return about a tenth, and it is not yet law. Where states are putting new money into ships and yards, the reason they give is security.

Exhibit 10 Five barriers between public money and shipping's new fuel, and what the EU takes in and proposes to give back



A **Little credit, little tax**

Shipping's emissions count little toward national pledges, and tonnage tax keeps it largely untaxed.

B **Security comes first**

Allies are raising defence toward 5% of GDP, and where states spend on shipping, the reason is security.

C **About a tenth comes back**

Up to 110 million allowances proposed for shipping's fuel in 2028–2040 – a proposal, not law.

The EU's rules reach about an eighth of shipping's energy; elsewhere the outlook turns on one IMO decision on 4 December

On almost all other voyages a ship pays no carbon price today and faces no limit on its fuel's score. Into the 2030s the pressure rises, but regionally, and new fuel arrives in few places.

Exhibit 11 Where a ship trades decides what it faces: the outlook by stage

Share of international shipping's energy within the EU's rules (A)

EU ≈13%	Elsewhere ≈87%: no carbon price and no limit on the fuel's score today – only the IMO's report and rating, and the bank's measure

	On EU voyages – law	Elsewhere, if the IMO adopts its framework (B)	Elsewhere, if it does not
To 2030 compliance without new fuel	**Price + limit** A price on every tonne; a limit 2%, then 6% below 2020 – met with existing fuel and cover	**Charge from ≈2029** Nothing paid before; then roughly USD 140–170 per tonne of fuel oil, first bill due in 2030	**Little binds** The IMO's rating only; national rules spread, as in the UK since July 2026
The 2030s scarce and regional	**Limit tightens** 6%, then 14.5% below; existing fuel and cover grow scarce	**Same squeeze everywhere** Every voyage, on figures still being negotiated; units traded between ships	**Patchwork** (C) National prices, limits and subsidies; fuel sold where a state or port paid for it
The 2040s routes that need a signature	**Steep limit** 31% below from 2040 and 62% from 2045	**Set to 2040 only** 65% below the 2008 average in 2040 on the approved text; nothing beyond	**No worldwide limit** The IMO's goal remains a goal

A **An eighth of the energy**
Voyages between EU ports and half of those in and out: about 90 of 691.5 Mt of CO_2 reported for 2024.

B **One decision on 4 December**
Adopted then, 2029 would probably be the framework's first full year, with the first bill due in 2030.

C **Fuel follows national lines**
LNG at 222 ports, methanol at 48 counting those planned, and no comparable network for ammonia.

Into the 2030s the rules can be met without the ship emitting much less – and that is where the bank's problem starts

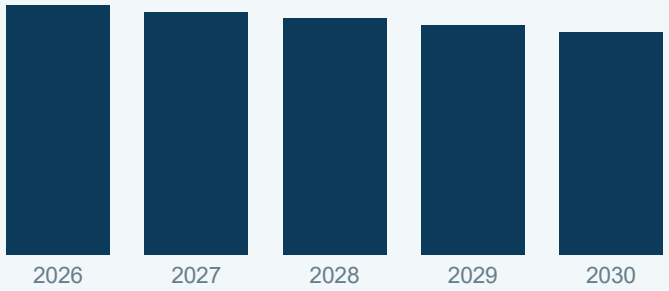
The reduction the EU's limit requires does take place, but on the ships that sell cover. A bank holds the ship twice: as security for a loan and as emissions in its own figures.

Exhibit 12 Our ship to 2030, and what it means for the bank that finances it

OUR SHIP TO 2030

Every rule with a penalty met

Own emissions: 14,600 t CO2 a year, only a little lower



It pays, burns a little less and blends what it can buy.

A BANK HOLDS THE SHIP TWICE

As security for a loan

Protected

The rules that let a ship pay keep it free to trade anywhere and to be sold to anyone.

As emissions in its own figures

Not moved

Carbon intensity under the Poseidon Principles and tonnes in its climate reporting – on all voyages.

WHAT MOVES THE BANK'S FIGURES UNTIL NEW FUEL ARRIVES

1 The market the ships trade in

speed, distance, ballast legs and waiting

2 How efficiently they are run

the ship and the state it is kept in

3 Which ships are in the portfolio

Waiting for a fuel that nobody has signed for does not move them. The next chapter starts there.

What to watch

4 Dec 2026

The IMO's session on the Net–Zero Framework resumes, if confirmed that week

Dec 2026

The Poseidon Principles report the signatories' scores for 2025

2030

The EU's limit steps to 6% below; the IMO's rating bar runs out

Chapter 3

No ship is financed alone

Borrowing under a carbon budget

A European bank balances the vessels it finances against the emissions they carry. The relationship still decides which owners are financed. The fleet's emissions decide what can be financed within it, measured against a trajectory that falls each year of the loan. A younger vessel makes room for an older one. The test is therefore run on the portfolio, not loan by loan.

I **What is asked of the bank**

II **One ship, three figures**

III **No ship is financed alone**

IV **Finance follows the fuel**

The story in one sentence

A bank’s financed emissions are the vessel’s emissions multiplied by the loan–to–value ratio. When ship prices fall, the ratio rises and the bank carries a larger share of the vessel’s emissions. Financed emissions rise although the emissions themselves are unchanged. No vessel is financed on its own. The younger vessels in a portfolio create the capacity for the older ones.

I · What is asked of the bank

A voluntary target has become a supervised one

2026

CRD VI in force: a plan with quantified targets, consistent with the Poseidon commitments

The previous chapter's rules reach the vessel; CRD VI reaches the bank. A bank that cannot show its supervisor that it manages the climate risk in its lending may be required to hold additional capital.

II · One ship, three figures

The price moves the figure as much as the fuel

50%

loan–to–value: the sole lender carries half the vessel's emissions, the owner's equity the rest

Tonnes and tonnes per dollar have the vessel's price as denominator. Alignment, the vessel's intensity against its trajectory, is the only figure the market cannot move.

III · No ship is financed alone

Age moves financed emissions more than type

5 loans

over a vessel's life: one as a newbuilding and four refinancings, each against a lower price

A new vessel burns 20 to 30% less fuel per mile; over a year an older vessel emits about the same tonnes at a far lower price. A loan that would raise the portfolio's average can be made only where other loans lower it.

IV · Finance follows the fuel

Portfolio choice works until the early 2030s

20–25%

the most a bank can cut from its portfolio’s carbon intensity by choosing which vessels it finances, and it can do so only once

The trajectory falls every year. By the early 2030s it has fallen further than the cut lowered the portfolio, which is above it again. After that, only the fuel the vessels burn moves a lender’s financed emissions.

Why it matters

Financed emissions move with the cycle

In a weak market, a bank’s financed emissions rise as its collateral falls, because loan–to–value and tonnes per dollar share a denominator, and its clients’ earnings fall.

The old end depends on the young end

A bank that stops financing newbuildings has, within a few years, no capacity left to lend against older vessels. Blending ages and types is how the balance is struck.

Declining is migration, not reduction

The declined vessel is refinanced outside the regulated sector at a higher margin. The bank's financed emissions decline; the vessel's emissions do not.

The regulation reaches the vessel through its fuel and the bank through its plan, and both end in the financed emissions the supervisor reads.

Commitments that were voluntary up to 2026 have become targets in a plan reviewed by the supervisor. The leasing companies that finance many newbuildings sit outside it.

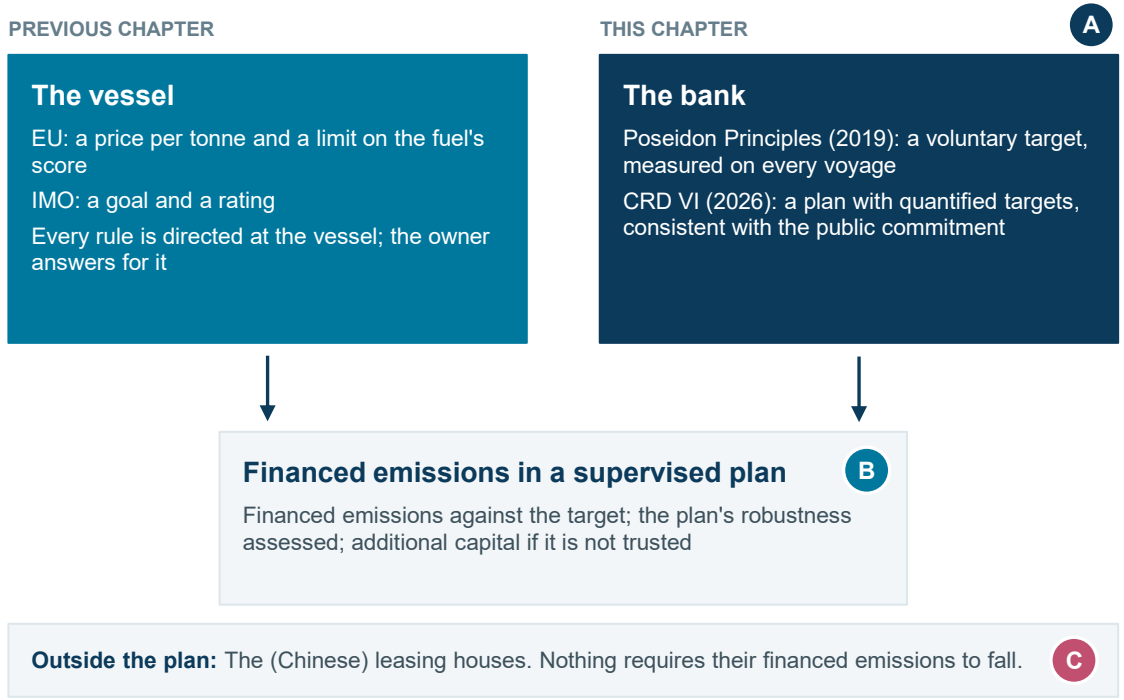
The bank's own figure. The regulation described in the previous chapter is directed at the vessel, not at the bank that finances it. A bank is measured on a figure of its own: its financed emissions, the emissions of every vessel it has lent against, attributed in proportion to its loan and counted in tonnes of CO2e well–to–wake. Most European ship lenders have undertaken to reduce it by a stated amount by a stated date, or to bring the vessels they finance onto the IMO's trajectory.

The plan the supervisor reads. Under CRD VI, in force from 2026, a bank in the EU manages the climate risk in its loan portfolio through a plan with quantified targets, consistent with its public commitments. A bank that cannot show its supervisor that it manages that climate risk may be required to hold additional capital.

A declining average. The trajectory is a declining average, and a bank meets it by choosing which vessels to finance. A newbuilding enters the portfolio below the trajectory; an older vessel enters above it. Because the portfolio's figure is an average, a loan below it leaves room for one above it. A bank that continues to finance newbuildings therefore retains the capacity to lend against older vessels; one that withdraws from young vessels will, within a few years, have to withdraw from older ones.

Outside the plan. Newbuildings are increasingly financed by leasing companies, most of which are Chinese and are not credit institutions in the EU; the planning requirement does not apply to them.

Exhibit 1 Two routes to one plan: what the previous chapter asks of a vessel, and what CRD VI asks of the bank that finances it.



A **The target is now supervised**

What a signatory promised in 2019 is, from 2026, a quantified target in a plan the supervisor assesses, with capital as the consequence of a plan it does not trust.

B **A loan below the average makes room**

A newbuilding enters below the trajectory and creates the capacity a bank needs to refinance older vessels; without the young end, the old end closes within a few years.

C **The young end is contested**

Leasing companies outside the rules finance many newbuildings at higher leverage; a bank priced off the young end is cut off from the capacity it needs.

A loan carries the vessel's emissions in proportion to its share of the price, and a lender works with three figures

The share is the loan–to–value ratio. Only one of the three figures describes the vessel rather than the lender's exposure to it.

Counted more than once. A vessel's emissions are counted more than once, by design. The operator counts all of them. A bank that lends against the vessel counts a share, equal to its loan divided by the vessel's price, and the owner's equity accounts for the remainder.

What the share is not. It is not a measure of credit risk: a lender with a first mortgage has the whole vessel as security, whatever the share it reports. Nor does it reward conservative leverage: a lender at 40% of a vessel's price and one at 70% carry the same emissions for each dollar lent, because what each dollar carries is the vessel's emissions divided by its price.

Tonnes

Each vessel's emissions multiplied by the lender's share, summed across the portfolio. Moved by the price of vessels, the size of the loans and the vessels. The lender's exposure, read by investors.

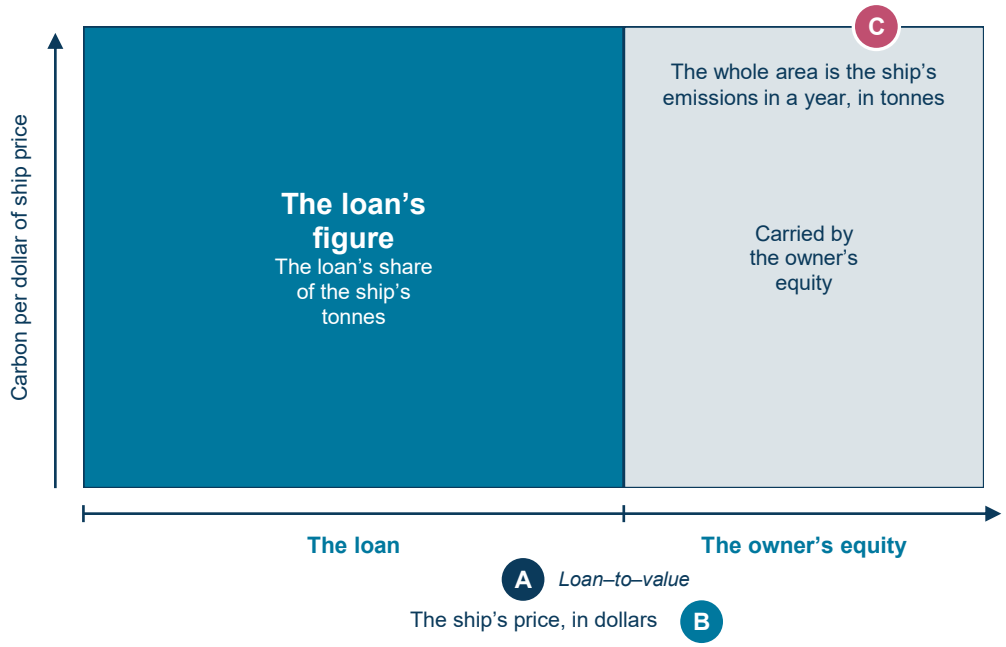
Tonnes per dollar lent

The tonnes divided by the loan portfolio. Moved by the price of vessels and the vessels, not the size of the loans. The target most lenders publish.

Alignment

Each vessel's carbon intensity relative to the trajectory for its type and size; the Poseidon climate alignment score, based on the annual efficiency ratio for most types, not the IMO's CII rating. Moved by the vessel only. The one figure that shows whether the vessels are changing.

Exhibit 2 One loan, one figure: the area is the tonnes, the base the price, the height carbon per dollar



A **The loan–to–value ratio cuts the tonnes**

The loan's financed emissions are the vessel's emissions multiplied by the loan–to–value ratio: a sole lender at 50% carries half, the owner's equity the other half.

B **Two figures follow the price**

Tonnes and tonnes per dollar have the vessel's price as denominator, so the market moves both with no change on board.

C **Alignment alone describes the vessel**

It is the only figure that neither the market nor the loan can move, and therefore the only one that shows whether the vessels a lender finances are changing.

Ship type sets the tonnes, size the intensity and age the distance from the trajectory; the price has not yet entered the picture

Four properties of a vessel move the financed emissions a bank reports, and each moves a different one. A lender choosing between two loans is choosing on one or more of these.

Type determines the tonnes. A large Crude Tanker emits several times what a Product Tanker emits, at any age.

Size determines the carbon intensity. For each tonne of cargo capacity moved one nautical mile, a large vessel emits considerably less than a small one, because engine power does not increase in proportion to hull size.

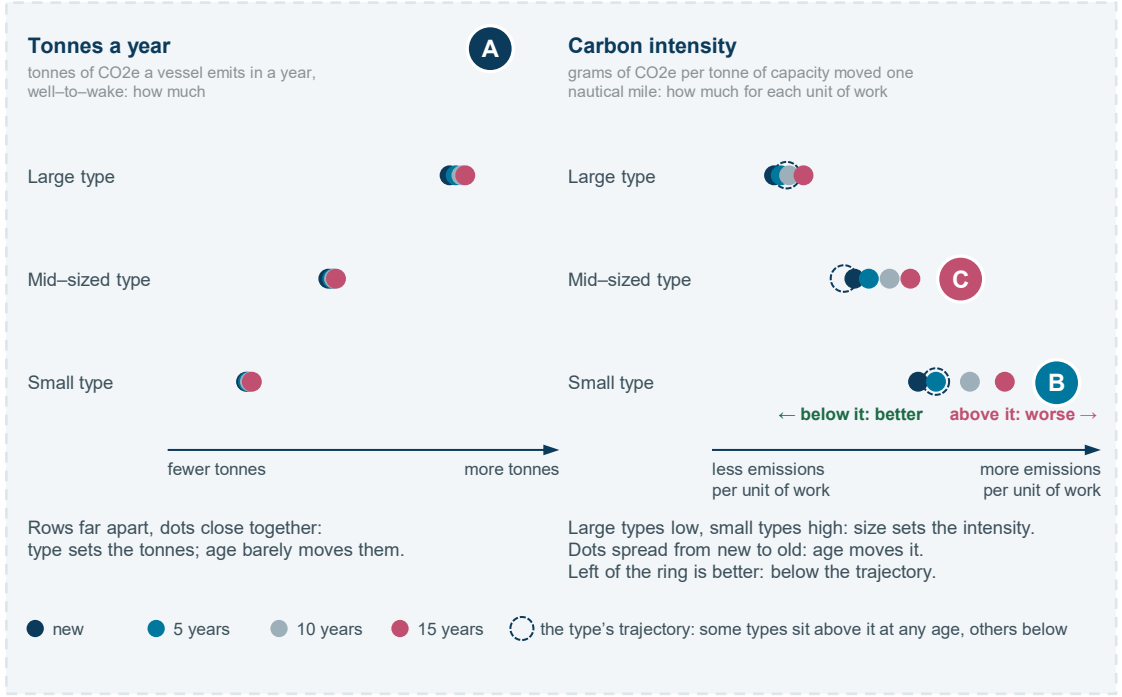
Operation moves a vessel within its type and age. Speed, distance sailed and time spent waiting affect carbon intensity by approximately as much as a decade of age.

The fuel a vessel burns moves its intensity too, at any age and with no work on board; the chapter returns to it at the end, because it is the lever that remains when the others are spent.

Age determines the distance from the trajectory. The cause is the generation of the design rather than wear. A vessel of the latest generation, built from about 2014, burns 20 to 30% less fuel per mile than a vessel of 15 years or more of the same type. Over a year the older vessel emits about the same tonnes, because it sails slower and fewer miles. Maintenance cannot close the design gap; operation and retrofits narrow it.

Each type is measured against its own trajectory, but the typical vessel of some types sits above it at any age and of other types below it. None of this yet determines what a dollar lent carries, because the price of the vessel has not entered the picture.

Exhibit 3 Annual CO2e emissions (well–to–wake) and carbon intensity by vessel type and age band



A Type and size are not the same thing

Vessel type sets how many tonnes a vessel emits; size sets how many per unit of work. A large vessel emits more in total and less for each unit of work.

B Age is design generation, not wear

The latest designs burn 20 to 30% less fuel per mile than vessels of 15 years or more, which sail slower and less and so emit about the same tonnes a year.

C Operation is worth a decade

Speed, empty legs and waiting move a vessel's intensity by about a tenth either way, as much as ten years of age.

Ship prices move financed emissions as fuel does, and a fall in prices moves them by more than an equal rise

Tonnes per dollar has the vessel's price as its denominator. When prices rise, the financed emissions decline with no change on board; when they fall, they rise.

The denominator. Tonnes per dollar lent has the vessel's price as its denominator, and the market sets that price. A fall of a given proportion therefore raises tonnes per dollar by more than a rise of the same proportion reduces it: a 20% fall in price adds 25%, a 20% rise takes away 17%.

Three conclusions.

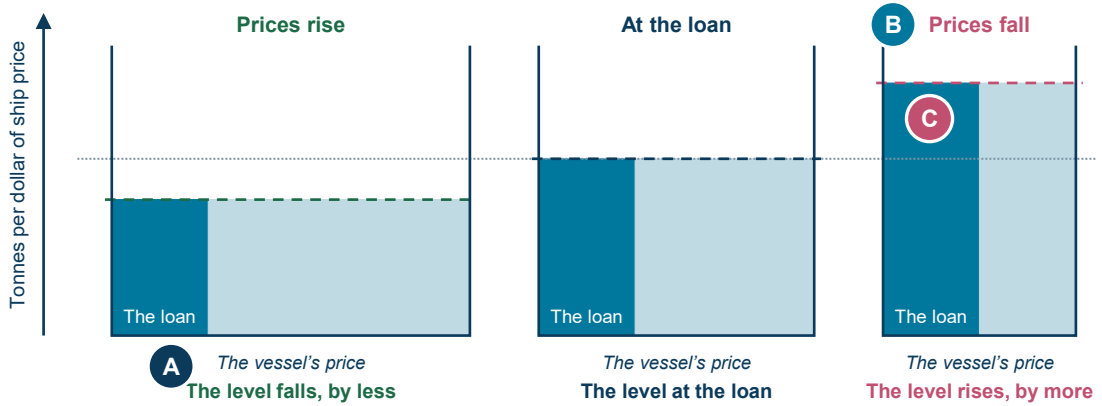
1. A decline in a lender's financed emissions is not evidence that its vessels have improved, because the price may have moved and not the vessel.
2. A rise is not evidence of poor lending, for the same reason.
3. In a weak market a bank's financed emissions rise as its collateral falls, because loan–to–value and tonnes per dollar share a denominator, and its clients' earnings fall.

Where in the cycle. Prices near the top of the cycle have more room to fall than to rise, so financed emissions that have declined through a rising market are more likely to rise again than to fall further. Most large ocean–going segments trade near the top of their price cycles today.

A spread steadies the financed emissions. Segment prices do not always move together, although they did in 2008, so a portfolio spread across vessel types moves less than any one segment.

Exhibit 4 The price effect: the same vessel, the same tonnes and the same loan at three prices

The same emissions, poured into a container as wide as the vessel's price. The loan is a fixed slice of that width.



The area is the vessel's tonnes and does not change. Width is the price; a wider rectangle is a higher price, and the same tonnes stand lower. The loan is the same width in all three, so its financed emissions fall as prices rise and rise as they fall. Narrowing raises the height by more than widening lowers it, because height is tonnes divided by price.

A **Prices are the denominator**

Tonnes per dollar is tonnes divided by price: a lower price makes each dollar lent carry more, with the vessel unchanged.

B **A fall hurts more than a rise helps**

Dividing by a smaller number moves the result further than dividing by a larger one, so tonnes per dollar is not symmetric around the cycle.

C **Financed emissions rise as the collateral falls**

Loan–to–value and tonnes per dollar share a denominator; the two questions arrive at the same refinancing, in the same weak year.

A vessel is financed five times, each time against a lower price and the same tonnes, and the first loan creates the capacity for the other four

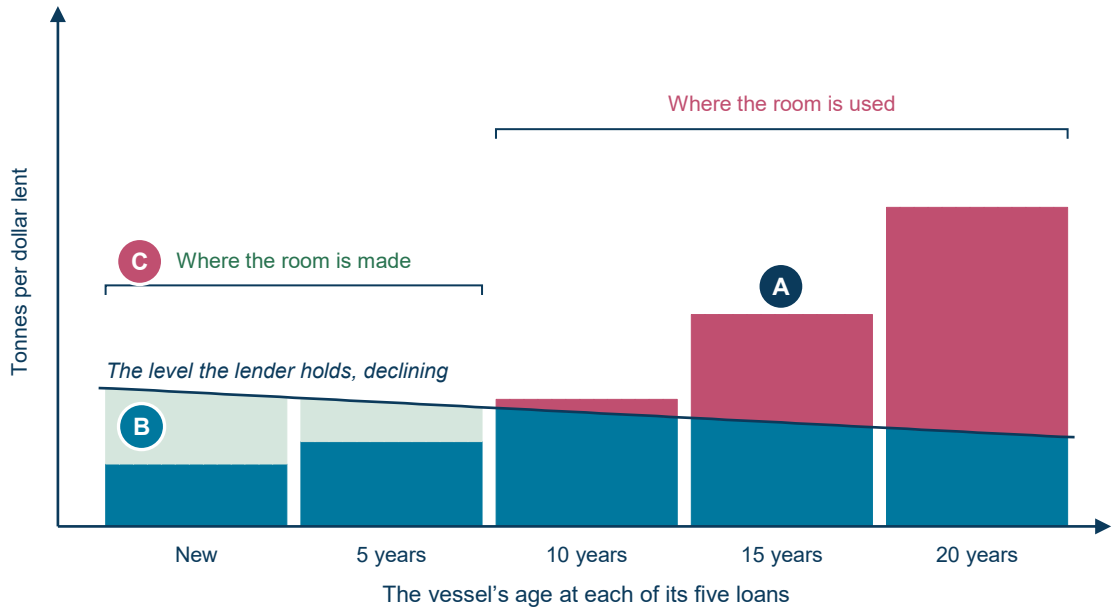
A vessel trades for about 25 years and a ship loan runs for about five. The first loans sit below the level the lender holds; the later loans sit above it.

Five loans. A vessel trades for approximately 25 years and a ship loan runs for approximately five, so a vessel is financed about five times: once as a newbuilding and about four times thereafter. What the lender takes on differs at each financing.

A lower price, the same tonnes. A vessel loses most of its price over its trading life and, trading as it does, none of its emissions. Each refinancing is therefore made against a lower price and the same tonnes, so the emissions carried by each dollar lent increase with every loan.

The fourth loan. By the fourth loan, when the vessel is about 15 years old, each dollar lent carries a multiple of what it carried at the second. For a vessel ordered today that loan falls in the early 2040s, when the vessel is likely to be above its trajectory and the EU's fuel limit then in force requires more than existing fuels can deliver.

Exhibit 5 A ship is five loans: tonnes per dollar at each financing, under a declining level



A — Each step is higher than the last

Tonnes per dollar is the tonnes divided by the price; the price falls with age and the tonnes do not, so each refinancing carries more per dollar lent.

B — The level the lender holds declines

A loan below the level creates capacity and a loan above it uses capacity; under a declining trajectory the line between them moves left every year.

C — No first loans, no later ones

A lender that does not make the first loans holds only loans above the line; the young end is where the leasing companies lend, outside the rules.

Ship type sets the level of financed emissions and age moves it within the type. A portfolio has to blend both, and no vessel is assessed alone

No loan is assessed on its own tonnes or its own distance from the trajectory, but by its effect on the portfolio average, which has to fall from one year to the next.

The question. A lender does not ask whether a vessel's own emissions are high or low, but what has to be in place in the portfolio for the loan to be made with the portfolio's financed emissions still falling.

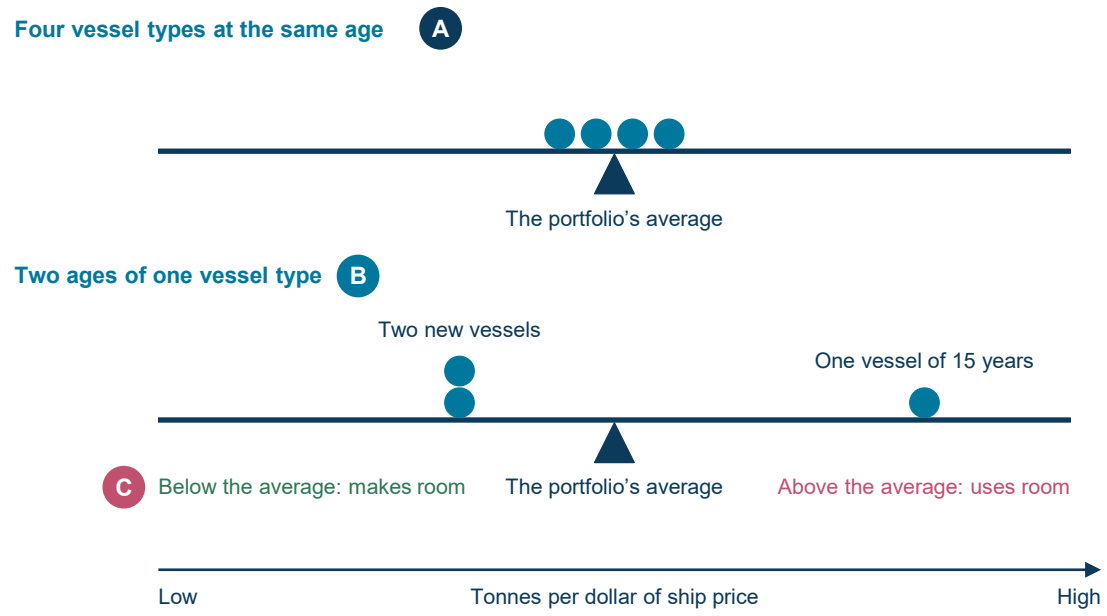
Two kinds of capacity.

- Capacity per dollar is created by a loan below the portfolio's average and used by a loan above it; it comes from young vessels and from expensive ones.
- Capacity on alignment is created by a vessel below its trajectory and used by one above it; it comes from the young vessels of most types. A vessel can be below the average per dollar and above its trajectory at the same time.

What the beam shows. Each loan in Exhibit 6 is a weight on a beam: its position is its tonnes per dollar of ship price, the pivot is the portfolio's average, and the beam is level when that average does not change. Types sit close to the pivot, because a larger vessel costs more as well as emitting more. Ages sit far apart, because an older vessel emits about the same a year and costs less. Two new vessels at one distance below the average balance one of 15 years at twice the distance above it.

Why a portfolio blends. The vessels that create capacity on both tonnes and alignment are few and belong to the most competitive segment of ship finance. The capacity is not created once: a fifth of the portfolio falls due each year. Growing and holding a portfolio require young vessels; reducing it requires none. For an owner the question runs in reverse: what else the owner can bring to the bank.

Exhibit 6 Age over type: on tonnes per dollar, vessel types sit close to the portfolio's level and ages far from it



A **Types sit close to the pivot**
A larger vessel costs more as well as emitting more, so on tonnes per dollar the types sit close; on alignment some types sit above their trajectory.

B **Ages sit far from it**
An older vessel emits the same and costs less. Two newbuildings at one distance below the level balance one vessel of 15 years at twice the distance above it.

C **Growth needs loans below the level**
Tonnes are the portfolio multiplied by tonnes per dollar, so a growing lender can commit to a lower figure per dollar, not to lower tonnes.

Judged as one fleet, the younger vessels carry the older ones; a declined vessel takes its emissions to another lender, and only a retrofit cuts them

A limit on tonnes per dollar applied vessel by vessel reaches most vessels over 15 years; applied to a client's whole fleet it reaches considerably fewer.

The difficult case. A long–standing client with a strong balance sheet, an older fleet and no newbuildings on order: the loans against its older vessels are among the best secured and carry the most emissions per dollar, so the loan the credit committee prefers is the loan that raises the portfolio's tonnes per dollar most.

Four options. Finance work that reduces the older vessels' consumption; refinance them together with the client's next vessels, priced as one fleet; refinance them for a short period with rapid repayment; or decline them. Only the first changes what a vessel emits. The second places some of the client's newbuildings with the relationship bank so that its older vessels stay financed; whether that is worth the price is the owner's decision.

The fleet facility. A client's younger and older vessels in one facility, priced as one fleet, repaying on a profile set by the fleet's age, with an emissions covenant the owner meets by operation or by substituting vessels. The trajectories steepen after 2030, so it provides years, not decades.

The retrofit loan. A tranche sized to the cost of the retrofit and repaid from the fuel saved, which requires that the owner pays for the fuel or shares the saving under the charter; pricing tied to what the vessel burns, verified from reported consumption; and dated milestones the lender can show its supervisor. This keeps the vessel inside the bank's CRD VI plan.

The declined vessel. A declined vessel of 15 years has ten years of trading left. A leasing company, a credit fund or a bank outside Europe refinances it, usually at a higher margin. The owner depends on fewer lenders; what the vessel emits does not change.

Exhibit 7 Tonnes per dollar for one client's six vessels, alone and as one fleet

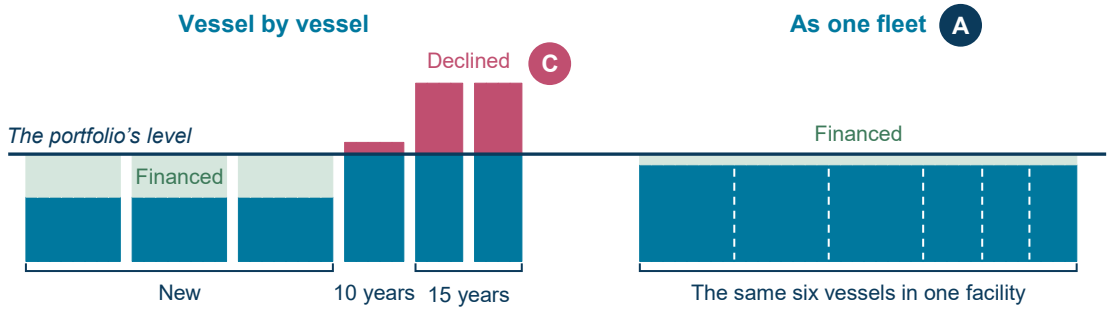
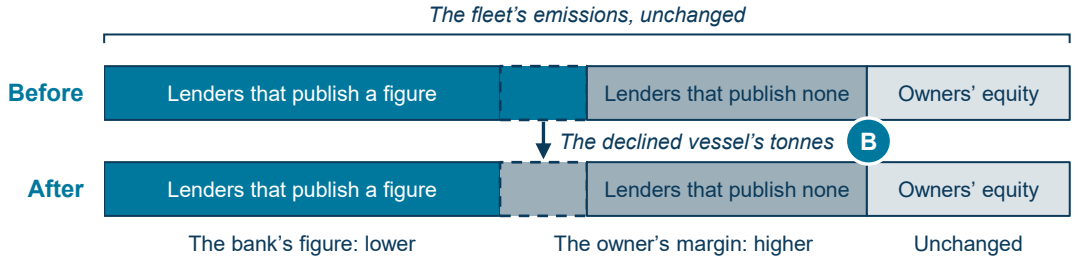


Exhibit 8. Who carries the fleet's emissions before and after a vessel is declined



A **As one fleet, the older vessels pass**

Judged alone, the 15–year loans sit above the level and would be declined; in one facility the room under the young vessels covers the excess.

B **Declining moves tonnes and removes none**

The bank's financed emissions fall and the vessel emits as before, so a lender is judged on whether its vessels change, not on how fast its tonnes fall.

C **Only a retrofit cuts emissions**

The fleet facility provides years; the retrofit loan, repaid from the fuel it saves, is the one that grows the portfolio and improves alignment at once.

Portfolio choice lowers a lender's financed emissions once; the trajectory declines every year, and from the early 2030s mainly the fuel moves them

Every lever in this chapter requires a decision: which vessels, which clients, how they are operated. Those decisions have a ceiling, because a portfolio cannot be younger than new.

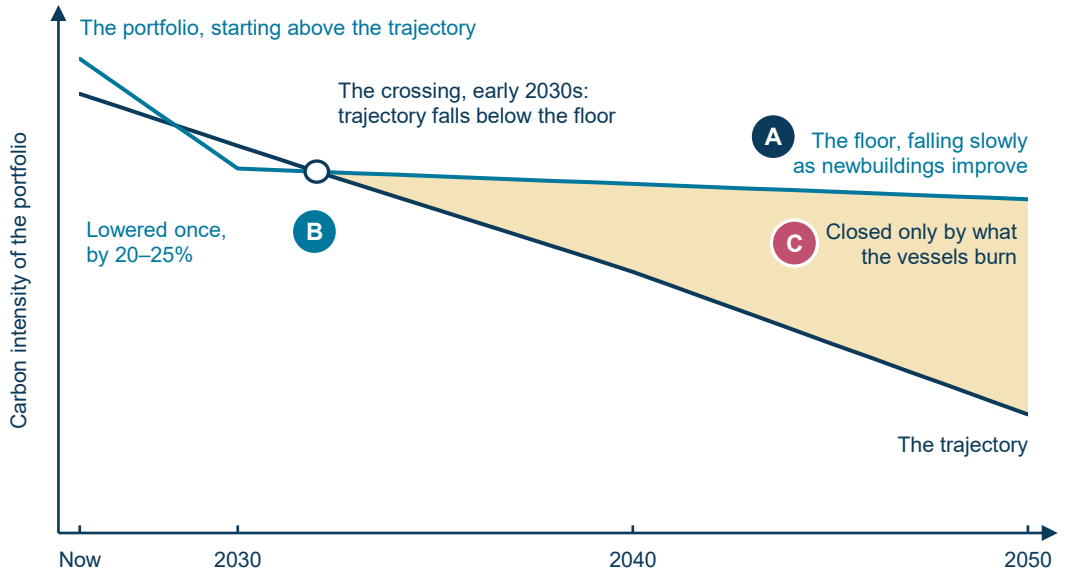
What portfolio choice delivers. The choice of vessels, clients and operation can reduce the carbon intensity of a lender's portfolio by 20 to 25%, once: a portfolio cannot be younger than new, and the gains from speed and utilisation were largely taken between 2008 and 2019.

Where portfolio choice ends. The trajectories decline every year to 2050, and the EU's fuel limit tightens at five–year steps to 2050. On the trajectories as they stand, the required decline exceeds the one–off cut in the early 2030s. From then on, a lender's financed emissions decline mainly with the fuel its vessels burn; a change to the trajectories or the fuel limit moves the year.

The route that remains. What a vessel burns can change without the vessel changing. Emissions are measured well–to–wake, so a fuel with a lower carbon factor reduces a vessel's intensity in proportion to the share blended and the gap in carbon factor, at any age and with no retrofit, and the same blend counts towards the EU's fuel limits. Drop–in biofuels blended into fuel oil serve the existing fleet; methanol and ammonia from low–carbon sources serve newbuildings and conversions, because they need an engine built or converted for them.

Alignment becomes a credit signal. Lenders have reported alignment as a disclosure since 2020. It also shows which vessels will still earn and hold their price at the fourth loan, when the vessel is fifteen years old, the trajectory has fallen further and charterers pay for the carbon.

Exhibit 9 Finance follows the fuel: the levers of portfolio choice against a trajectory that declines every year



A **Portfolio choice has a floor**

It lowers financed emissions once: a portfolio cannot be younger than new, and the gains from speed and utilisation have largely been taken.

B **The trajectory crosses the floor**

The trajectory falls every year to 2050; below the floor, no choice of vessels, clients or operation can follow it.

C **Beyond the crossing, the fuel**

A lower–carbon blend lowers intensity in proportion to the share bunkered, at any age; from then on the financed emissions move with what the vessels burn.

Chapter 4

Shipbuilding

The yards have sold far more than they can deliver on schedule. How that difference is resolved will determine when the next supply wave reaches the water – and how long it stays there.

I **Method**

II **Introduction**

III **Development 2020–2026**

IV **Delivery performance**

V **Orderbook**

VI **Capacity**

VII **Spare capacity**

The story in one sentence

The yards have sold far more than they can deliver on schedule, and new orders keep joining the longest queues while builders with room are passed over. At the historical delivery rate, the yards will stay full until 2028, and **the supply wave will arrive later and last longer than the orderbook shows**.

What we did

Measured capacity from the bottom up

277 active yards, each sized from its own best delivery years – not from its orderbook, which implies 41% more.

Tested the orderbook against it

Five years of January delivery schedules crosschecked vessel by vessel against what arrived, slipped or vanished.

Split it every way that matters

By builder region, yard tier and segment, down to the berths still open in whole ships. All delivery and contracting figures refer to active yards.

What we found

3.5× p. 45

Orderbook growth since 2020

against 30% more yard capacity. Order cover is up from 1.4 to 3.7 years.

75% p. 58

of last year's orders went to China

and 81% to the top performers. Japan, the builder with free berths, won 2%.

1.64× p. 66

Top performers' 2028 schedule

against capacity at the 99 yards booked 3+ years ahead. The other 178 have room.

78% p. 47

delivered in the planned year

of each January schedule, every year since 2021. Only 5–7% is never cancelled.

13 p. 72

LNG Carrier slots left for 2028

worldwide, and as many for VLCCs – against 92 for Capesize bulkers.

155 p. 74

of 277 yards will run dry by 2028

holding a fifth of capacity. Japan refills at a quarter of the rate it builds.

Why it matters

Supply timing is misread

Read as a delivery forecast, the orderbook overstates 2027–28 and understates 2029 and beyond – the years on which today's residual values rest. The excess moves; little of it vanishes.

Prices rest on scarcity, not cost

Newbuilding prices are being held up by a berth shortage that is acute for LNG Carriers and VLCCs, not bulkers – and that has about three years to run.

Discipline starts in the wrong place

If capacity exits, it will start at small second–tier yards and in Japan – not at the first–tier yards that hold the orderbook, whose books run into 2029–30.

Source: Clarksons, Danish Ship Finance

Each section answers one question – together they explain why the supply wave will arrive later and last longer than the orderbook shows

Read down the middle column for what we look at, and the right–hand column for what we conclude. Each section opens with a page that sets out the question, our view and what each page shows.

	Section	The question	Our answer
0	**Method** Page 38	How much can the world's yards build?	We size each of the 277 active yards from its own best delivery years: 56.4m cgt a year. Order cover – orderbook over capacity – sets each yard's tier.
1	**Introduction** Pages 39–43	Why does yard capacity matter now?	Newbuilding prices are within 3% of their 2008 record, held up by booked berths, and the orderbook equals 19% of the world fleet.
2	**Development 2020–2026** Pages 44–45	How did the yards become this full?	The orderbook has grown three and a half times since 2020, and yard capacity by 30%. Order cover has risen from 1.4 to 3.7 years.
3	**Delivery performance** Pages 46–48	How far can we trust the delivery schedule?	Four in five scheduled tonnes arrive in the year they are due. Most of the rest arrive late rather than never: 5–7% are never cancelled.
4	**Orderbook** Pages 49–55	What is on order, and where has it been placed?	Orders are joining the longest queues: Chinese yards took four–fifths of the growth, and the top–performing yards 81% of last year's orders.
5	**Capacity** Pages 56–69	Who can build it, and can they deliver it on time?	Capacity has moved into China's first tier as the buffer has shrunk. In 2027–28, the schedule exceeds what the busiest yards can build.
6	**Spare capacity** Pages 70–75	Where can an owner still find a berth?	There are almost no berths for LNG Carriers and VLCCs until 2029. The 2028 spare capacity is mostly Japanese and second–tier – where capacity would exit first.

Nobody publishes what the world's yards can build, so we have built the number yard by yard

Capacity depends entirely on how it is measured. The most generous way to gauge capacity is just to believe the orderbook – and if you do that, you can never catch the orderbook being too big.

Exhibit 1 How yard capacity and order cover are estimated in this chapter

1 Define the active base

Yards with at least one vessel of 10,000 dwt or more on order.

277

active yards, of roughly 750 with any order on the books

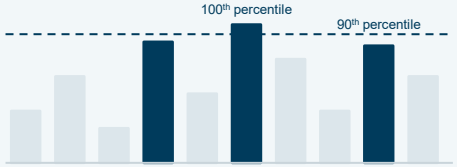
2 Read each yard's record

Every vessel it has delivered, by year.



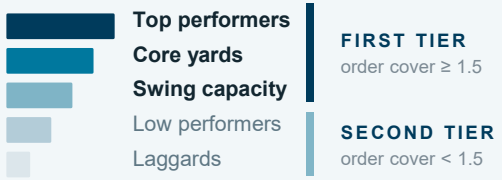
3 Keep its best years

Average of its 90th–100th percentile years is its capacity.



4 Divide the orderbook by it

Years of production sold is **order cover**, which sets the tier.



The same yards, counted three ways

index, demonstrated output = 100



C Where the estimate leans on the orderbook

37 of the 277 active yards have no delivery record. Some are genuinely new, others have been renamed after a merger, or build vessel types the dataset does not cover. For these, the maximum scheduled year stands in, so no active yard is left blank – but it is the one input taken from the orderbook rather than from what has been built. Capacity (56.4m cgt) and order cover (3.7 years) rest on delivery records everywhere else.

A What yards repeat, not what they peak at

A single best year can be an accident of timing – one ship slipping from December to January empties one year and inflates the next. The best decile reflects the level a yard repeats.

B The denominator decides the answer

Read against the orderbook's own implied capacity – 41% higher – every year of the schedule looks deliverable.

C No history? Use the orderbook

Yards without a delivery record are sized from their own schedules: 37 of 277 today. Every delivery figure in the chapter refers to active yards.

Source: Clarksons , Danish Ship Finance. Index from the June 2026 cut; all other figures September 2026.

Section 1

Introduction

Why does yard capacity matter now?

The number to remember

19%

The orderbook as a share of the world fleet in September 2026, up from 7% in 2020.

The chapter

I	Method	p. 38
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VI	Capacity	pp. 56–69
VII	Spare capacity	pp. 70–75

Our view

Newbuilding prices sit within 3% of their 2008 record, held there by berths sold years ahead rather than by costs.

Behind them is an orderbook equal to 19% of the world fleet, up from 7% in 2020 – and far heavier in some segments: 36% for Container ships and 35% for LNG Carriers.

What the pages show

p. 40 **Newbuilding prices** – up with the queue to within 3% of the 2008 record, and flat since 2024 as the queue has lengthened.

p. 41 **How scarcity reaches prices** – booked berths hold prices up; the delivery schedule is where that support wavers.

p. 42 **Fleet and orderbook by builder region** – China built 32% of today's fleet but holds 69% of the orderbook.

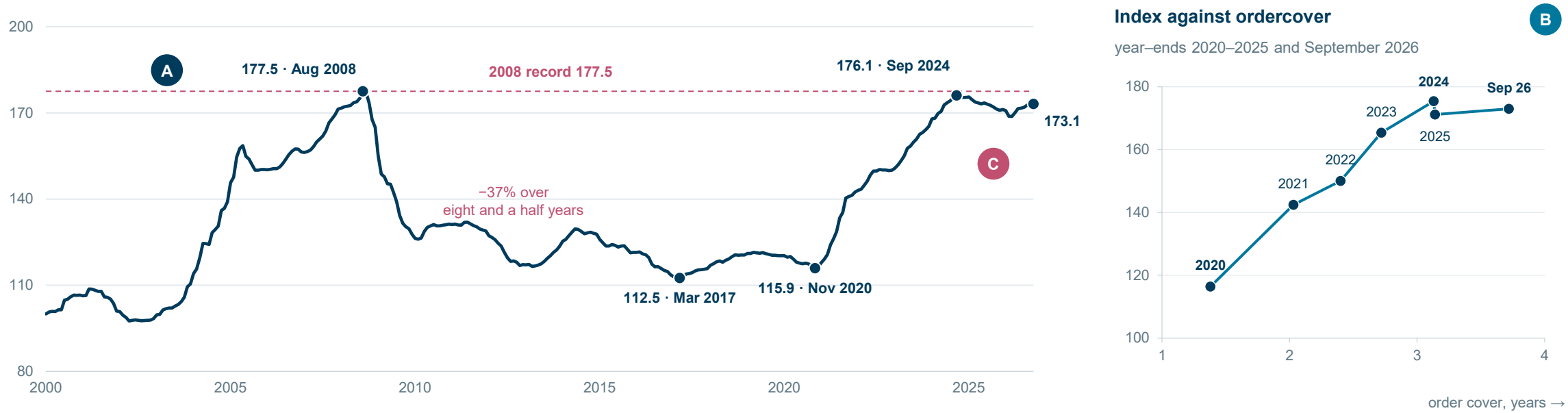
p. 43 **Fleet and orderbook by segment** – Container ships carry the largest book, 36% of their fleet, against 13% for Dry Bulk.

Next → Section 2 shows how the yards came to be this full.

Newbuilding prices rose with the queue to within 3% of their 2008 record – but since 2024 they have held, not risen, as the queue has lengthened

Clarksons' newbuilding price index since 2000 and set against world order cover at each year–end since 2020. Scarcity is priced in; the longer queue since 2024 has not lifted prices further.

Exhibit 2 Newbuilding price index (January 2000 = 100), monthly since 2000, and against world order cover at year–ends



A **Near the 2008 record**

173.1 in October 2026: 2.5% below the August 2008 record of 177.5 and 49% above the November 2020 low of 115.9.

B **Up with the queue until 2024**

Each year–end from 2020 to 2024, longer cover came with a higher index: 1.4 → 3.1 years of cover, 116 → 175 on the index.

C **Holding, not rising, since**

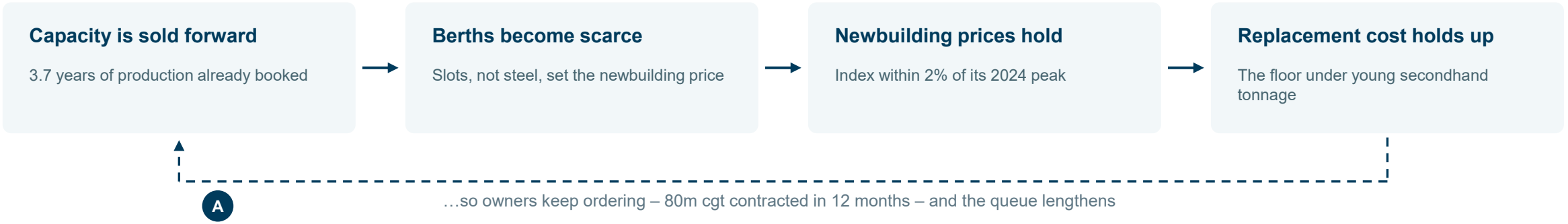
Cover has lengthened to 3.7 years since year–end 2024, while the index has eased 1–2%. After its 2008 record, it fell 37% over eight and a half years.

Source: Clarksons, Danish Ship Finance.

Booked berths hold newbuilding prices up. The delivery schedule is where that support wavers

The supply side is clearing through time, not price. Three indicators will show whether that is changing.

Exhibit 3 How yard scarcity transmits to vessel prices



The loop does not break at the orderbook. It bends at the delivery schedule.

Every step holds only while the yards stay full, and they stay full because the schedule says so.
B One tonne in five misses its scheduled year, and the yards already run at 86% of their demonstrated capacity.
So, scarcity in 2027–28 turns into supply in 2029 and beyond – the years on which today's residual values rest –
C while the yards that could absorb a downturn are the ones the market has stopped using.

A Watch contracting against deliveries

1.6 times in the past 12 months. Below 1.0, the orderbook shrinks and the cliff on page 74 stops moving.

B Watch the on–schedule share

80% in 2025, within a 73–80% range since 2021. A sustained move above that range would mean capacity has genuinely expanded; a fall would lengthen the tail.

C Watch Japan

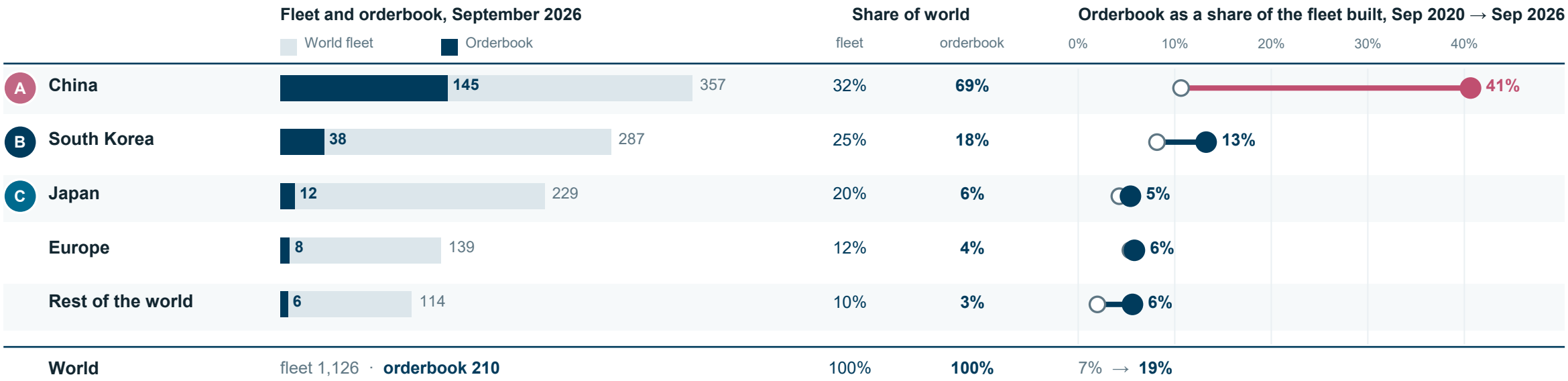
The first place where supply discipline would show – and the builder with the free berths the market is not using.

Source: Clarksons, Danish Ship Finance.

China built 32% of today's fleet but holds 69% of the orderbook – a book equal to 41% of the fleet it has built, against 13% for South Korea

The same view as page 43, by builder region: who built the ships in service, against who is building those on order. The world fleet has grown 24% to 1.1bn cgt; the part built in China has grown by 59%.

Exhibit 4 World fleet and orderbook by builder region, and the orderbook as a share of the fleet each region has built (million cgt; %)



Open circle = September 2020, filled = September 2026; pink = above the world's 19%.

A China is building the new fleet

145m cgt on order against 357m in service from Chinese yards: 41%, up from 11% in 2020. China built 25% of the 2020 fleet and 32% of today's.

B South Korea: A big fleet, a modest book

Korean yards built 25% of today's fleet but hold 18% of the book. This equals 13% of the fleet they built, up from 8% – below the world's 19%.

C Japan and Europe have stood still

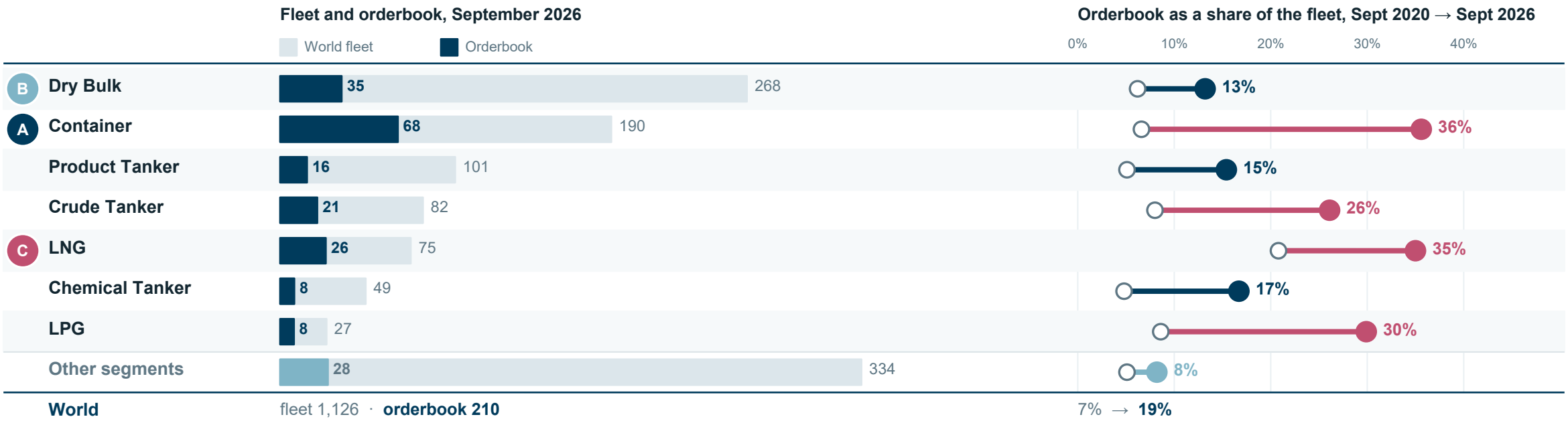
Japan built 20% of the fleet and Europe 12%, but they hold 6% and 4% of the book – 5–6% of the fleet they built, little changed since 2020.

Source: Clarksons, Danish Ship Finance. Fleet = world fleet in service by builder region, all yards; orderbook = active yards. September 2020 orderbook by region derived from pages 51 and 53.

Dry Bulk is the largest cargo fleet, but Container ships carry the largest orderbook – 36% of their fleet, against 13% for Dry Bulk

The world fleet amounts to 1.1bn cgt and today's orderbook would add 19% to it – but very unevenly across segments.

Exhibit 5 World fleet and orderbook by segment, and the orderbook as a share of the fleet (million cgt; % of cgt)



A A large fleet with the largest book

Container ships are 17% of the world fleet but 32% of the orderbook: 68m cgt on order against a 190m cgt fleet, up from 7% of the fleet in 2020.

B The biggest fleet, a modest book

Dry Bulk is the largest cargo fleet at 268m cgt. Its 35m cgt book is the second–largest in tonnage, but at 13% of the fleet it is below the 19% average.

C Gas: Small fleets, heavy books

LNG's 26m cgt on order equals 35% of its fleet, LPG's 8m equals 30%. Small in tonnage, they are among the largest additions to what they will join.

Source: Clarksons, Danish Ship Finance. Fleet = world fleet built by all yards; orderbook = active yards. Other segments include Offshore Vessels.

Section 2

Development 2020–2026

How did the yards become this full?

The number to remember

3.7

years of production already sold at today's capacity, up from 1.4 years at the end of 2020.

The chapter

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IV	Delivery performance	pp. 46–48
V	Orderbook	pp. 49–55
VI	Capacity	pp. 56–69
VII	Spare capacity	pp. 70–75

Our view

Orders have outstripped capacity in every year of this cycle.

Since 2020, the orderbook has grown three and a half times, to 210m cgt, while yard capacity has grown by 30%. Order cover – the years of production already sold – has risen from 1.4 to 3.7 years. An owner ordering today is buying a place in line.

What the pages show

p. 45 **World orderbook and yard capacity** – the orderbook has grown three and a half times since 2020; the capacity that builds it by less than a third.

The rest of the chapter takes the imbalance apart

Section 3 **Delivery performance** – can the yards deliver what they have scheduled?

Section 4 **Orderbook** – what is on order, and where has it been placed?

Section 5 **Capacity** – who can build it, and is the capacity where the orders are?

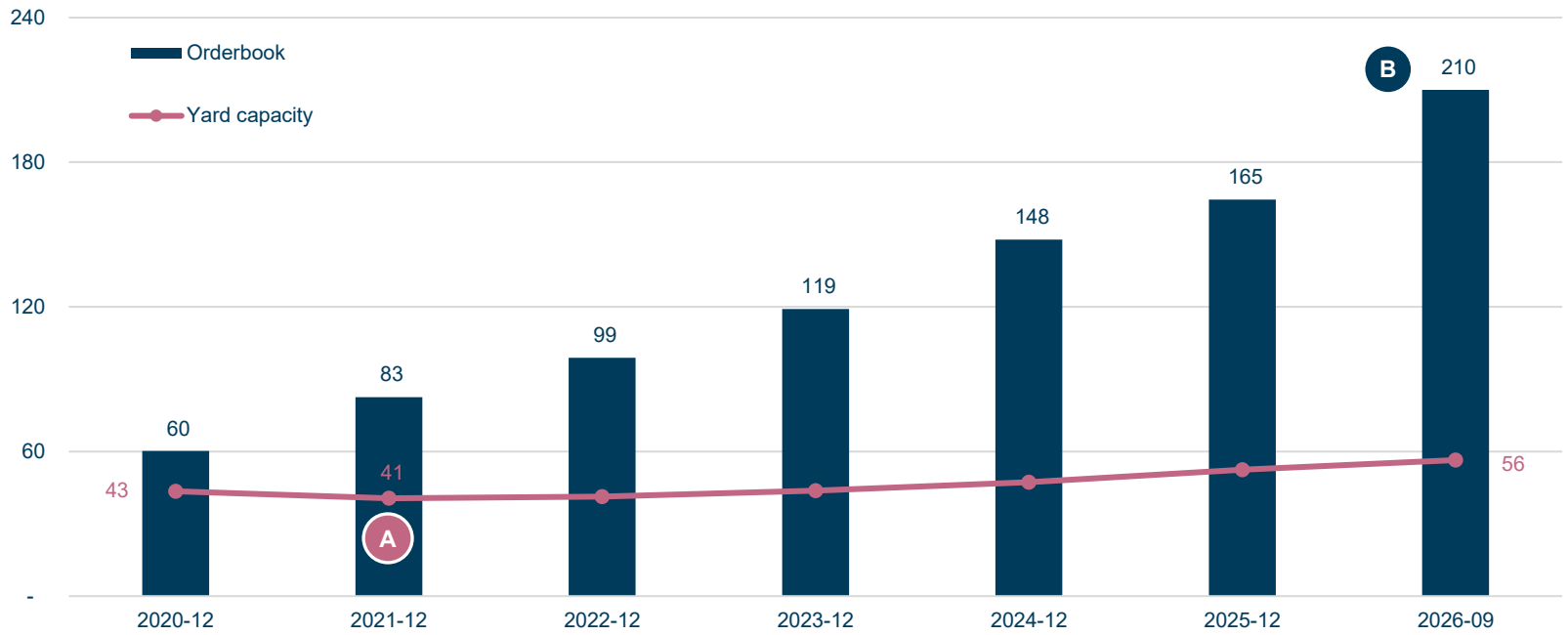
Section 6 **Spare capacity** – where can an owner still find a berth?

Next → Section 3 tests how well yards keep to their schedules, before we read the orderbook as one.

The orderbook has grown three and a half times since 2020; the yard capacity that builds it by less than a third

Orders have outstripped capacity every year of this cycle. The gap between them is order cover – the years of production already sold.

Exhibit 6 World orderbook and yard capacity, active yards (million cgt)



Order cover

years of production already sold

1.4 → **3.7** C

Dec 2020 **Sep 2026**

38% of today's orderbook has been contracted in the past 12 months

A Capacity fell before it rose

The active base kept shrinking throughout 2021, a year after ordering turned. Capacity only regained its 2020 level in 2023.

B The book is still accelerating

210m cgt, three and a half times the 2020 level – and two–fifths of it has been signed in the past 12 months.

C The queue is nearly four years long

Order cover has risen from 1.4 to 3.7 years. An owner ordering today is buying a place in line, not a ship.

Source: Clarksons, Danish Ship Finance

Section 3

Delivery performance

How far can we trust the delivery schedule?

The number to remember

78%

of each January's scheduled tonnage delivered in its scheduled year, 2021–25.

The chapter

0	Method	p. 38
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4	Orderbook	pp. 49–55
5	Capacity	pp. 56–69
6	Spare capacity	pp. 70–75

Our view

Read the orderbook as a guide to volume, not to timing.

Four in five scheduled tonnes have arrived in the year they were due – every year since 2021 and in each of the three big builder regions. Most of the rest arrive by the following June, nearly two–thirds of them ships due in the fourth quarter that slip past New Year. Only 5–7% are never delivered.

What the pages show

p. 47 **Each January's schedule, followed ship by ship** – four in five tonnes arrive in their scheduled year, every year since 2021; LNG Carriers slip most.

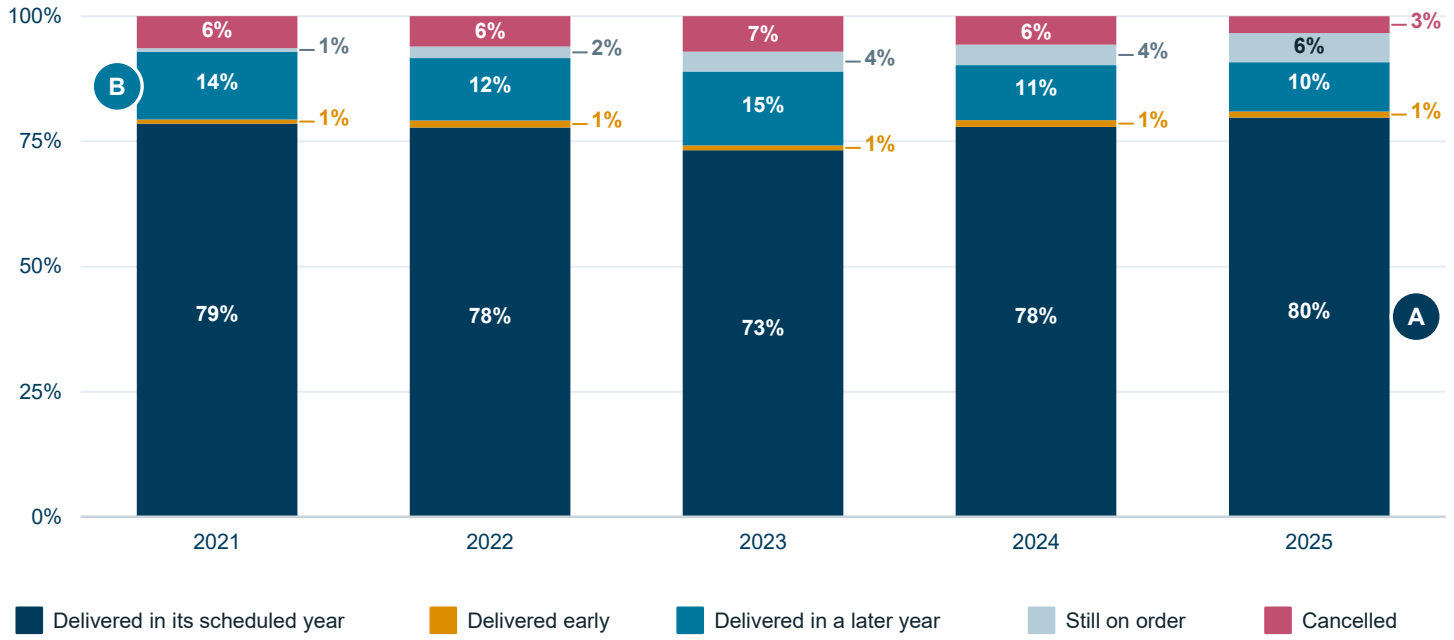
p. 48 **When the late tonnes arrive, by quarter due** – most arrive by the following June; nearly two–thirds of them were due in Q4.

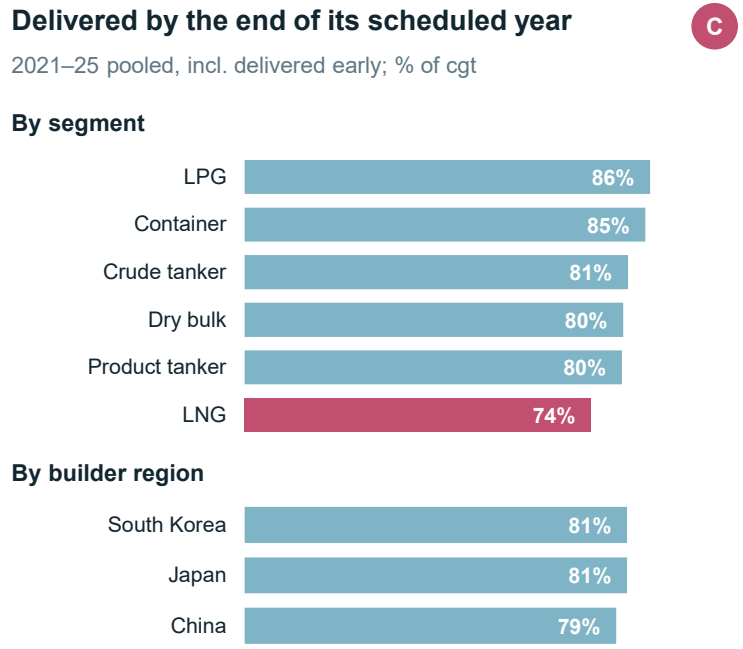
Next → Section 4 looks at what is in the schedule: by segment, builder region and yard.

Four in five scheduled tonnes arrive in the year they were due – and that rate has held for five years

Each January's schedule traced ship by ship. About one tonne in six slip into a later year; about one in 20 are cancelled.

Exhibit 7 What has happened to each January's delivery schedule, all segments, at yards active each January (% of scheduled cgt)





A **Four in five, every year**

73–80% of each January's tonnage has arrived in its scheduled year, and about 1% even earlier. No trend – even as the schedule grew from 33m to 46m cgt.

B **Slippage is mostly delay**

About one tonne in six slip into a later year, and nearly all of 2021's has since arrived. Only 5–7% of each schedule is never built.

C **Builders perform alike; ship types do not**

China, South Korea and Japan each deliver 79–81% in–year. LNG Carriers slip the most – one tonne in five move to a later year – and LPG and Container ships the least.

Source: Clarksons, Danish Ship Finance. Ships scheduled at yards active each January, followed to September 2026 even if the yard later left the base. Cancelled = no longer in the dataset.

Most late tonnes arrive by the following June – and nearly two–thirds were due in Q4, where even a one–quarter slip crosses New Year

The same January schedules as the previous exhibit, split by the quarter each ship was due and when it arrived. A one–quarter slip is about as common in every quarter – only for Q4 does it cost the year.

Exhibit 8 When each quarter's scheduled tonnes arrived, 2021–24 pooled (% of the quarter's scheduled cgt)

1 January

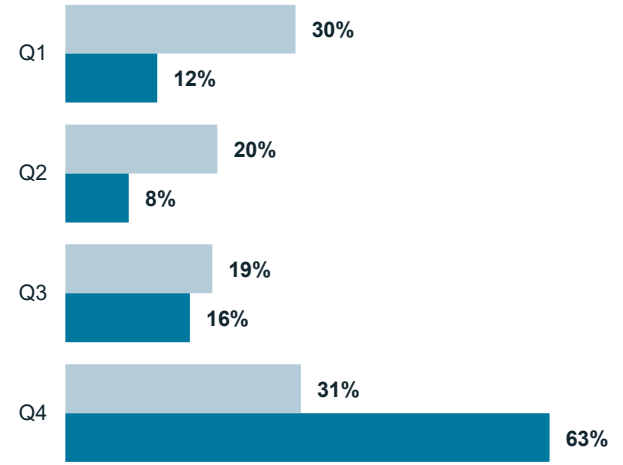
Due in (share of schedule)	Before 1 Jan*	Scheduled year Q1	Q2	Q3	Q4	Next year Q1	Q2	H2	2+ years later	Still on order (C)	Cancelled	In its year
Q1 30%	3	59	18	4	2	1	1	1	2	2	6	**83**
Q2 20%	<1	15	46	20	6	2	2	1	1	3	5	**86**
Q3 19%	<1	2	20	39	20	6	1	2	2	4	4	**81**
Q4 31%	<1	4	9	18	31	16	6	2	2	3	9	**62**
All quarters	**1**	**22**	**21**	**18**	**15**	**7**	**3**	**2**	**2**	**3**	**6**	**77**

(A) Outlined: tonnes that arrived one quarter after the quarter they were due – 18%, 20%, 20% and 16%. Only Q4's cross 1 January.

Shading, % of the quarter's scheduled cgt: <2 | 2–5 | 5–15 | 15–40 | 40+

Where the late tonnes come from (B)

2021–24 pooled, by quarter due; % of cgt



(A) One quarter's slip is routine

16–20% of every quarter's tonnage arrives one quarter late. For Q4, that quarter is the next January–March, so Q4 makes its year 62% of the time, against 81–86% for Q1–Q3.

(B) Q4 sets the headline rate

Q4 supplies 51–72% of each year's late tonnes. 2023 had the most Q4–heavy schedule (37% vs. 28–30%); at the usual mix, its 73% becomes 75% – still the weakest year.

(C) A small tail that isn't shrinking

Nearly nine in ten tonnes arrive by the end of the next year; 6% are cancelled. Ships 2+ years late or still on order rose from 3% of the 2021 schedule to 5% for 2023–24.

Source: Clarksons, Danish Ship Finance. Same cohorts as the previous exhibit, 2021–24 pooled so the next year is fully observed. *Recorded as delivered before 1 January while on order in the January snapshot; 92% was due in Q1, so most is likely late–registered December deliveries.

Section 4

Orderbook

What is on order, and where has it been placed?

The number to remember

81%

of last year's orders went to the 99 top–performing yards, which hold half of world capacity.

The chapter

I	Method	p. 38
II	Introduction	pp. 39–43
III	Development 2020–2026	pp. 44–45
IV	Delivery performance	pp. 46–48
V	**Orderbook**	**pp. 49–55**
VI	Capacity	pp. 56–69
VII	Spare capacity	pp. 70–75

Our view

New orders keep joining the longest queues.

The yards have sold more than they have delivered every year since 2021 – 1.6 times as much in the past 12 months. Two–fifths of the orderbook's growth is Container ships, four–fifths has gone to Chinese yards, and the 99 top–performing yards took 81% of last year's orders. The yards with spare capacity are being passed over.

What the pages show

p. 50 **Contracting and deliveries** – the yards have sold more than they have delivered every year since 2021; output is running at 86% of capacity.

p. 51 **Orderbook by builder region** – four–fifths of the growth has gone to Chinese yards; China's book is six times its 2020 size.

p. 52 **Orderbook by segment** – two–fifths of the growth is Container ships; Crude and Product Tankers have more than tripled.

p. 53 **Orderbook by builder region and segment** – China is building the most of everything, South Korea the Gas Carriers; Japan's spare berths are bulk berths.

p. 54 **Capacity, orderbook and new orders, by region** – China's share is rising at every step; South Korea holds gas; Japan's bulk room is going unused.

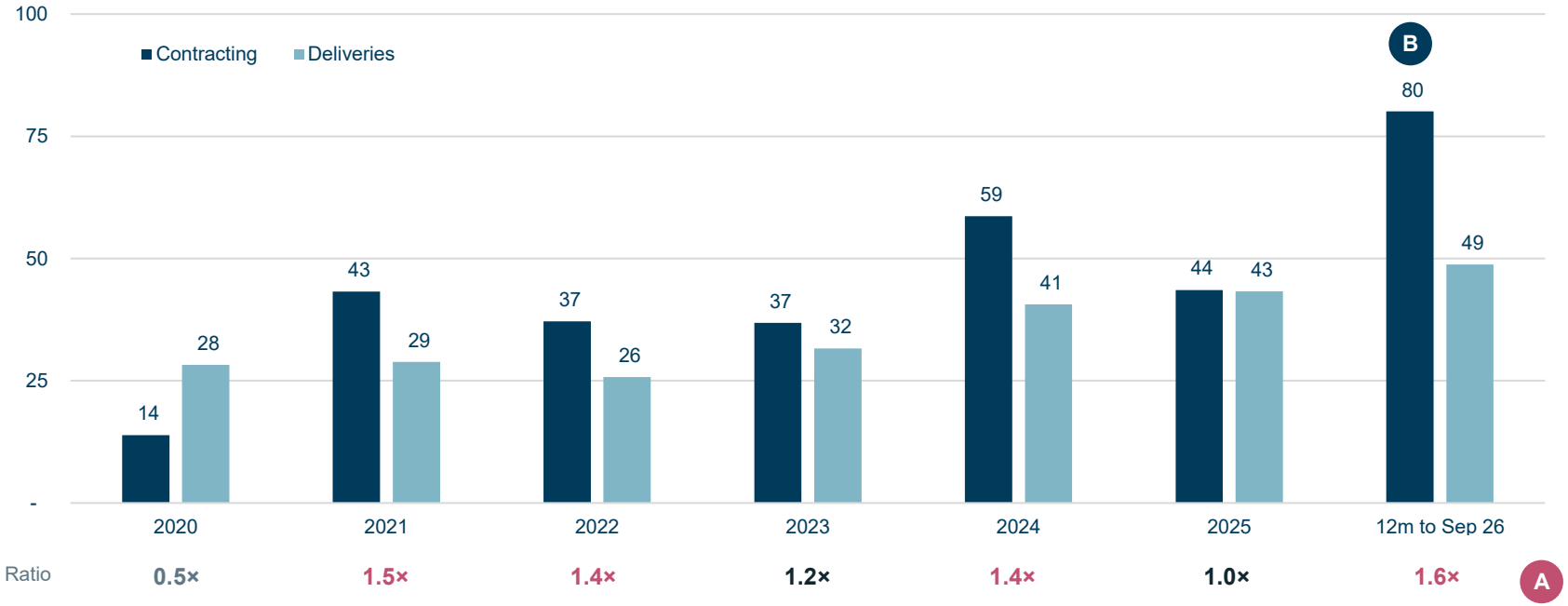
p. 55 **Orderbook by order cover tier** – the top performers hold half the capacity and took four–fifths of last year's orders.

Next → Section 5 asks whether the capacity is where the orders are – and whether it can deliver them.

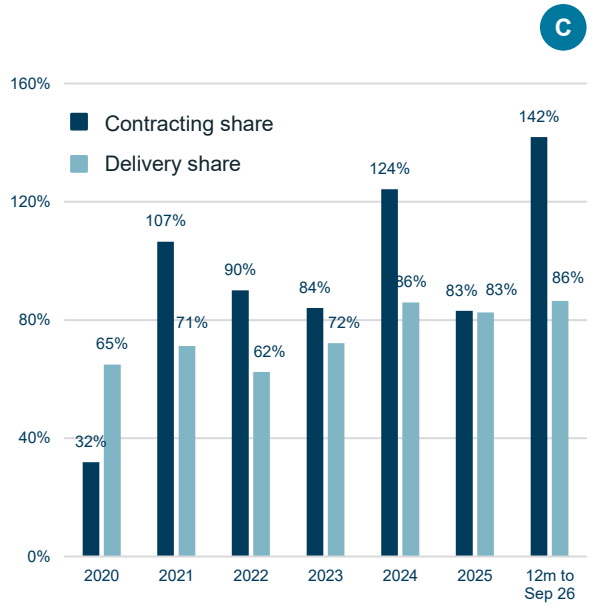
Since 2021, the yards have sold more than they have delivered – and output is now running at 86% of capacity

Deliveries from active yards are up 69% since 2021, but contracting has outpaced them in all six years. The past 12 months have shown the widest gap yet.

Exhibit 9 Contracting and deliveries, active yards (million cgt)



Contracting & deliveries as a share of yard capacity



A Six years of selling more than building

The ratio has stayed above 1x since 2021. Together, the yards have sold about 1.4 times what they have delivered, which is what has caused the orderbook to triple.

B The past year has seen the widest gap in several years

80m cgt contracted against 49m delivered – 142% of capacity sold against 86% built. 2025 is the only year the two matched, at 83%.

C Orders jump, output climbs

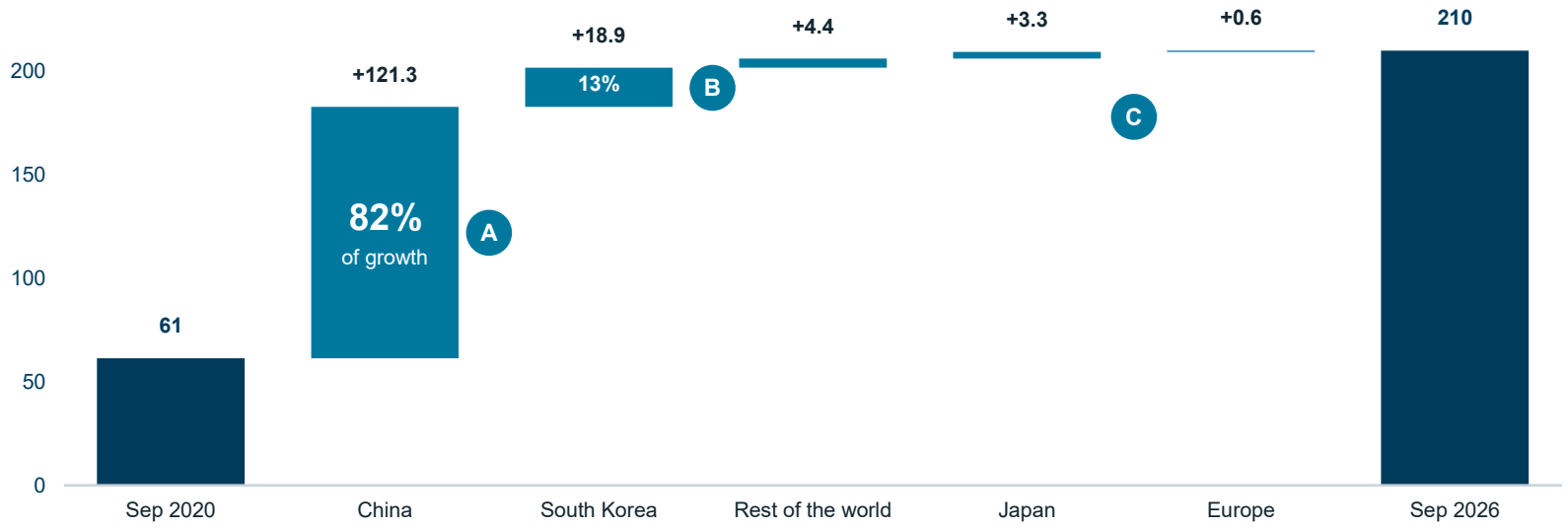
Contracting has swung between 83% and 142% of capacity since 2021. Deliveries have climbed steadily, from 62% of capacity in 2022 to 86%. Yards can raise output, but only gradually, so each surge in orders adds to the queue.

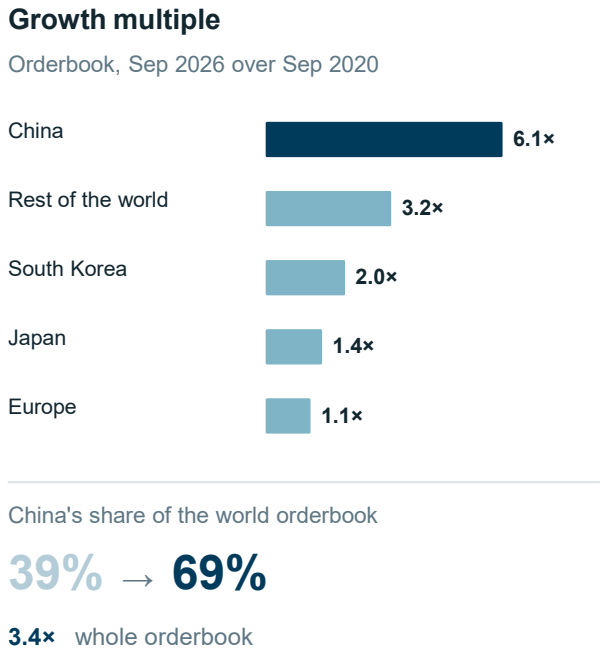
Source: Clarksons, Danish Ship Finance. Contracting and deliveries at active yards, 12–month totals; utilisation against year–end capacity.

Four–fifths of the orderbook's growth has gone to Chinese yards; China's book is six times its 2020 size

Of the 149m cgt added since September 2020, Chinese yards have taken 121m – over four times more than all other regions combined.

Exhibit 10 Change in the orderbook by builder region, September 2020 to September 2026 (million cgt)





A **China has taken four–fifths of the growth**

+121m cgt, 82% of the total. Its book is 6.1 times its 2020 size and now represents 69% of the world orderbook, up from 39%.

B **South Korea has doubled, but lost share**

+19m cgt and twice its 2020 book, yet its share has fallen from 31% to 18%. With capacity down 15% and three years of cover, Korea is short of berths, not orders.

C **Japan and Europe have barely moved**

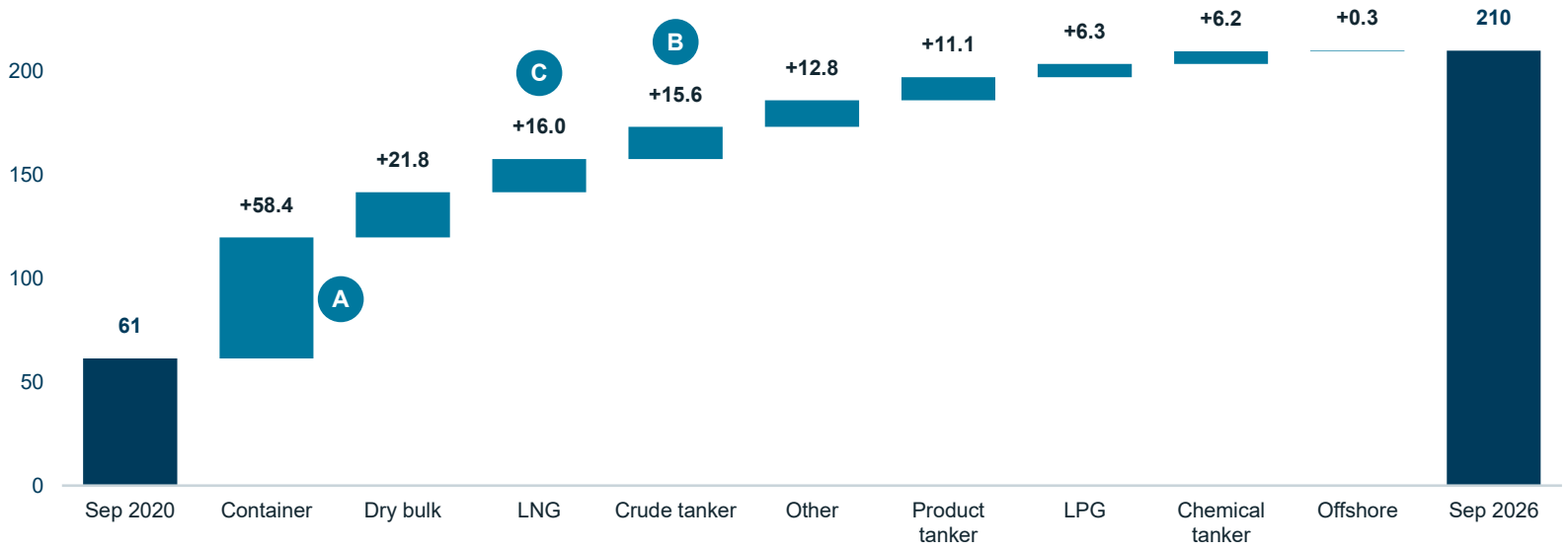
Japan +3.3m cgt (1.4×), Europe +0.6m (1.1×): less than 3% of the growth between them. Japan has the free berths, as page 60 shows, but not the orders.

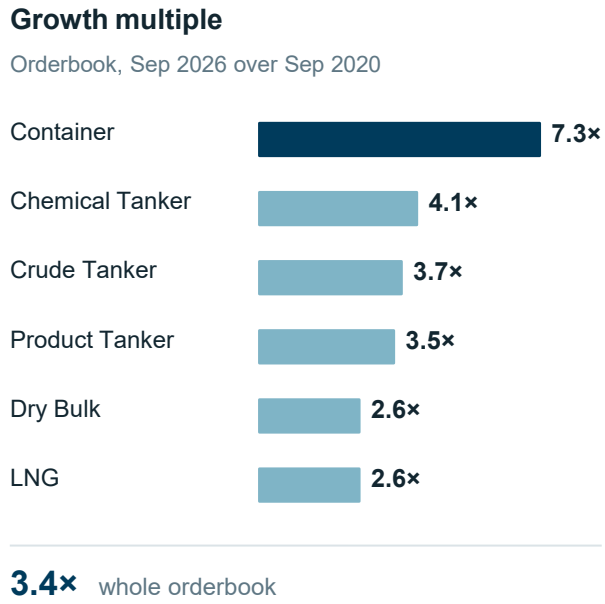
Source: Clarksons, Danish Ship Finance.

Two–fifths of the orderbook's growth is Container ships; Crude and Product Tankers have more than tripled from a low base

The book has grown by 149m cgt since September 2020. Every major cargo segment has at least doubled, but the growth is far from even.

Exhibit 11 Change in the orderbook by segment, September 2020 to September 2026 (million cgt)





A **Container ships lead**

+58m cgt, seven times the 2020 book and 39% of all growth. Vessels of 15,000 teu and more added 22m cgt on their own.

B **Tankers have grown from a low base**

Crude Tankers 3.7 times, with VLCCs alone adding 11m cgt; Product Tankers 3.5 times, led by MRs and LR2s.

C **The largest traditional segments have grown least**

Dry Bulk and LNG each rose 2.6 times. Yet LNG is where berths are scarcest, as page 72 shows.

Source: Clarksons, Danish Ship Finance.

The regions build different ships: China builds most of everything, South Korea the Gas Carriers – and Japan's spare berths are bulk berths

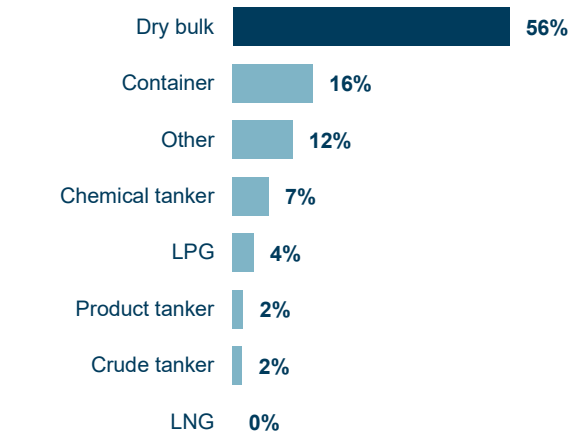
Read by segment, the builder regions are not substitutes for each other. Free berths in one region do little for a segment that that region does not build.

Exhibit 12 Share of each segment's orderbook by builder region, September 2026 (% of cgt)

Segment	Orderbook m cgt	China (A) 69% of book	South Korea 18% of book	Japan 6% of book	Europe 4% of book	Rest of world 3% of book
Container	67.7	**83%**	14%	2%	–	1%
Dry Bulk	35.4	**77%**	–	19% (C)	–	4%
Crude Tanker	21.4	**69%**	25%	4%	–	2%
LNG	26.3	**35%**	**63%** (B)	–	–	2%
Product Tanker	15.5	**74%**	11%	2%	1%	12%
Chemical Tanker	8.2	**76%**	1%	16%	2%	5%
LPG	8.0	**42%**	**51%**	7%	–	1%
Other, incl. Offshore	27.5	**61%**	3%	4%	28%	4%
All segments	**210.0**	**145.2m**	**38.0m**	**12.4m**	**8.1m**	**6.4m**

What Japan's yards delivered, 2021–25

Share of cgt delivered



South Korea, for comparison: 43% LNG and 1% Dry Bulk.

A China builds most of everything

Over two–thirds of every main cargo segment outside gas is Chinese: 83% of Container tonnage, 77% of Dry Bulk, 74% of Product and 69% of Crude Tankers.

B South Korea is the gas builder

63% of the LNG book and 51% of LPG is Korean, and LNG alone is 44% of Korea's orderbook. China holds 35% of LNG, yet gas accounted for 4% of its 2021–25 output.

C Japan's spare capacity is bulk

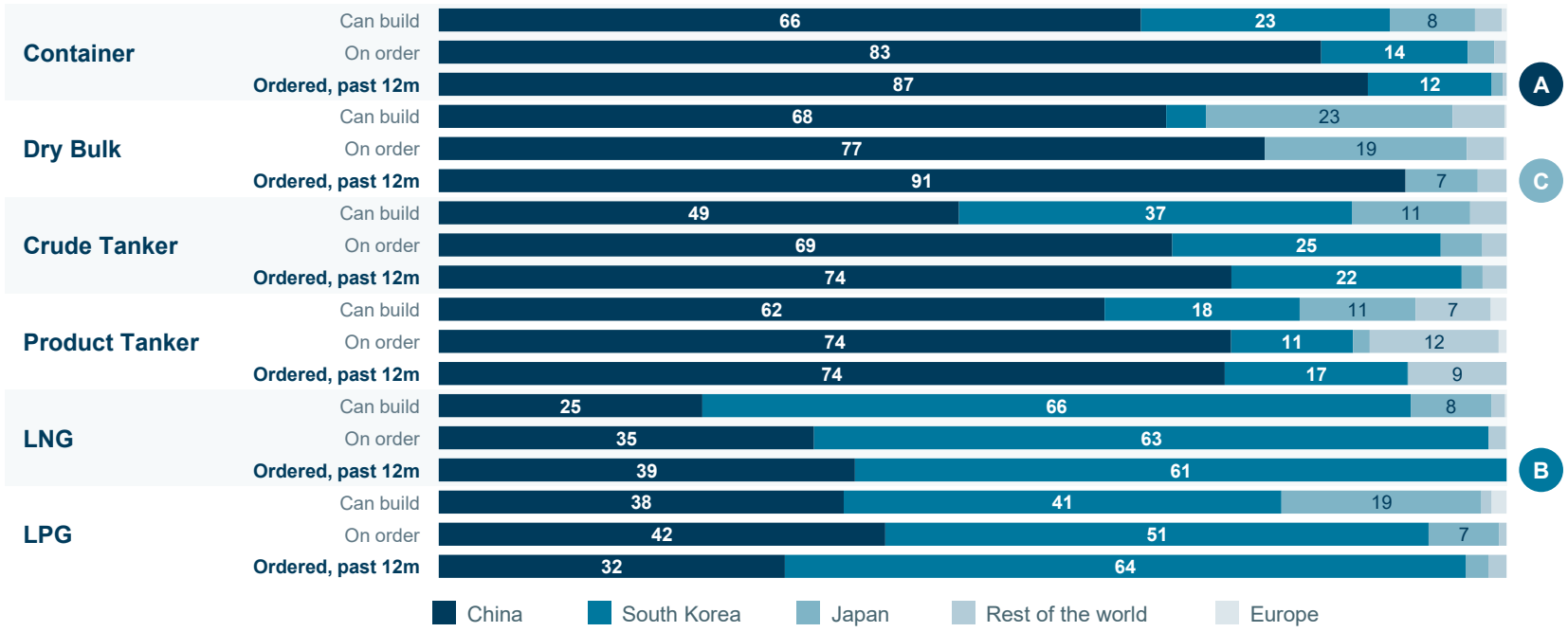
56% of what Japanese yards delivered in 2021–25 was Dry Bulk and none of it LNG. Its free berths cannot ease the scarcity for Gas Carriers or VLCCs.

Source: Clarksons, Danish Ship Finance. Orderbook at active yards, September 2026. Output = deliveries in 2021–25 by today's active yards.

China's share is rising from what yards can build, to what is on order, to last year's orders – South Korea holds gas and Japan's spare bulk capacity is going unused

For each main segment: each builder region's share of the capacity able to build it, of the orderbook, and of the cgt ordered in the past 12 months. Where the three bars differ, orders are moving.

Exhibit 13 Capacity, orderbook and past–year orders by builder region, main segments, September 2026 (% of each)



Where the scarce berths are

Share of each subsegment's capacity → share of its past–year orders, %

	China	Korea	Japan
VLCC	56 → **83**	31 → **13**	10 → **2**
Capesize	71 → **93**	7 → **0**	18 → **7**
15,000+ teu	66 → **91**	27 → **9**	8 → **0**
MR Tanker	60 → **60**	15 → **28**	15 → **0**
LGC	21 → **36**	70 → **64**	7 → **0**

Dark = larger share of orders than of capacity; **pink** = smaller.

A **China is gaining at every step**

Container ships: 66% of capacity, 83% of the book, 87% of last year's orders; Dry Bulk: 68%, 77%, 91%; Crude Tankers: 49%, 69%, 74%.

B **South Korea holds gas**

Two–thirds of LNG–capable capacity and 61% of last year's LNG orders; in LPG, 41% of capacity but 64% of orders. In Containers and Crude Tankers, it is losing share.

C **Japan's spare bulk capacity is going unused**

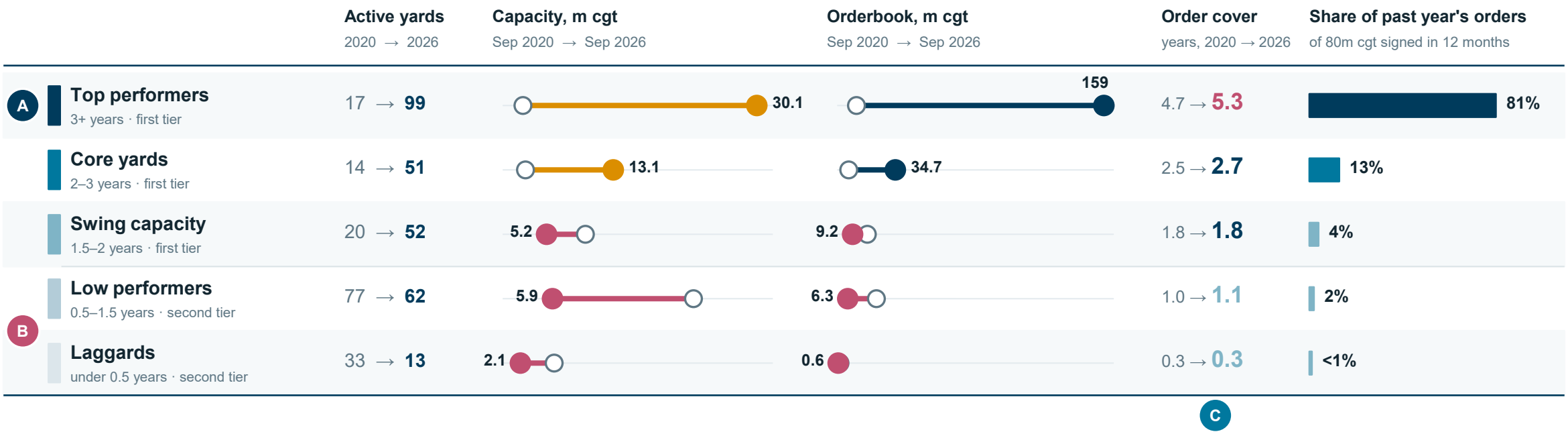
Japan holds 23% of bulk–capable capacity, 19% of the Dry Bulk orderbook and 7% of last year's bulk orders. In the other main segments, its share of orders is 2% or less.

Source: Clarksons, Danish Ship Finance. Capacity = active yards' demonstrated capacity per segment, capped at each yard's total, so a yard counts in every segment it has built (page 71); page 59 counts only yards with orders in the segment. Orders = cgt contracted in the 12 months to September 2026 and still on order.

Top performers hold half the capacity and took four–fifths of last year's orders – the queue is growing where it is already longest

Tiers are set by order cover at each date, so yards move between them. The top performers have grown from 17 yards in 2020 to 99 today.

Exhibit 14 Order cover tiers, September 2020 to September 2026



A Orders are following the queue

Top performers took 81% of the past year's contracting – 65m cgt, over two years of their own capacity in 12 months. Their cover has lengthened from 4.7 to 5.3 years.

B The second tier is being passed over

Low performers and laggards still hold 8m cgt of capacity but took under 2% of last year's orders – about two months of their output.

C Capacity has moved up, not the bar

Each tier's cover is little changed since 2020. The world's cover has risen from 1.4 to 3.7 years because capacity has migrated into the top tier, from 6% of the total to 53%.

Source: Clarksons, Danish Ship Finance. Tiers are measured at each date, so the yards in each tier differ between 2020 and 2026.

Section 5

Capacity

Who can build it, and can they deliver it on time?

The number to remember

1.64×

The top performers' 2028 schedule against their capacity. The other 178 yards have room.

The chapter

I	Method	p. 38
II	Introduction	pp. 39–43
III	Development 2020–2026	pp. 44–45
IV	Delivery performance	pp. 46–48
V	Orderbook	pp. 49–55
VI	**Capacity**	**pp. 56–69**
VII	Spare capacity	pp. 70–75

Our view

Capacity has grown, but it has moved into the first tier – the yards that are already full.

Capacity is up 30% since 2020: China has doubled its capacity, much of it by bringing old yards back, while South Korea's and Japan's have shrunk. The second–tier buffer that could absorb new orders has fallen from 29m to 8m cgt. Against this capacity, the 2027–28 schedule is too heavy – the top–performing yards are booked at 1.64 times their capacity for 2028 – so part of the wave will arrive later than scheduled.

What the pages show

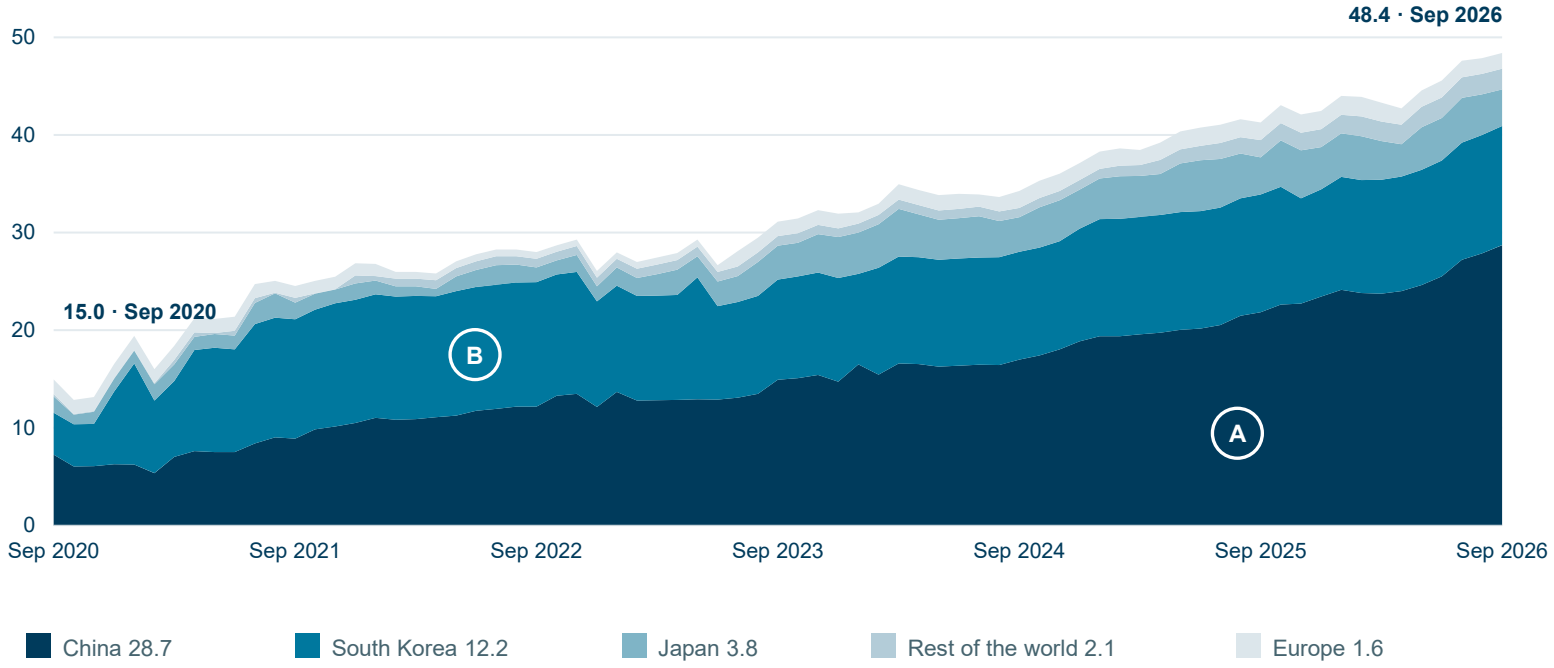
pp. 57–60	**Capacity development** – up 30% since 2020: China has doubled, South Korea and Japan have shrunk, and first–tier capacity has more than tripled.
pp. 61–62	**Capacity by tier** – first–tier yards have outnumbered second–tier yards since 2024; the second tier's share of capacity has fallen from 62% to 14%.
pp. 63–64	**New yards** – only 111 of today's 277 active yards were active in 2020; most of China's newcomers are old yards brought back.
pp. 65–69	**Scheduled deliveries against capacity** – even at the historical on–time rate, 2027–28 will fill the yards to 84–89% of capacity; the excess will be with the top performers and with China.

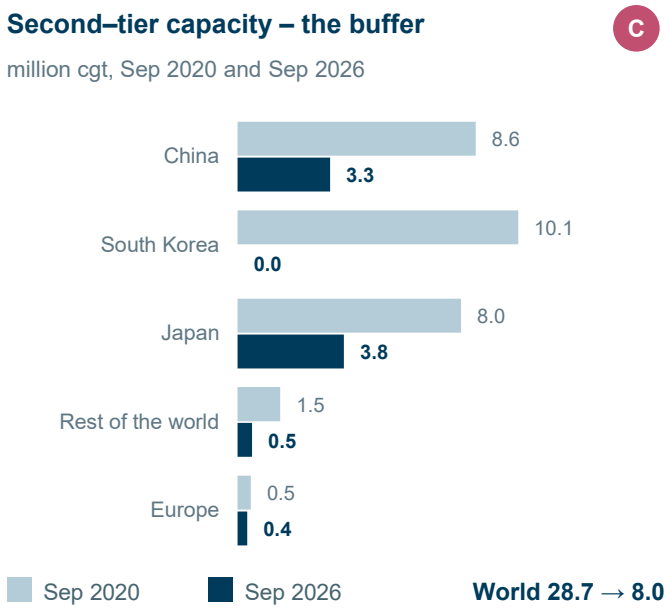
Next → Section 6 asks where an owner can still find a berth, and when space will return.

First–tier capacity has more than tripled since 2020 – China has supplied nearly two–thirds of it, while South Korea's has been full and flat since 2021

First–tier yards have at least 18 months of work booked. The buffer that could take new orders – second–tier capacity – shrank from 29m to 8m cgt in the period spanning September 2020 to September 2026.

Exhibit 15 First–tier yard capacity by builder region, September 2020 to September 2026 (million cgt)





A **China built the first tier**

From 7.2m to 28.7m cgt – 64% of the world's increase. China now holds 59% of first–tier capacity, up from 48% in 2020.

B **South Korea sold out first**

Its first tier reached 12m cgt by late 2021 and has stayed there. All ten Korean yards are first tier, and the region has added no capacity since.

C **The buffer is Japanese and Chinese**

Second–tier capacity has fallen from 28.7 to 8.0m cgt. Japan holds 3.8m and China 3.3m; South Korea's 10.1m has moved into the first tier.

Source: Clarksons, Danish Ship Finance.

China has doubled its capacity and expanded its orderbook sixfold. Japan, the builder with space, is being passed over

Every region's order cover has risen, but not evenly. Orders have moved to the yards with the longest queues, not those with the most free space.

Exhibit 16 Builder regions, December 2020 to September 2026

	Active yards	Capacity, m cgt Dec 2020 → Sep 2026	Orderbook, m cgt Dec 2020 → Sep 2026	Order cover years	Share of past year's orders cgt signed in the past 12 months
A China	81 → **175**	32.0	145	**4.5**	**75%**
B South Korea	9 → **10**	12.2	38	**3.1**	**17%**
C Japan	46 → **43**	7.6	12	**1.6**	**2%**
Europe	11 → **20**	2.0	8	**4.1**	**3%**
Rest of the world	14 → **29**	2.6	6	**2.4**	**2%**
World	**161 → 277**	**43.5 → 56.4 (+30%)**	**60 → 210 (×3.5)**	**3.7**	**80m cgt**

A China took three–quarters of last year's orders

Nearly two years of its own capacity signed in 12 months. 94 more Chinese yards are active than at the end of 2020.

B South Korea shrank its yards and doubled its book

Capacity down 15%, orderbook up 97%. The discipline was in capacity; the result is three years of cover.

C Japan has the space and is not being chosen

Capacity down a fifth, order cover 1.6 years, and orders equal to a quarter of one year's output.

Source: Clarksons, Danish Ship Finance. Order share is the cgt of the current orderbook signed in the 12 months to September 2026.

Every main segment's orderbook has outgrown the capacity that serves it – and the segments are bidding for the same berths

Segment capacity is what the yards able to build a type could produce if they built nothing else. Together, the main segments are adding to 100m cgt against 56m of world capacity: the overlap is the competition between them.

Exhibit 17 Main segments, December 2020 to September 2026 (yards with orders in the segment)

	Active yards 2020 → 2026	Capacity per segment, m cgt Dec 2020 → Sep 2026	Orderbook, m cgt Dec 2020 → Sep 2026	Segment order cover years	Share of past year's orders cgt signed in the past 12 months
A Container	40 → **129**	35.0	67.7	**1.9**	29%
Dry Bulk	75 → **107**	28.1	35.4	**1.3**	18%
C LNG	14 → **19**	8.9	26.3	**2.9**	9%
B Crude Tanker	21 → **36**	11.1	21.4	**1.9**	17%
Product Tanker	33 → **84**	12.4	15.5	**1.3**	9%
LPG	12 → **29**	4.1	8.0	**1.9**	3%

A Container ships have reshaped the base

The orderbook is seven times its 2020 size and 129 yards hold Container orders, up from 41. Capable capacity has grown 55% – more than any other main segment.

B Crude Tanker capacity has barely grown

10.9m cgt in 2020 and 11.1m today, while the orderbook has nearly quadrupled. Cover has gone from six months to nearly two years.

C LNG is the tightest segment

2.9 years of cover across 19 yards, against 1.3 for Dry Bulk and Product Tankers. This is why only 13 LNG slots remain open for 2028.

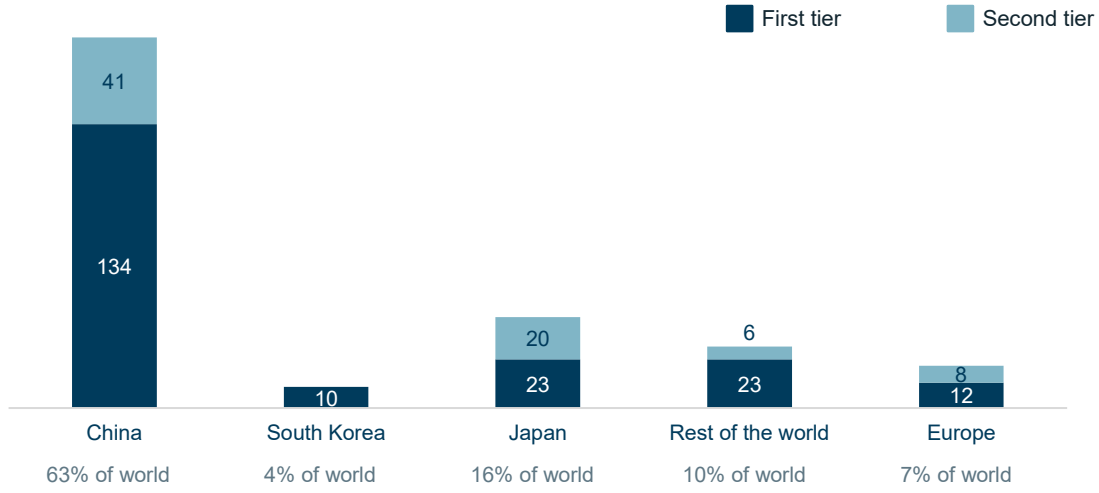
Source: Clarksons, Danish Ship Finance.

China has most of the yards, South Korea the biggest ones – and Japan holds half the capacity with thin orderbooks

Today's 277 active yards and their capacity by builder region and tier. 202 of the yards, and 86% of the capacity, are first tier.

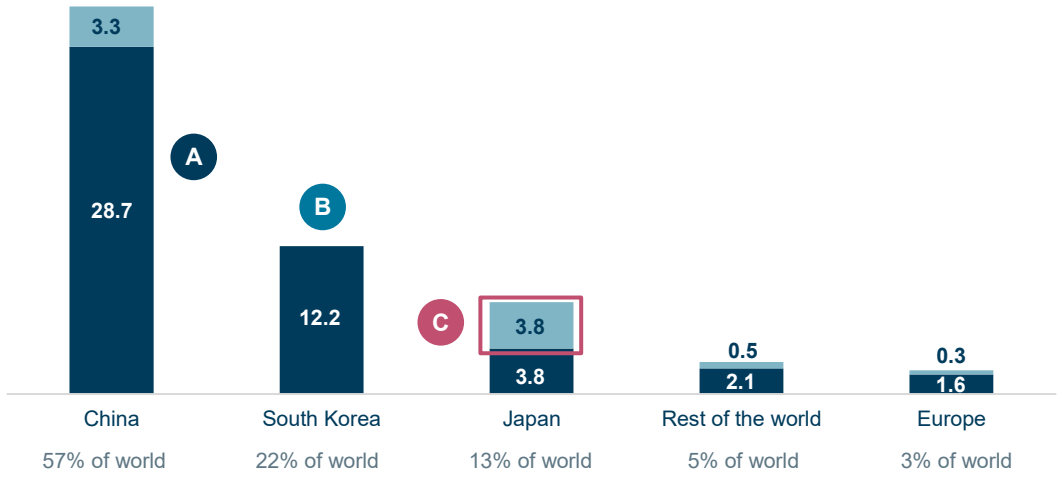
Exhibit 18 Active yards and yard capacity by builder region and order cover tier, September 2026

Active yards number of yards · 277 in total



World 202 first tier · 75 second tier

Yard capacity million cgt · 56.4 in total



World 48.4 first tier · 8.0 second tier

A China is most of the industry

175 of the 277 yards and 57% of capacity, 90% of it first tier. In September 2020 China had 78 active yards and 36% of capacity.

B Ten yards, a fifth of the world

South Korea's ten yards average 1.2m cgt each – almost seven times the Chinese average – and every one of them is first tier.

C Japan holds the space

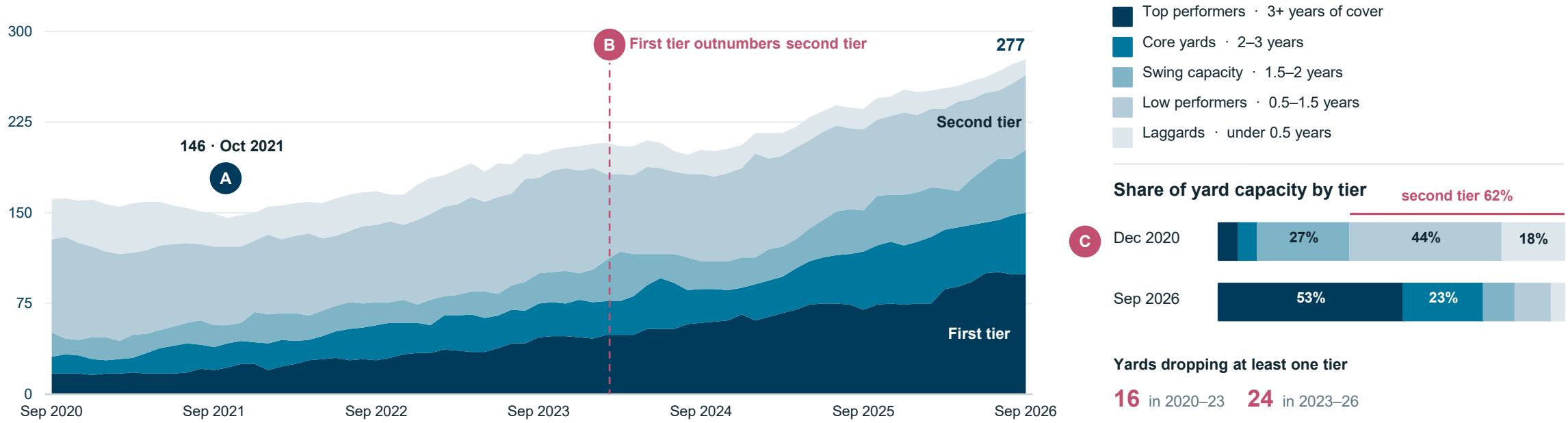
43 yards and 13% of capacity, but 48% of the world's second–tier capacity. Half of Japan's own capacity has less than 18 months of work.

Source: Clarksons, Danish Ship Finance.

Since its 2021 low, the active yard base has almost doubled

The number of yards with work fell for a year after ordering turned, then climbed to 277. The yards with thin orderbooks did not grow with it.

Exhibit 19 Active yards by tier category (number of yards)



A **The base shrank after ordering turned**

Active yards kept falling for a year after contracting recovered, bottoming at 146 in October 2021.

B **The first tier took over in 2024**

First–tier yards rose from 47 to 202 and second–tier yards fell from 114 to 75. The first tier has represented the majority since February 2024.

C **The buffer went with it**

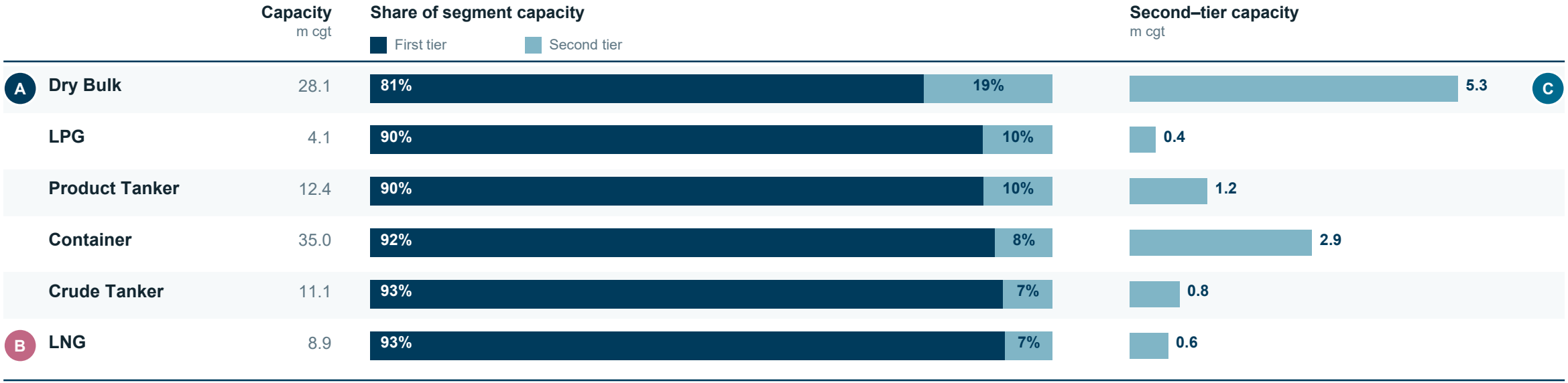
Second–tier yards held 62% of capacity in 2020 and hold 14% today – and downgrades are becoming more common, not less.

Source: Clarksons, Danish Ship Finance.

The second–tier buffer is mostly bulk capacity: 19% of Dry Bulk capacity is at second–tier yards, against 7% for LNG Carriers and Crude Tankers

Segment capacity at first– and second–tier yards, six main segments, September 2026. Second–tier yards hold 5.3m cgt of bulk capacity – two–thirds of the tier's 8.0m cgt – and 0.6m of LNG capacity.

Exhibit 20 Segment capacity by order cover tier, main segments, September 2026 (% of segment capacity; million cgt)



Segments overlap: a yard counts in every segment it has orders in, capped at its own total, so the second–tier column sums up to 11.3m cgt against the tier's 8.0m. Sorted by the second tier's share.

A **Dry Bulk leans most on the second tier**

5.3m cgt of bulk capacity, 19% of the segment, is at second–tier yards – nearly twice the tier's 2.9m of Container capacity.

B **Gas Carriers and Crude Tankers are first–tier work**

93% of LNG and Crude Tanker capacity is first tier. The second tier adds 0.6m and 0.8m cgt – little help where berths are scarcest (page 72).

C **An exit would hit bulk first**

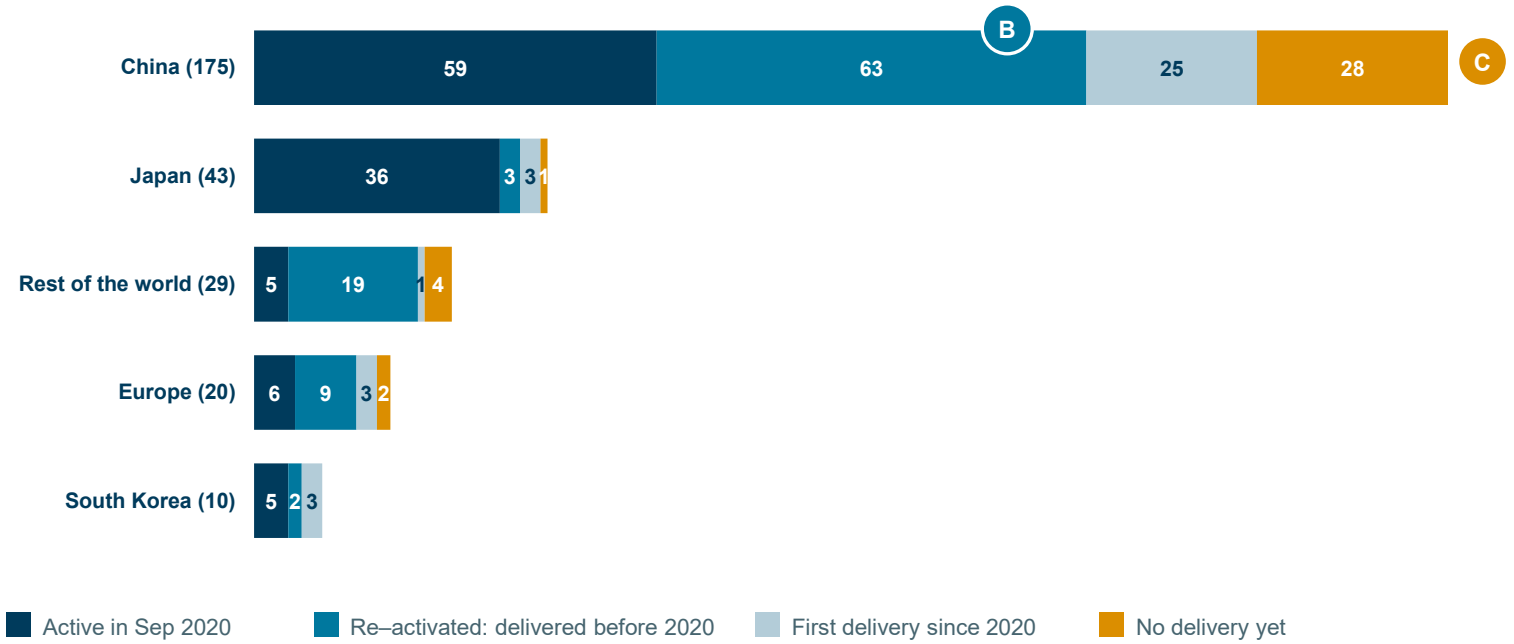
65 of the 75 second–tier yards will run out of contracts by the end of 2028 (page 75). If they close, Dry Bulk will lose up to a fifth of its capacity; LNG Carriers and Crude Tankers less than a tenth.

Source: Clarksons, Danish Ship Finance. Segment capacity as on page 59: yards with orders in the segment, capped at each yard's total. Tiers by order cover, September 2026.

Only 111 of today's 277 active yards were active in 2020 – most of China's new yards are old yards brought back into use

Since September 2020, 50 yards have left the active base and 166 have joined. Most of those that have joined have built ships before.

Exhibit 21 Today's active yards by their status in September 2020, by builder region (number of yards)



The active base, 2020 → 2026 A

number of yards

161	**active in September 2020**
–50	**have since left** China 19 · Japan 10 · Rest of world 10 · Europe 7 · Korea 4
+166	**have joined** 96 returned · 35 first delivery since 2020 · 35 not yet delivered
277	**active in September 2026**

A The base has turned over

Of the 161 yards active in September 2020, 50 have since left. 166 have joined – more than the entire base held in 2020.

B China has reopened its boom–era yards

63 of the 116 Chinese yards that have joined delivered ships before 2020, most of them first in the 2000s and 2010s. That is capacity returning, not capacity built.

C What has come back could leave again

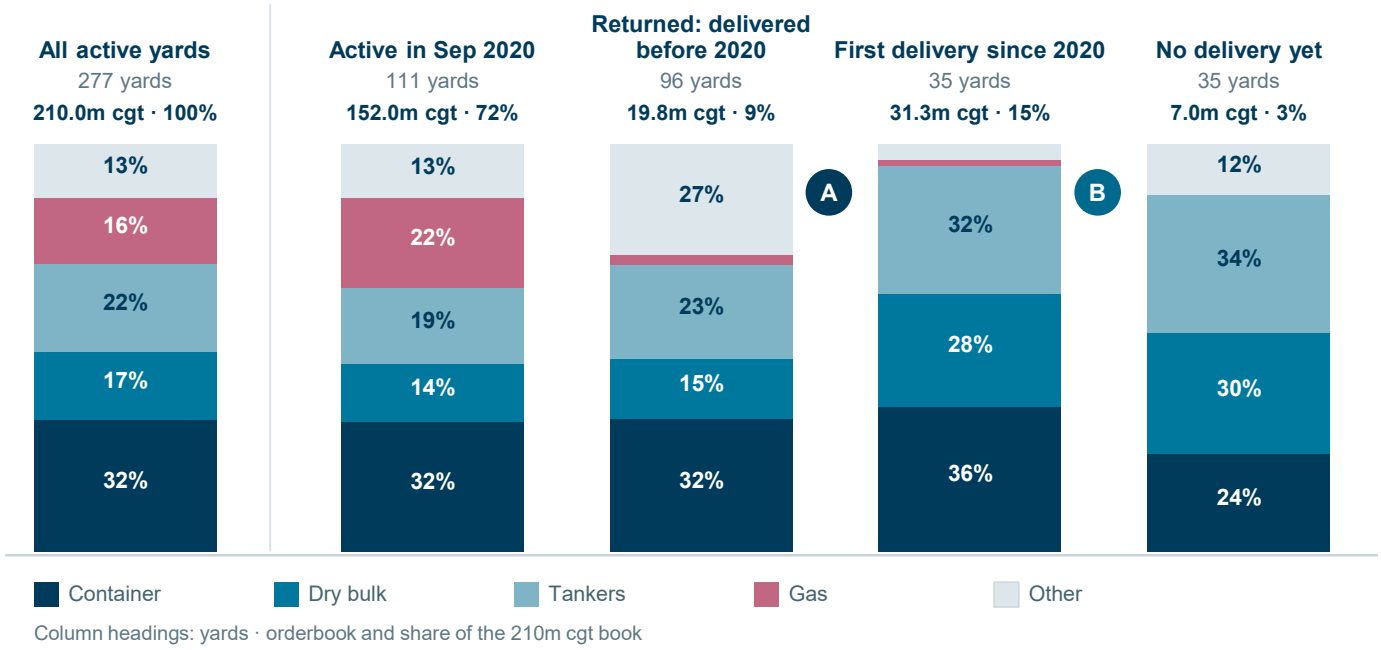
35 newcomers have yet to deliver a ship, 28 of them Chinese; their capacity is read from the orderbook. Returned and untested yards are the likeliest to fall idle.

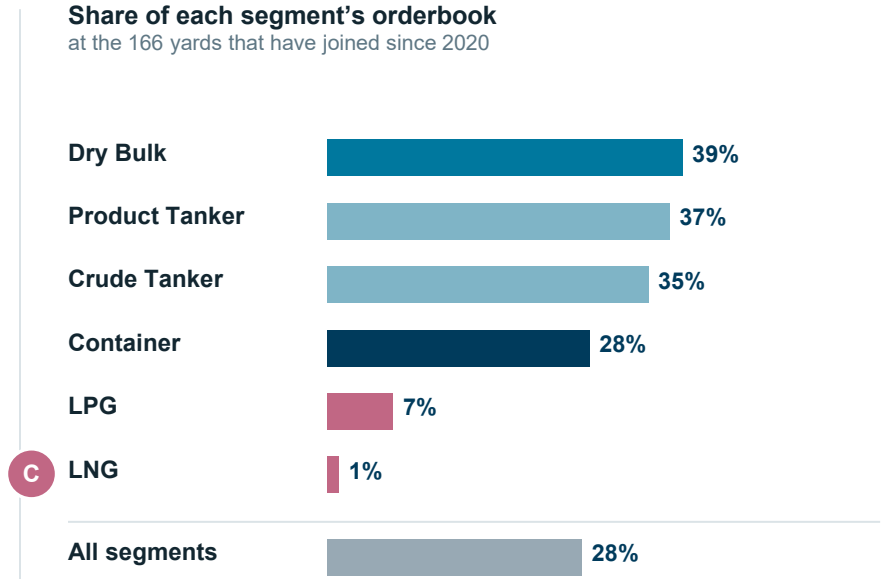
Source: Clarksons, Danish Ship Finance. Yards renamed or merged since 2020 are counted under their predecessor.

Yards that have joined since 2020 hold over a quarter of the orderbook – 39% of Bulkers but just 1% of LNG Carriers

Today's orderbook by segment at yards active in 2020, yards that have returned, yards with their first delivery since 2020 and yards yet to deliver (groups as on page 63). Together, the 166 yards that have joined hold 58m cgt, 28% of the orderbook. Renamed yards count under their predecessor.

Exhibit 22 Orderbook by segment and by yard status in September 2020, active yards, September 2026 (% of each group's orderbook; % of each segment's orderbook)





A Returned yards hold little

The 96 yards that delivered before 2020 hold 19.8m cgt, 9% of the book – 0.21m each on average, a third of it Container ships and almost no gas.

B One yard carries the first deliveries

35 yards hold 31.3m cgt, 15% of the book; Hengli, on the former STX Dalian site, alone holds 14.9m. The 35 untested yards hold 3%, none of it gas.

C Gas remains with the incumbents

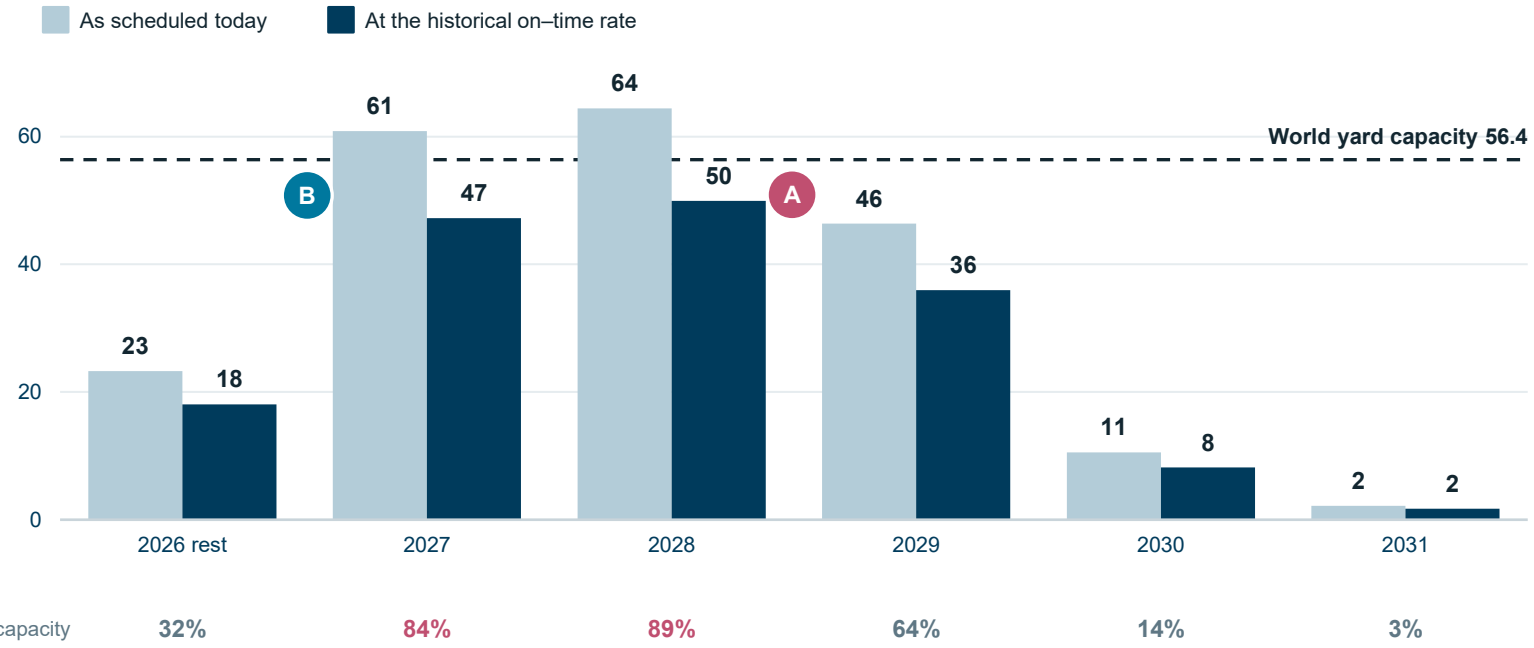
Yards active in 2020 hold 97% of the gas orderbook. Newcomers hold 39% of Dry Bulk and 35% of Crude Tankers but 1% of LNG – where berths are scarcest (page 72).

Source: Clarksons, Danish Ship Finance. September 2026 orderbook at active yards (210m cgt); yard status in September 2020 as on page 63, yards matched to builder ID. Yards renamed or merged since 2020 are counted under their predecessor. Tankers = Crude, Product and Chemical; gas = LNG and LPG.

Even at the historical on–time rate, 2027–28 will fill the yards to 84–89% of capacity – before any late arrivals are counted

About 78% of each year's scheduled tonnage has arrived on time since 2021. The 35m cgt that slips does not disappear; it moves to later years, starting with a 2028 that is already near capacity.

Exhibit 23 Orderbook as scheduled, against delivery in its scheduled year at the historical rate, by current active yards (million cgt)



What happens to the 2026–2031 deliveries

208m cgt due in 2026–31, at 2021–25 rates



161 78% delivered in its scheduled year

35 17% early, late or still on order

12 6% cancelled C

A What arrives on time is already a full load

47m cgt in 2027 and 50m in 2028 would arrive on schedule – 84% and 89% of world capacity, against 86% utilisation over the past 12 months.

B Slippage does not disappear; it moves

10–11m cgt a year will slip out of 2027 and 2028. If 2027's arrives the following year, 2028 will land at about 60m cgt – 107% of capacity.

C Few orders vanish

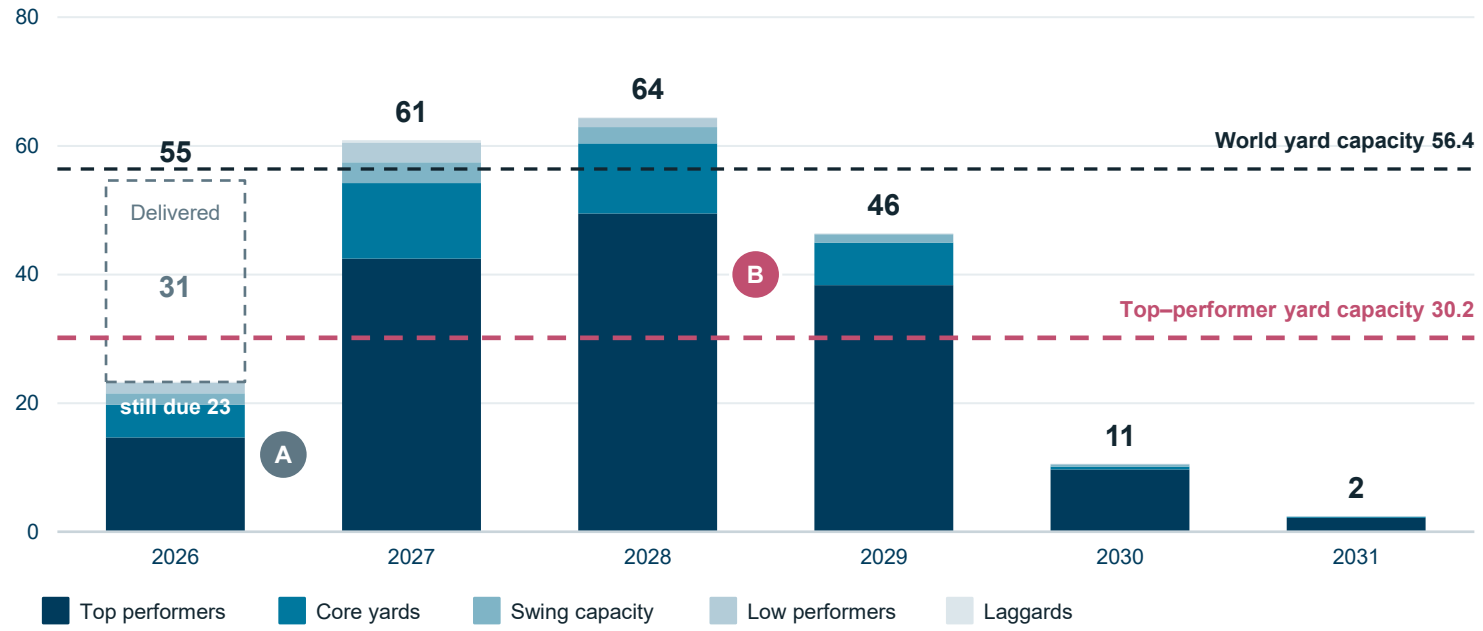
At the historical rate, 12m cgt, 6% of the book, is never built. The orderbook overstates the timing of supply far more than its volume.

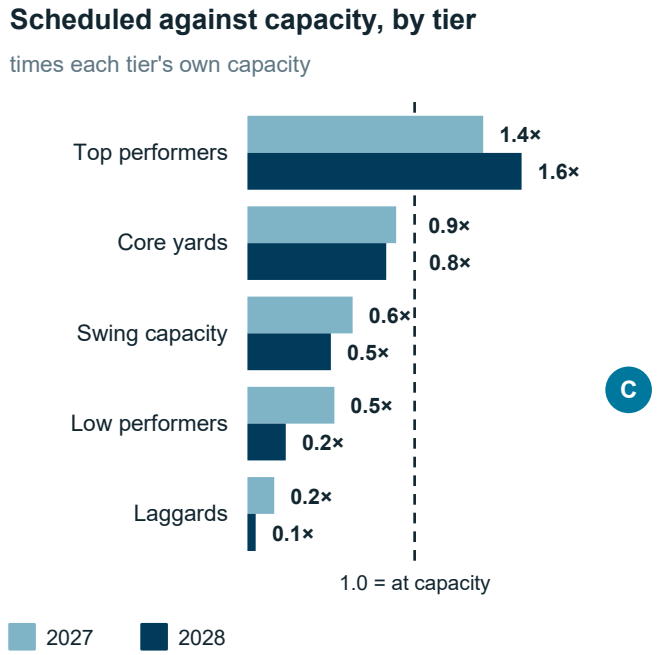
Source: Clarksons, Danish Ship Finance. Illustrative, not a forecast. Rates from 2021–25 January cohorts, applied to schedules up to five years ahead.

The excess in 2027–28 is with the top–performing yards, booked at up to 1.6 times their capacity – every other tier has space

Across all yards, the schedule is for 8–14% above capacity. Split by tier, the 99 yards with three or more years of cover account for all of it; the other 178 are scheduled for below their own capacity.

Exhibit 24 Current active yards' scheduled deliveries by yard tier (million cgt)





A **2026 hinges on the year–end**

31m cgt delivered and 23m still due. If 2026 follows recent years, about two–thirds of what is still due will arrive by year–end, and about 8m will slip into 2027.

B **The top tier is 19m cgt over in 2028**

The 99 top performers are scheduled for 1.64 times their capacity in 2028 and 1.41 in 2027. They are carrying 70% of 2027's tonnage and 77% of 2028's.

C **The space is where the orders are not**

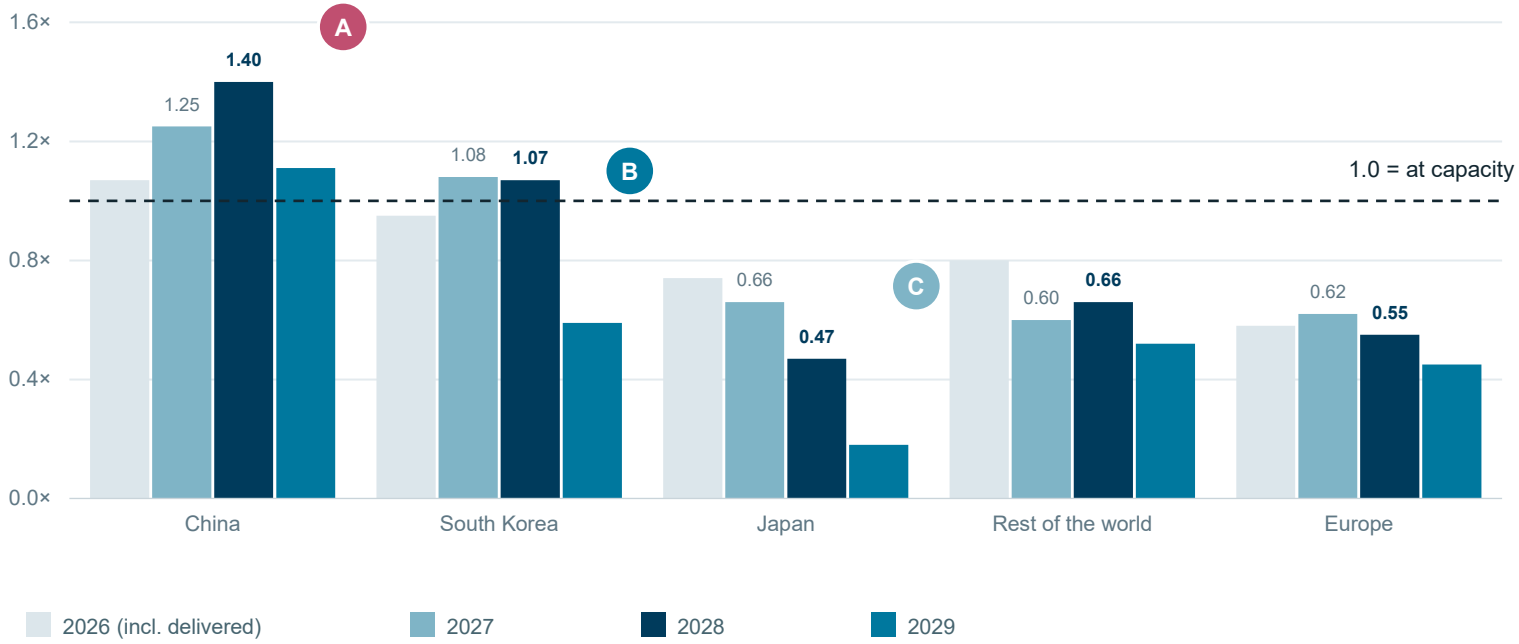
The other 178 yards have 11m cgt to spare in 2028 – less than the top tier's overflow, and at yards owners have so far passed over.

Source: Clarksons, Danish Ship Finance. Scheduled deliveries at active yards, September 2026 orderbook; tier capacity as of September 2026. 2026 delivered = January–September.

By builder region, the excess is Chinese: China is scheduled for 1.4 times its capacity in 2028, South Korea for 1.1 and Japan for under half

Exhibit 24 splits the schedule by tier; this splits it by region. Even at its own historical on–time rate, China would deliver more in 2028 than it has capacity for.

Exhibit 25 Scheduled deliveries against each region's own yard capacity, 2026–2029 (times capacity)



How full the regions already are

	Capacity m cgt	Delivered ÷ capacity, past 12m	On–time rate 2021–25	2028 at that rate
China	32.0	92%	77%	**1.09×**
South Korea	12.2	91%	81%	0.86×
Japan	7.6	72%	80%	0.38×
Rest of world	2.6	59%	50%	0.33×
Europe	2.0	55%	71%	0.39×

World: 1.14× scheduled in 2028; 0.89× at the 78% world rate (Exhibit 23).

A **China is carrying the excess**

39.9m cgt scheduled for 2027 and 45.0m for 2028 against 32.0m of capacity. At China's 77% on–time rate, 2028 still shows 1.09 times capacity.

B **South Korea is full, not overfull**

Booked at 1.07–1.08 times capacity and already delivering at 91% of it – 99–102% in 2024–25. At its historical rate, 2028 lands at 0.86.

C **Japan's schedule is emptying**

Booked at 0.66 times capacity in 2027 and 0.47 in 2028, while delivering at 72% today. The space is real, but it is Bulk Carrier capacity (page 53).

Source: Clarksons, Danish Ship Finance. September 2026 orderbook and capacity, active yards; 2026 includes January–September deliveries. On–time rate from 2021–25 schedules.

China is scheduled to deliver twice its record in 2028 – 4.3 times its best year in Crude Tankers and 2.4 times in Container ships

Each region's 2028 schedule set against the most its active yards have delivered in any year since 2000. Where the multiple is highest, the schedule leans most on yards doing what they have not done before.

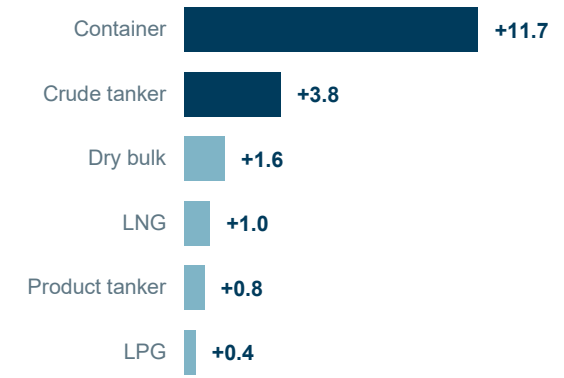
Exhibit 26 2028 scheduled deliveries against each region's record year, by segment (million cgt; times the record)

	China				South Korea			C	Japan		
Segment	2028	Record	× record		2028	Record	× record		2028	Record	× record
Crude Tanker	5.0	1.2 '17	**4.3×**	A	1.7	2.1 '19	0.8×		0.3	0.5 '03	0.5×
Container	20.2	8.5 '24	**2.4×**	B	4.7	4.5 '24	1.0×		0.5	1.0 '18	0.5×
LPG	0.9	0.5 '25	**1.9×**		0.9	0.8 '16	1.1×		0.2	0.2 '23	0.7×
LNG	2.4	1.4 '25	**1.7×**		4.7	5.6 '25	0.8×		–	0.6 '18	–
Product Tanker	3.3	2.5 '25	1.3×		0.9	0.5 '25	**1.8×**		–	0.6 '10	–
Dry Bulk	7.7	6.1 '25	1.3×		–	0.8 '11	–		1.9	3.7 '12	0.5×
Chemical Tanker	1.2	1.2 '25	1.0×		–	0.1 '00	–		0.4	0.8 '16	0.5×
Other, incl. offshore	4.2	5.0 '25	0.8×		0.3	1.0 '14	0.3×		0.3	1.1 '08	0.3×
All segments	**45.0**	**22.5** '25	**2.0×**		**13.0**	**11.0** '25	**1.2×**		**3.6**	**5.5** '19	**0.6×**

Times the record: 2.0 or more | 1.5–2.0 | 1.0–1.5 | below 1.0

Where China's step–up comes from

2028 schedule minus each segment's record, million cgt



+18.7m cgt above the segment records, net

Not shown: Chemical Tankers (at their record) and other segments (0.7m cgt below). China's capacity (32.0m cgt, page 67) exceeds its 2025 record of 22.5m because each yard's best years differ and returned yards add capacity.

A **Crude Tankers have climbed furthest**

5.0m cgt due in 2028 against China's best year of 1.2m in 2017. It is also the segment whose 2028 berths are nearly sold out (page 72).

B **Container ships are carrying the volume**

20.2m cgt due in 2028, 2.4 times China's 2024 record of 8.5m. That is 11.7m of the 18.7m cgt by which its 2028 book exceeds its segment records.

C **South Korea and Japan remain near their records**

Korea is booked at 0.8 times its record in LNG and Crude Tankers and 1.0 in Container ships; only its small Product Tanker orderbook is well above. Japan is below its record everywhere.

Source: Clarksons, Danish Ship Finance. Record = most cgt delivered in any calendar year 2000–2025 by today's active yards in that region and segment. 2028 from the September 2026 orderbook.

The supply wave will land at different times: Gas Carriers will peak in 2027, Container ships and Crude Tankers in 2028–29

Scheduled deliveries as a share of today's fleet. Dry Bulk faces about 4% a year; Container ships face 13% in 2028 alone – before any scrapping.

Exhibit 27 Scheduled deliveries by segment and year, as a share of the September 2026 world fleet (%)

	Fleet m cgt	2026 Oct–Dec	2027	2028	2029	2030	2027–29 total	Peak year at on–time rate	On–time rate
LPG	27	3.5	12.0 B	7.2	5.7	1.6	24.8	10.3 · 2027	86%
LNG	75	5.3	10.9	9.7	7.0	1.3	27.5	7.9 · 2027	73%
Chemical Tanker	49	4.6	6.5	3.4	1.8	0.5	11.7	4.5 · 2027	69%
Container	190	2.4	8.9	13.4 A	9.5	1.2	31.9	11.3 · 2028	84%
Crude Tanker	82	1.4	6.1	8.5	7.8	2.3	22.4	6.9 · 2028	81%
Product Tanker	101	2.1	4.9	4.7	3.5	0.3	13.1	3.9 · 2027	80%
C Dry Bulk	268	1.7	4.4	3.8	2.4	0.8	10.6	3.5 · 2027	80%

10% or more 7–10% 4–7% 2–4%

A Container ships face the biggest wave

25.6m cgt in 2028 – 13% of the fleet in one year and 32% during 2027–29. Even at the segment's 84% on–time rate, 2028 will add 11%.

B Gas will arrive first

LPG will add 12% of its fleet in 2027 and LNG 11%. LNG will slip most – 73% on time – so its wave is the likeliest to stretch into 2029–30.

C Dry Bulk is the calm segment

Under 4.5% of the fleet in any year and 11% over three years – the lowest of the main segments, and where berths are still open (page 72).

Source: Clarksons, Danish Ship Finance. Gross scheduled deliveries at active yards (September 2026 orderbook) over the world fleet in cgt; no scrapping assumed.

Section 6

Spare capacity

Where can an owner still find a berth?

The number to remember

13

LNG Carrier slots left for 2028 worldwide – and as many for VLCCs, against 92 for Capesize Bulkers.

The chapter

I	Method	p. 38
II	Introduction	pp. 39–43
III	Development 2020–2026	pp. 44–45
IV	Delivery performance	pp. 46–48
V	Orderbook	pp. 49–55
VI	Capacity	pp. 56–69
VII	**Spare capacity**	**pp. 70–75**

Our view

Scarcity is segment–specific, and it has about three years to run.

For 2028, only 13 LNG Carrier and 13 VLCC slots remain worldwide, against 92 for Capesize Bulkers and 71 for MR Tankers; outside gas, most of that room is Japanese. The berths that reopen in 2029–30 are Korean and Chinese. 155 of the 277 yards will run out of contracts by the end of 2028, but they hold only a fifth of capacity, nearly half of it second–tier – if capacity exits, it will start there.

What the pages show

p. 71	**Method: capacity by vessel type** – each segment is measured from the yard's own record, capped at its total, then turned into whole ships.
p. 72	**Spare berths by segment** – ordering for 2028 is almost closed for LNG Carriers and VLCCs, still open for Bulkers and MR Tankers.
p. 73	**Spare berths by builder region** – Japan holds most of the 2028 space; the capacity that reopens in 2029–30 will be Korean and Chinese.
p. 74	**Yards by year of last contracted delivery** – 155 of 277 yards will run dry by end–2028, but they hold only a fifth of capacity.
p. 75	**Booked capacity by tier** – second–tier yards are booked at 43% of capacity for 2027 and 19% for 2028; the first tier at 119% and 130%.

What to watch → contracting against deliveries, the on–schedule share and Japan's order intake (page 41).

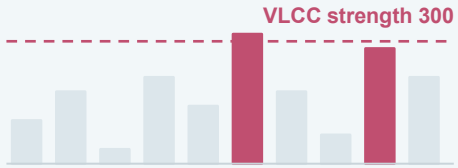
Yard capacity per segment is measured one vessel type at a time – and because yards can switch between types, the segments add up to more than the whole

Total capacity determines how much a yard can build. Segment capacity determines what it can build, taken from the yard's own delivery record in each subsegment.

Exhibit 28 How yard capacity per segment is estimated, illustrated for one yard ('000 cgt of annual output)

1 Measure each subsegment

The yard's best decile of delivery years, taken one subsegment at a time.



2 Fill the gaps

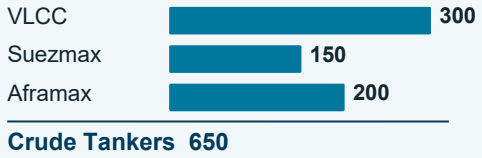
A

No record in a subsegment? Use its maximum scheduled year. Neither? Zero.

- ● delivered before → average top 10 decile
- ○ only on order → max scheduled year
- — neither → no capacity in that subsegment

3 Add up into segments

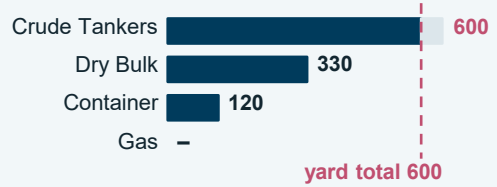
Subsegments sum up into their segment: VLCC, Suezmax and Aframax comprise Crude Tankers.



4 Cap at the yard's total

B

No segment can exceed what the yard can build in total, however strong its record.



The segments add up to more than the yard

because the same berths are counted in every segment they could serve



C What it unlocks: spare capacity in ships

Segment capacity minus what the yard has scheduled in that segment, never more than the yard's total spare capacity – then converted into whole ships at the subsegment's average size, yard by yard. That is how Exhibit 29 counts the VLCC, LNG and Capesize berths still open.

A Demonstrated, not theoretical

A thin record in a subsegment can be a choice, not a limit: a yard that builds large Feeders may well be able to build small ones. The measure shows what yards have built.

B Capped, but not additive

Each segment is capped at the yard's total, but the segments together can exceed it. Segment order cover therefore assumes a yard builds nothing else.

C Whole vessels, yard by yard

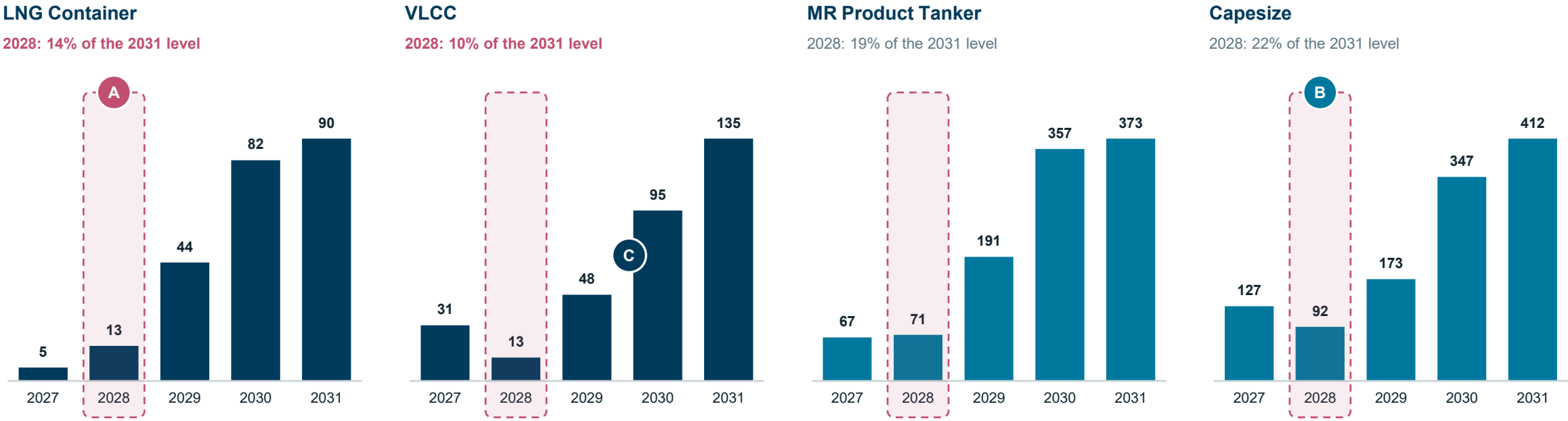
Spare capacity is turned into ships before it is added up. Three yards each with space for two–thirds of a VLCC count as no VLCCs, not two.

Source: Clarksons, Danish Ship Finance. Illustrative yard in '000 cgt of annual output.

Scarcity is segment–specific: ordering for 2028 is almost closed for LNG Carriers and VLCCs, but still open for Bulkers and Product Tankers

Aggregate capacity says little about what can be built. The berths that would take an LNG Container or a VLCC are almost gone until 2029.

Exhibit 29 Spare capacity by segment and delivery year (number of vessels)



Vessels that could still be ordered for delivery in each year from 2027, at yards with a record in the segment. 2028 highlighted.

A **Gas is shut out**

Five LNG slots worldwide for 2027 and 13 for 2028. China, with 57% of world capacity, can offer one in each year.

B **Bulk and Product Tankers are not**

92 Capesize and 71 MR slots remain for 2028. A Dry Bulk owner can still order into the tight years.

C **Every segment will reopen together**

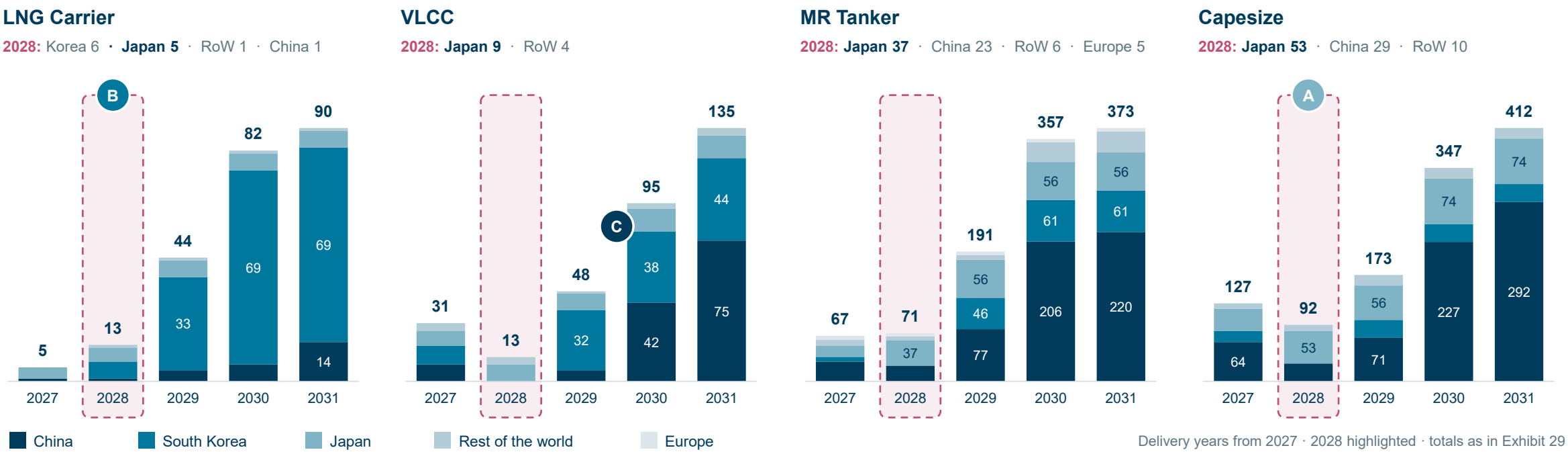
Availability will roughly double between 2029 and 2030 everywhere. The scarcity holding up prices has about three years to run.

Source: Clarksons, Danish Ship Finance. Spare capacity divided by average vessel size; the 2031 level serves as the unbooked reference.

Japan holds most of the berths left for 2028 and South Korea almost none – the space that reopens in 2029–30 is Korean and Chinese

The 2028 spare capacity is with the builder that owners have so far passed over. The berths that will return from 2029 belong to the builders that already hold the longest queues.

Exhibit 30 Spare capacity by segment, builder region and delivery year (number of vessels)



Delivery years from 2027 · 2028 highlighted · totals as in Exhibit 29

A **Japan holds the 2028 space**

Japanese yards hold 9 of the 13 VLCC slots left for 2028, 53 of 92 Capesize slots and 37 of 71 MR slots. South Korea has none in these three segments.

B **Gas is the exception**

South Korea holds 6 of the 13 LNG slots for 2028 and Japan 5. Japan delivered no LNG Carriers in 2021–25, so its spare capacity for gas rests on an older record.

C **The reopening is Korean and Chinese**

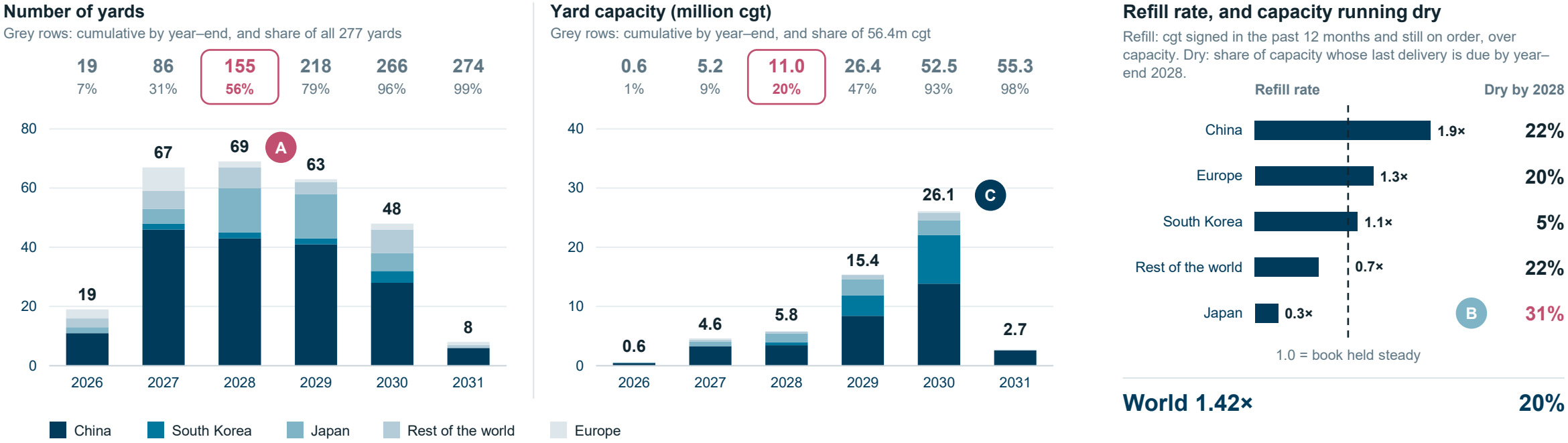
Korea accounts for 63 of the 69 LNG slots added from 2028 to 2030. China will supply half of the extra VLCC slots and 64–78% of the extra MR and Capesize slots.

Source: Clarksons, Danish Ship Finance.

Behind the wall is a cliff: 155 of 277 yards will run out of contracts by the end of 2028 – but they hold only a fifth of world capacity

The yards that will empty first are small. The capacity cliff will come later: 26.1m cgt, 46% of world capacity, will make its last contracted delivery in 2030. Whether either cliff arrives depends on refill – and Japan is not refilling.

Exhibit 31 Active yards and their capacity by year of last contracted delivery, and the rate at which orders refill them (number of yards; million cgt)



A **155 yards, but only a fifth of capacity**

By the end of 2028, 56% of the yards will have run dry, but only 20% of world capacity (11.0m cgt). They average 71k cgt; the yards that will run dry in 2029–30 average 374k.

B **Japan is not refilling**

Its yards have signed a quarter of a year's output in the past 12 months. All 43 will deliver their last contracted ship by 2030 – 31% of Japan's capacity by the end of 2028 and two–thirds by the end of 2029.

C **The capacity cliff is in 2030**

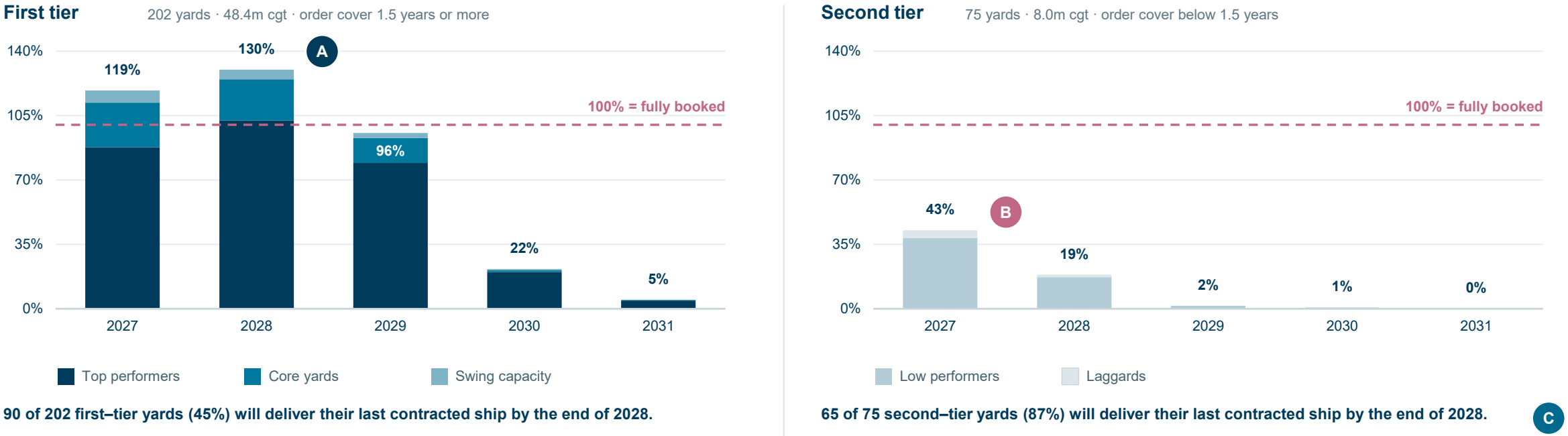
26.1m cgt will make its last contracted delivery in 2030, most of it Chinese (13.9m) and Korean (8.2m). At a world refill rate of 1.42×, those books are still being extended.

Source: Clarksons, Danish Ship Finance. Shown to 2031; three European yards (1.2m cgt) will deliver their last contracted ship in 2032–39. Shares are of all 277 active yards and 56.4m cgt of world yard capacity. Refill rate: cgt contracted in the past 12 months and still on order (80m cgt), over capacity.

Second–tier yards are running out of work: booked at 43% of capacity for 2027 and 19% for 2028, against 119% and 130% for the first tier

Scheduled deliveries as a share of each tier's own capacity. The first tier holds 86% of world capacity, the second tier 14% – but nearly half of the capacity whose contracts are due to run out by the end of 2028.

Exhibit 32 Scheduled deliveries against yard capacity, by order cover tier, 2027–2031 (% of each tier's September 2026 capacity)



90 of 202 first–tier yards (45%) will deliver their last contracted ship by the end of 2028.

65 of 75 second–tier yards (87%) will deliver their last contracted ship by the end of 2028. C

A The first tier is booked beyond capacity

Booked at 119% of capacity for 2027 and 130% for 2028 (the excess all at the top performers) and still 96% for 2029.

B The second tier is running dry

Booked at 43% of capacity for 2027, 19% for 2028 and 2% for 2029. 65 of its 75 yards will deliver their last contracted ship by the end of 2028.

C Refill will decide what exits

Second–tier yards took under 2% of last year's orders. Unless that changes, their 8.0m cgt (14% of world capacity) is where capacity will exit first.

Source: Clarksons, Danish Ship Finance. Scheduled deliveries at active yards (September 2026 orderbook) over each tier's September 2026 capacity, as in Exhibit 24. First tier = top performers, core yards and swing capacity; second tier = low performers and laggards. 2026 not shown: deliveries so far are not split by tier.

Once the orderbook has taken the oldest ships, renewing the rest would take yards from under a year to nearly 8 years of capacity

Same types as the spare–berth page, with VLGC in place of LNG Carriers and 15,000+ teu added. The orderbook replaces the oldest ships first; the years are what the capacity able to build the type needs for the ships left, oldest first.

Exhibit 33 Years of yard capacity to replace the ships left after the orderbook, ships of each age and older, selected types, September 2026

	Today				Orderbook covers	Years of capacity to replace the ships left				
	Fleet m cgt	Orderbook m cgt	% of fleet orderbook	Capacity m cgt a yr	all ships aged	20+	15+	10+	5+	All
A MR Tanker	54	**8.6**	16%	6.0	25+	0.6	3.1	4.9	6.4	**7.7**
B Capesize	68	**11.9**	17%	8.2	**20+**	–	1.5	4.2	5.9	**6.9**
VLCC	41	**13.5**	33%	5.1	**20+**	–	1.0	2.5	4.5	**5.4**
C VLGC	14	**6.0**	41%	2.1	**15+**	–	–	0.2	1.7	**4.0**
15,000+ teu	34	**24.9**	74%	10.8	**5+**	–	–	–	–	**0.8**

Sorted by years to replace the whole fleet that is left. “Book covers” is the youngest age band the orderbook replaces in full; pink = ships over 20 are left.

none · under 2 years · 2–4 · 4–6 · 6+

A MR Tankers are furthest behind

Orders cover 72% of the 11.9m cgt aged 20+. Replacing everything aged 15+ then takes 3.1 years and the whole fleet 7.7, the longest of the five.

B Capesize and VLCC miss the 15–20s

Both cover every ship over 20, but replacing the rest of the 15+ takes 1.5 years for Capesize and 1.0 for VLCC. Ships now 15–20 turn 20 within five years.

C VLGC and big boxes: the book outruns old ships

VLGC have 6m cgt on order against 1.9m aged 20+, and 15,000+ teu 25m against 0.1m: the book reaches ships aged 15+ and 5+, leaving 4.0 and 0.8 years.

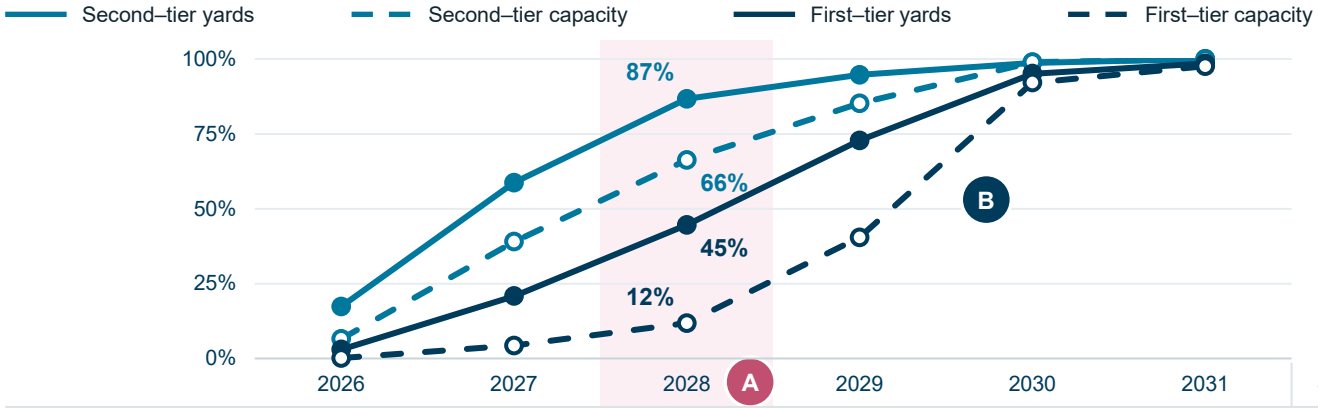
Source: Clarksons, Danish Ship Finance. Fleet by age and orderbook, September 2026, cgt; capacity by subsegment, Method 2 (page 71). Theoretical: yards build only the type; types share berths.

The cliff is a second–tier cliff: 87% of second–tier yards will run out of contracts by the end of 2028, against 45% of first–tier yards

Second–tier yards hold 14% of world capacity but nearly half of the capacity that will run dry by 2028. First–tier yards hold 86%, and most of their books run into 2029–30.

Exhibit A1 Active yards and their capacity by year of last contracted delivery, by order cover tier (% of each tier; number of yards; million cgt)

Cumulative share of each tier that has delivered its last contracted ship



		2026	2027	2028	2029	2030	2031	2032–39	Total
Second–tier	yards	13	31	**21**	6	3	1	–	**75**
	m cgt	0.52	2.61	**2.19**	1.52	1.10	0.09	–	**8.03**
First–tier	yards	6	36	**48**	57	45	7	3	**202**
	m cgt	0.07	2.01	**3.61**	13.86	25.01	2.65	1.17	**48.40**

Two tiers, two different books

Share of each tier's capacity that will deliver its last contracted ship by the end of 2028

66% **Second tier**

12% **First tier**

	Second tier	First tier
Active yards	**75**	**202**
Yard capacity, m cgt	**8.0**	**48.4**
Share of world capacity	**14%**	**86%**
Average yard, thousand cgt	**107**	**240**
Peak year of last delivery (by cgt)	**2027**	**2030**
Yards dry by end–2028	**65**	**90**
Capacity dry by end–2028, m cgt	**5.3**	**5.7**
Share of what runs dry by 2028 C	**48%**	**52%**

A Second–tier books are nearly gone

44 of 75 second–tier yards will deliver their last contracted ship by the end of 2027, 65 by the end of 2028. Those 65 yards hold 5.3m cgt – two–thirds of second–tier capacity.

B First–tier yards carry the capacity

202 first–tier yards hold 48.4m cgt, 86% of world capacity. Only 12% of it will run dry by the end of 2028; 25.0m cgt will make its last contracted delivery in 2030 alone.

C Half of the near–term cliff is second tier

Second–tier yards hold 14% of world capacity but 48% of the 11.0m cgt that will run dry by the end of 2028. Whether they are refilled determines how much of the near–term cliff is real.

Source: Clarksons, Danish Ship Finance. Shares are of each tier's yards and yard capacity; the three yards with contracts beyond 2031 are all first tier.

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