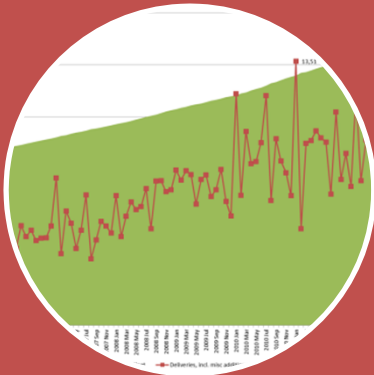


Supply, demand, capacity

*Forecasts prepared by the various
JECKU delegations in perspective of
market balances*

Contents



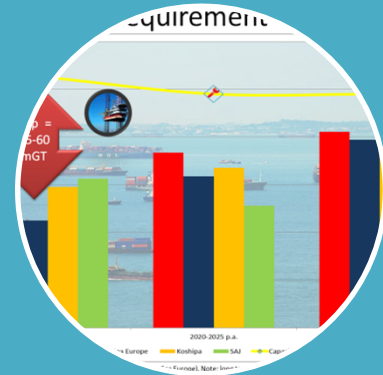
The past 8
years &
historical
perspective



Forecast:
seaborne
trade



Forecast:
newbuild
requirement



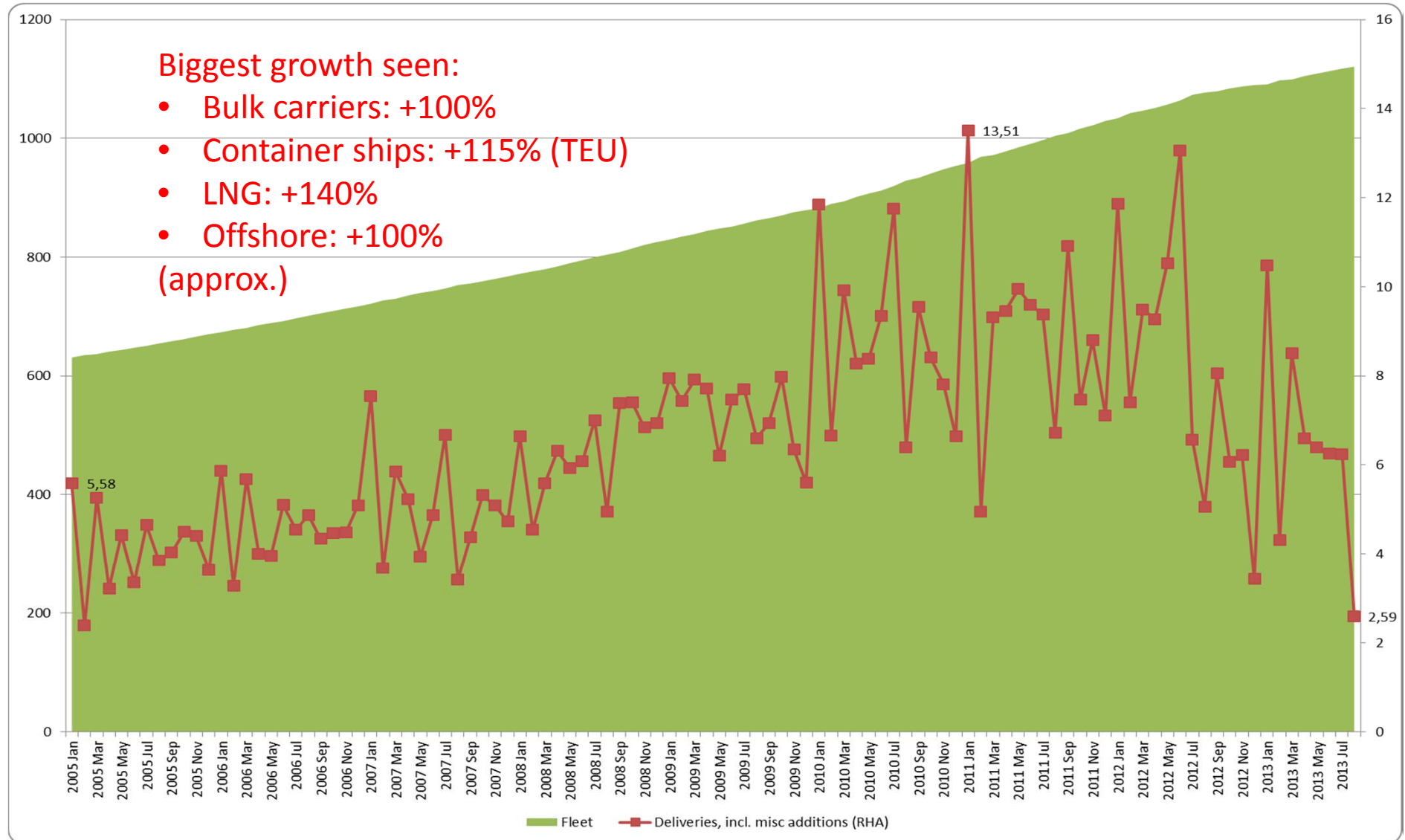
Capacity vs.
demand



The Shipping Market Cycle

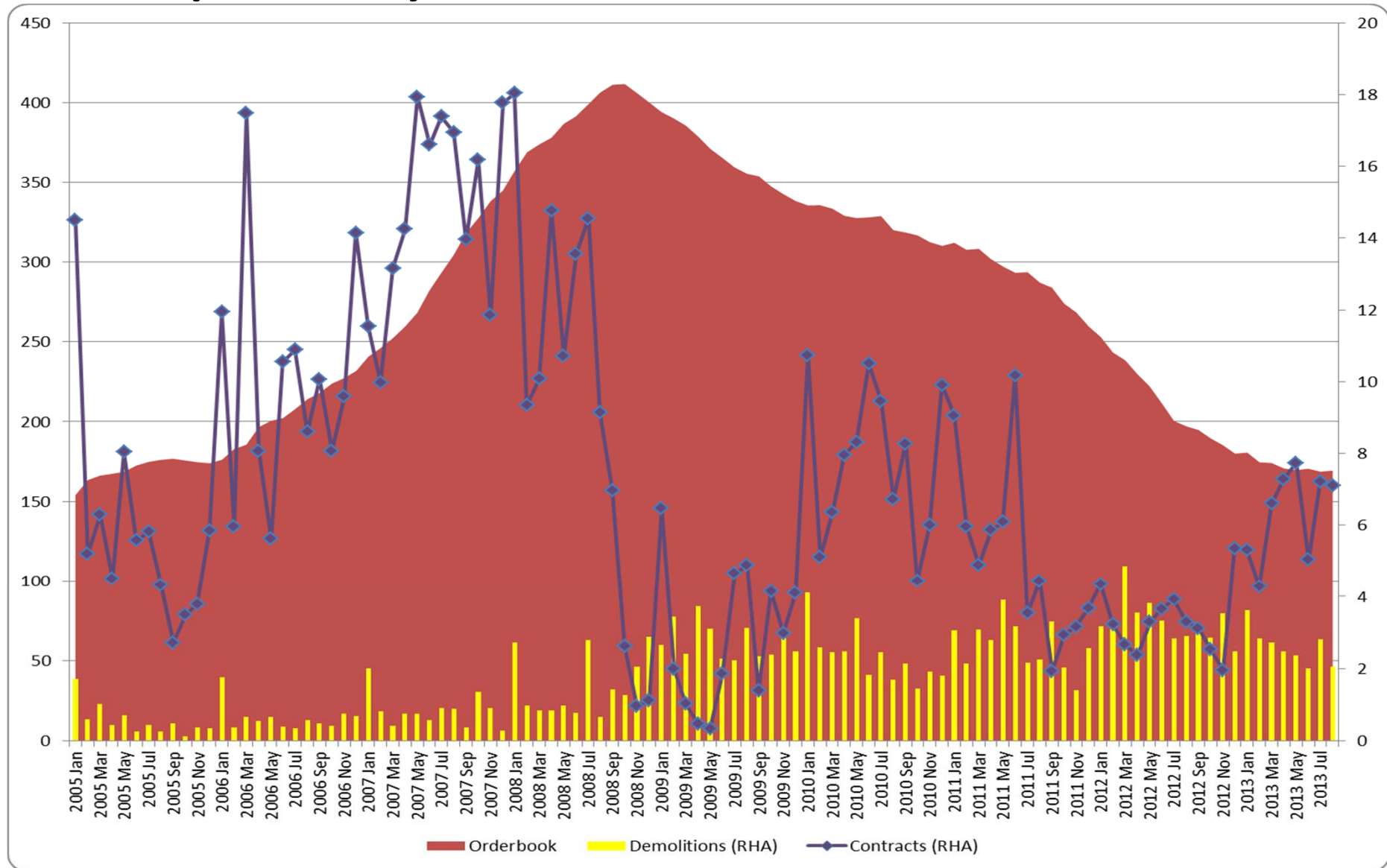


The past 8 yrs: deliveries & fleet (mGT)



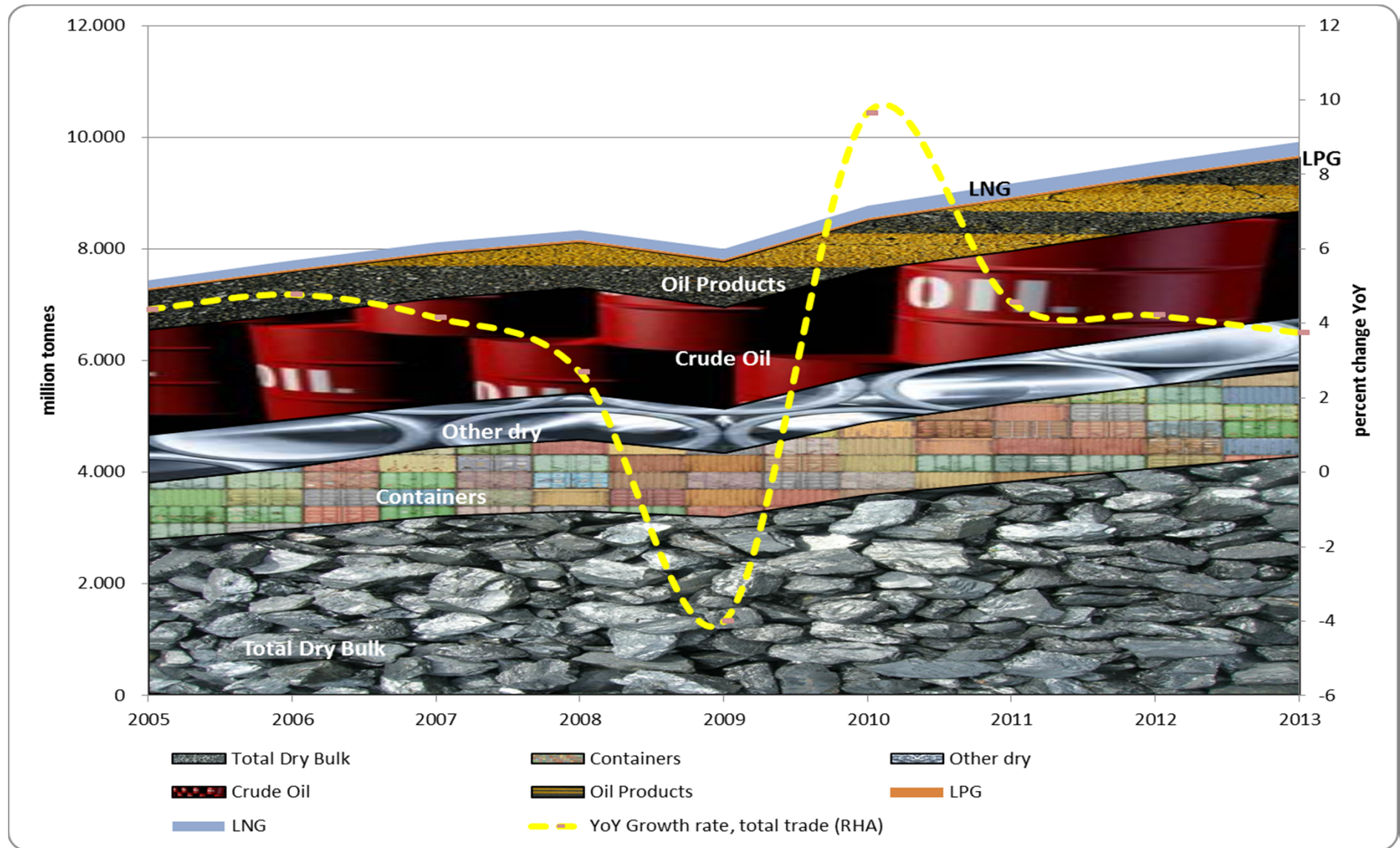
Data source: Clarkson

The past 8 yrs: contracts & demolitions (mGT)



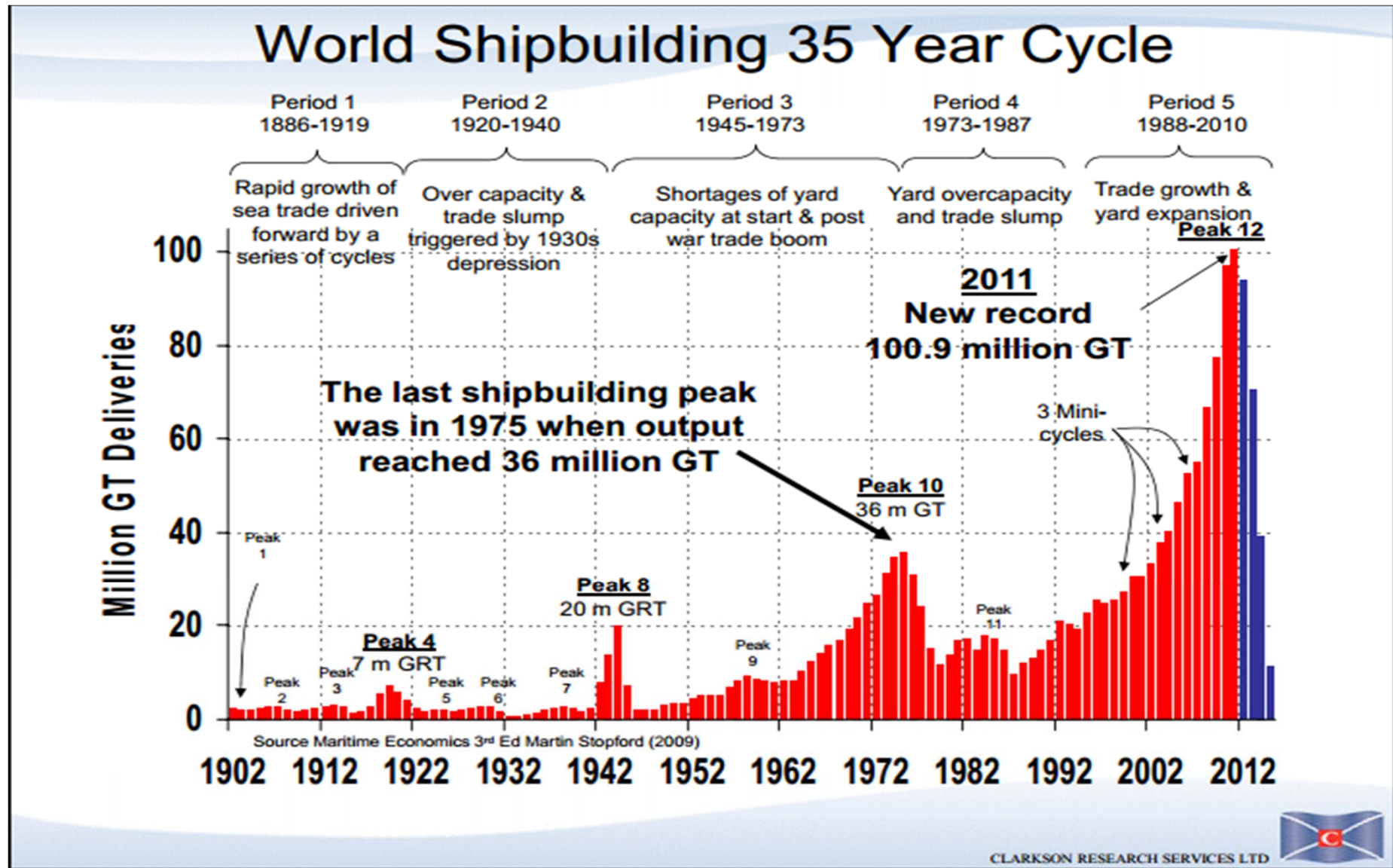
Data source: Clarkson

The past 8 yrs: seaborne trade

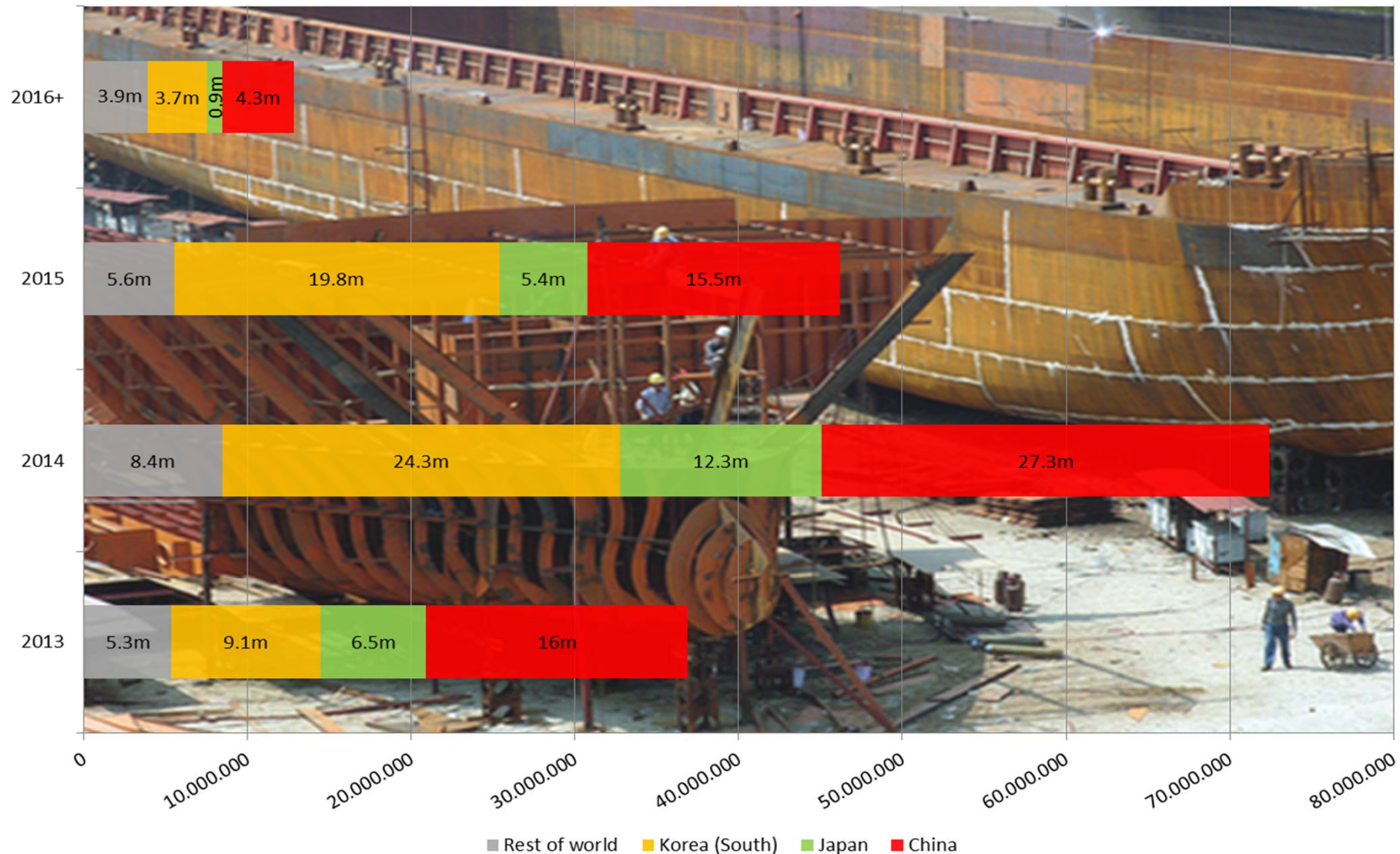


Data source: Clarkson

Historical perspective



Delivery schedule current orderbook (GT)



Data source: IHS Fairplay, Sept. 2013

Forecasting the future: methodology

Fleet vs. deletions

- Fleet data by ship type (and size class where applicable)
- Calculation of expected deletions (scrap + loss) in fc period – scrap age assumptions vary by type

Utilisation, trade

- Capacity usage by ship type by size class – matrix of transport flows and expected changes
- Ship size, fleet productivity (speed, sailing days, port days, congestion): ton miles
- Forecasts of world population, economy and production

Requirement

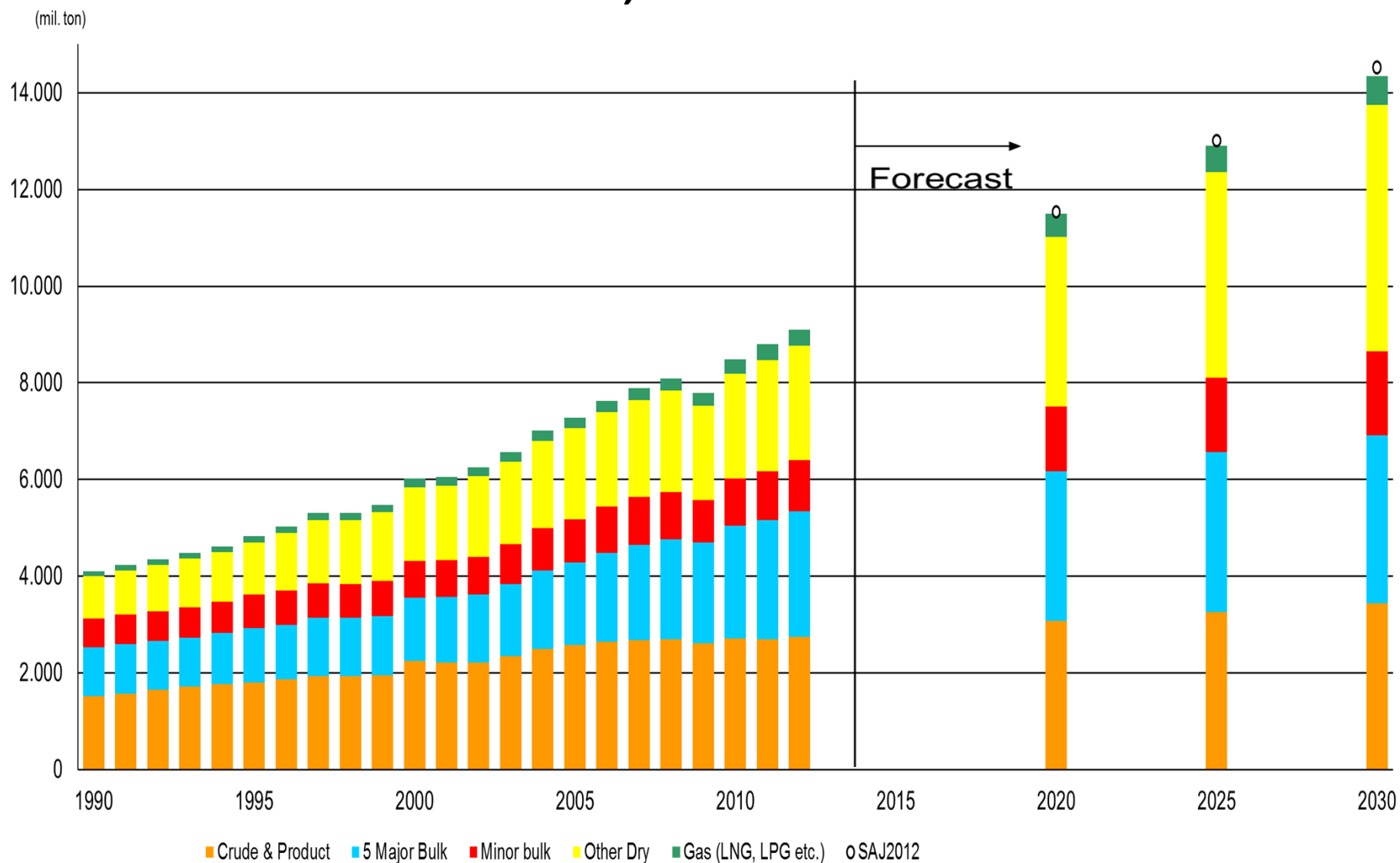
- Forecasted cargo carrying capacity demand (ton + ton mile) and required fleet therefore - / - deletions = newbuild requirement



FORECASTS

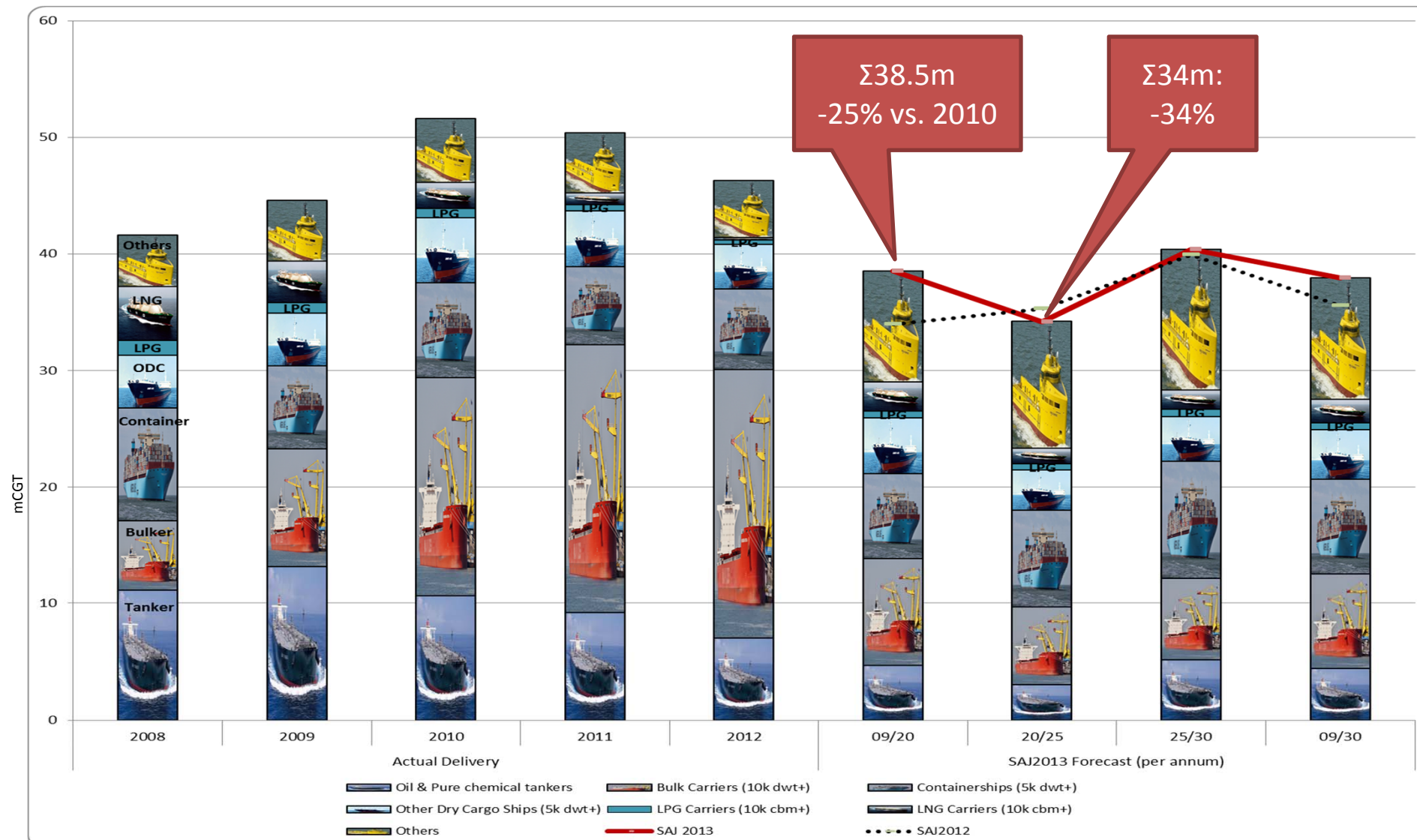


Seaborne Trade, Actual and Forecast



Source: SAJ, 2013.

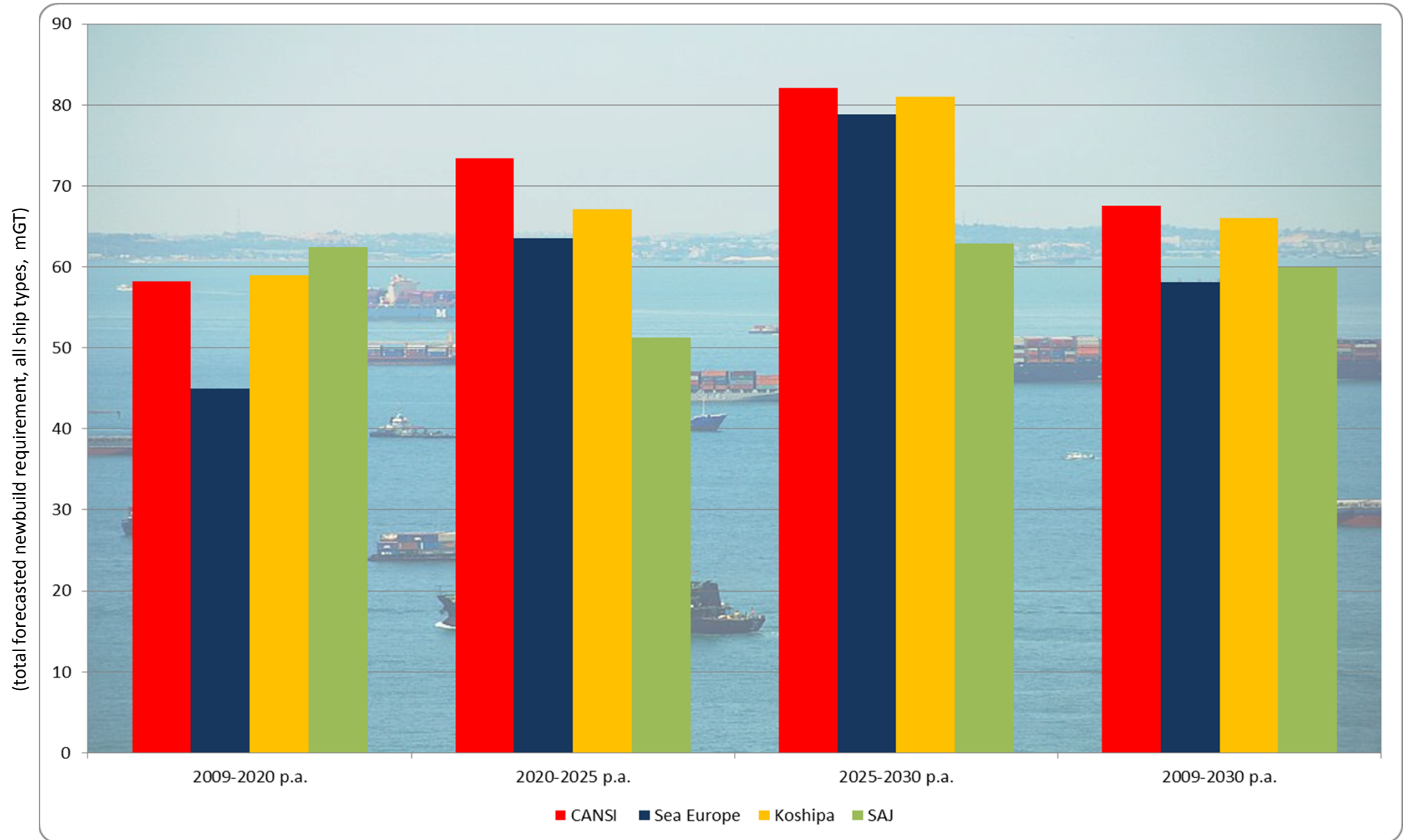
Newbuild requirement forecast, SAJ



Source: SAJ, 2013. Data sources: 2008-2009: IHS Fairplay, 2010-2012: Clarkson .

Note: ODC ships include FPSOs, MPP, Reefers, Ro-Ro ships and PCC. Others include Non cargo carrying ships, Offshore, Small & Miscellaneous ships.

Comparing NB requirement forecasts



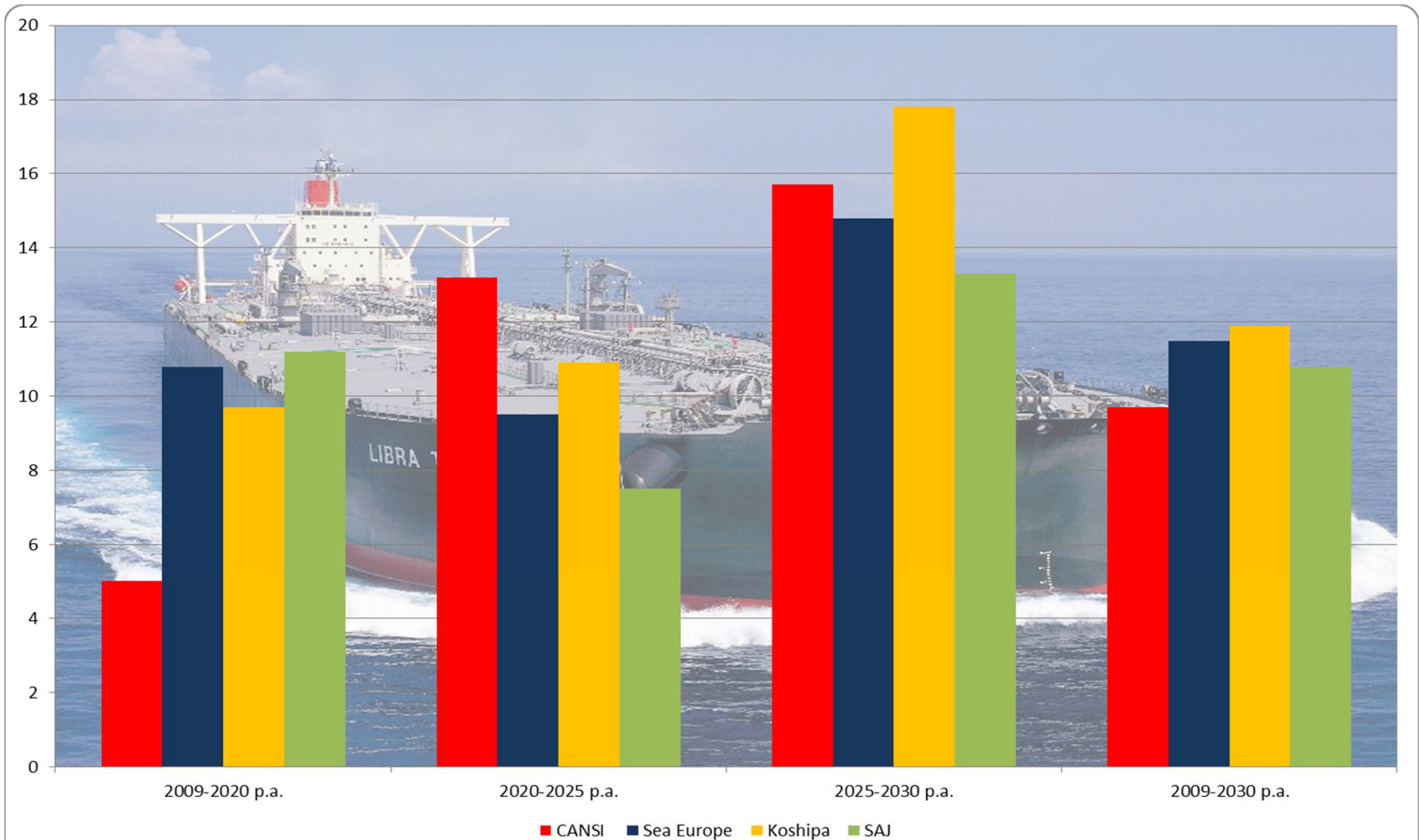
Sources: association forecasts, ISFEM memorandum, JECKU EPM presentations

Some assumptions in the forecasts

- Offshore markets (Sea Europe): oil price will remain at high level, 2015 offshore spending expected 350-400 USDb and will continue to rise (partly due to higher costs).
Deeper water, new requirements: best outlook for new, larger and more efficient vessels. Some markets will take a short term hit; (1) oversupply is a significant risk for PSVs, (2) a slowdown in drillship orders after an all-time high is very likely.
Other markets are seen picking up: (1) increased demand for semi submersibles, (2) AHTS markets will return, (3) continued strong subsea market.
However, it is very difficult to predict the next peak and the effect of shale oil. Increased onshore production will need to be monitored closely. The uncertainty is significant.
- Container ships (Hanjin/Koshiya): overcapacity situation expected to continue until 2015, even with trade growth at 6 or 7%. *New ships demo vastly improved fuel efficiency.*
- Tankers: short term VLCC market at low level (CANSI). Contrary to IEA 'New policy' scenario, oil imports to N-America & EU to slightly increase. *Avg. distances growing.* (SAJ)
Oil products demand relatively strong, approx. 3% growth p.a. (Koshiya)
- Bulk carriers (CANSI/SAJ): bulk carriers still in price abatement. China ore import to slow from 2020, coal imports to stay big. *But, India will be the largest coal importer from 2020.*
- Seaborne trade (SAJ forecast): trade will grow by an estimated 2.6% during the 2010-2030 period, to reach 14.4 million tonnes in 2030. Highest growth assumed in Other Dry, Minor Bulk, LNG.

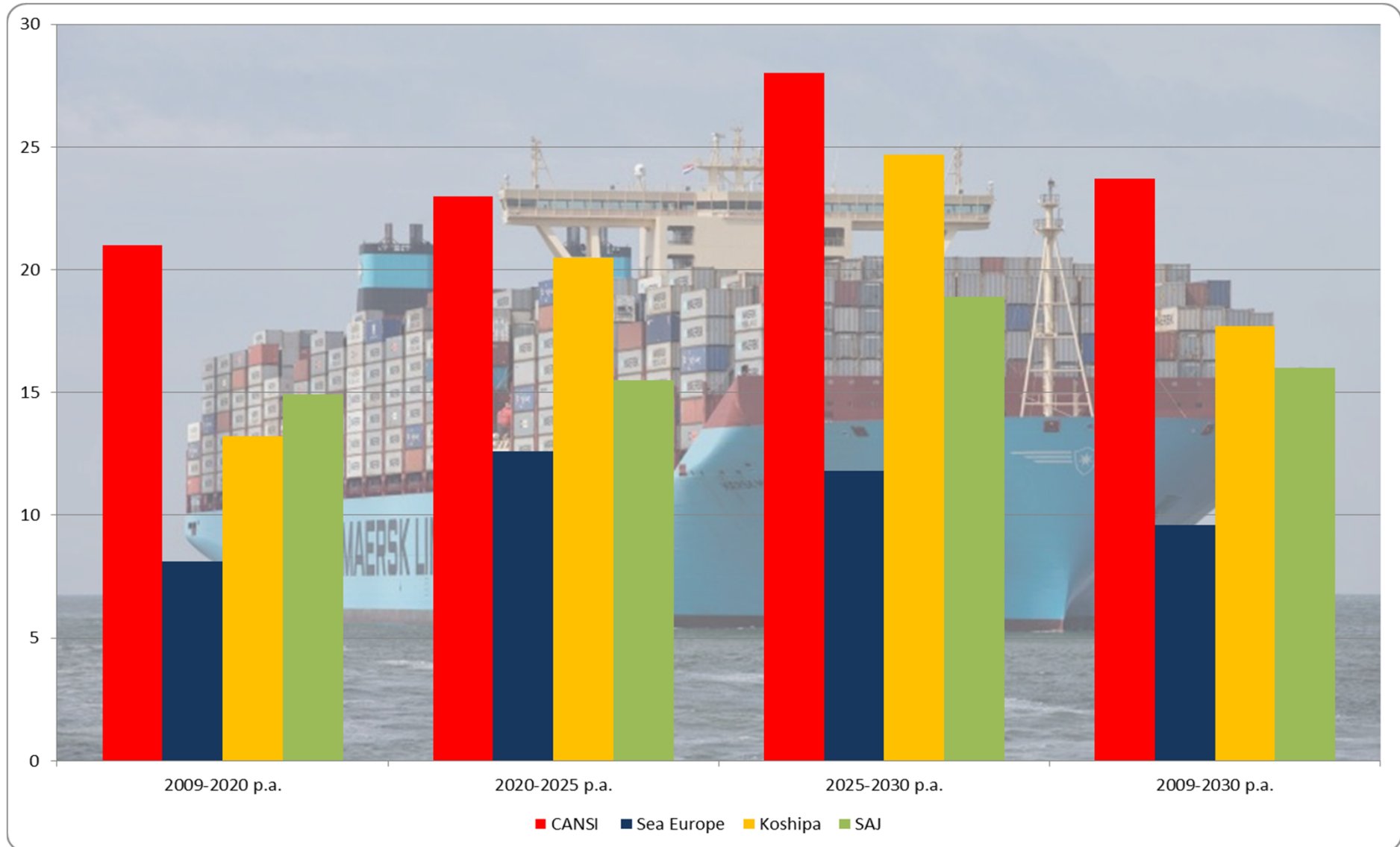
Commodity	Growth rate 2012-2030 (SAJ)	M tons 2030
Crude & Product	1,26%	3437
5 Major Bulk	1,60%	3471
Minor Bulk	2,84%	1739
Other Dry	4,34%	5098
LPG	1,89%	128
LNG	4,02%	480
Total trade	2,56%	14354

Tankers (mGT)



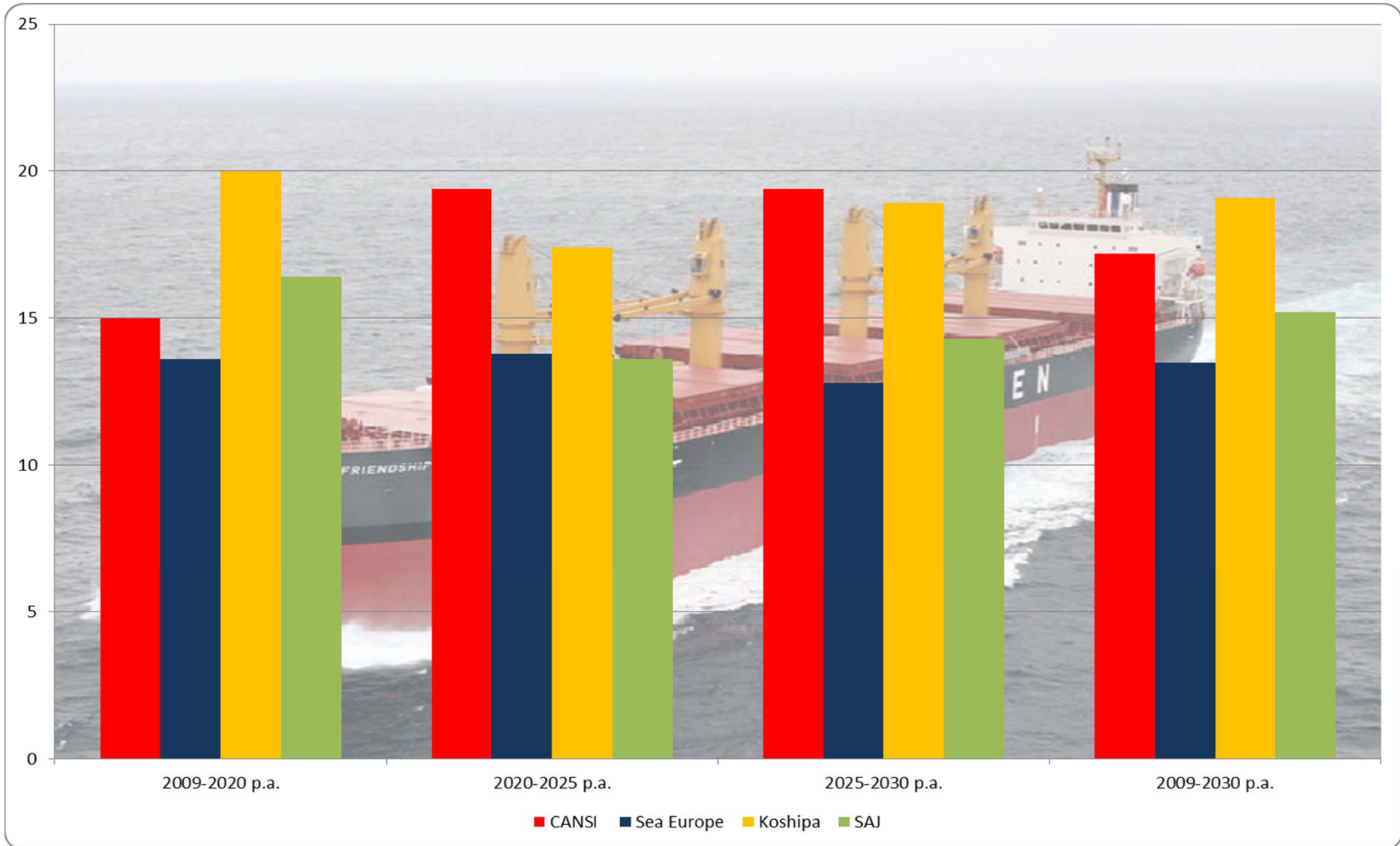
Sources: ISFEM memorandum, JECKU EPM presentations

Container ships (mGT)



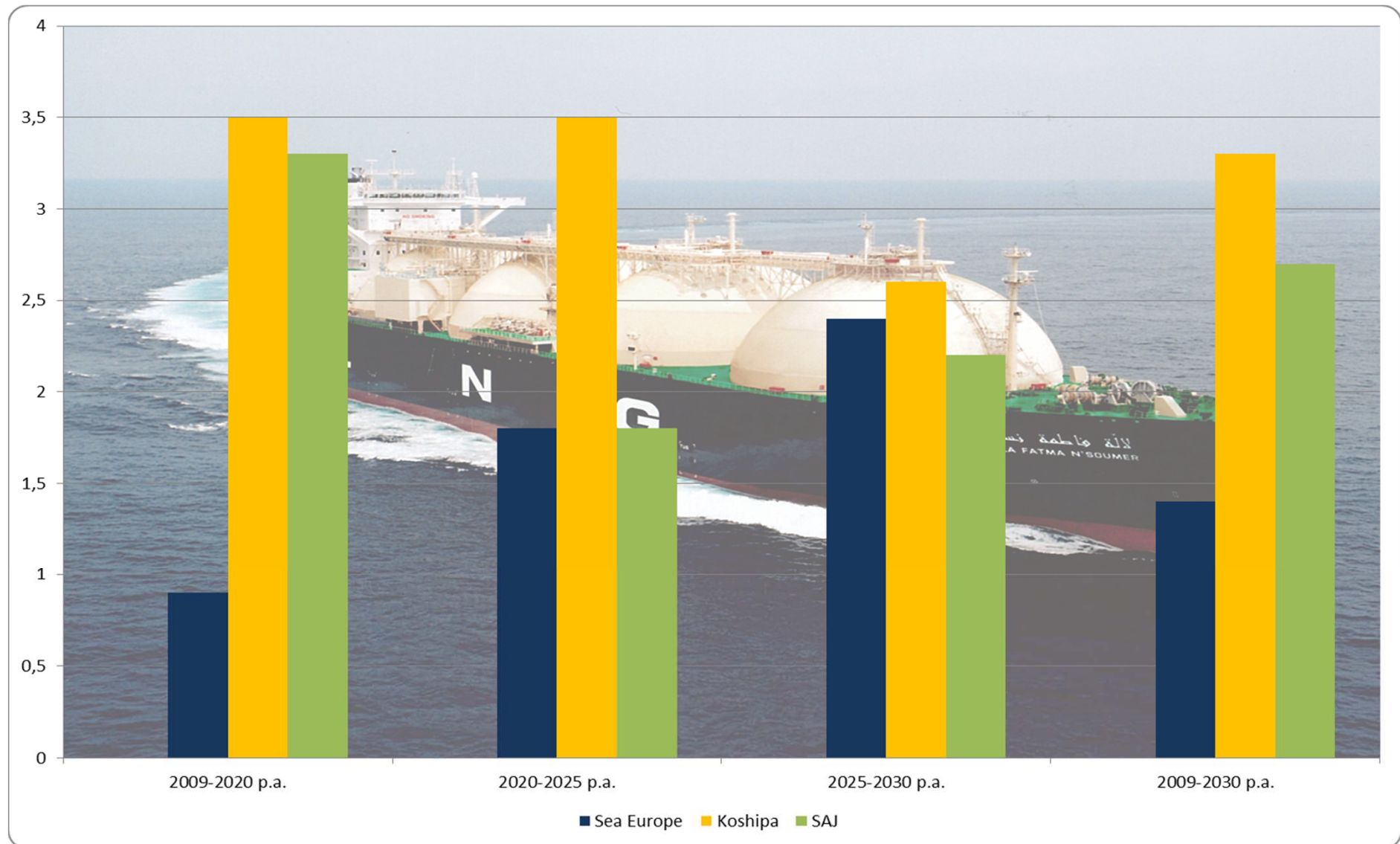
Sources: ISFEM memorandum, JEKCU EPM presentations

Bulk carriers (mGT)



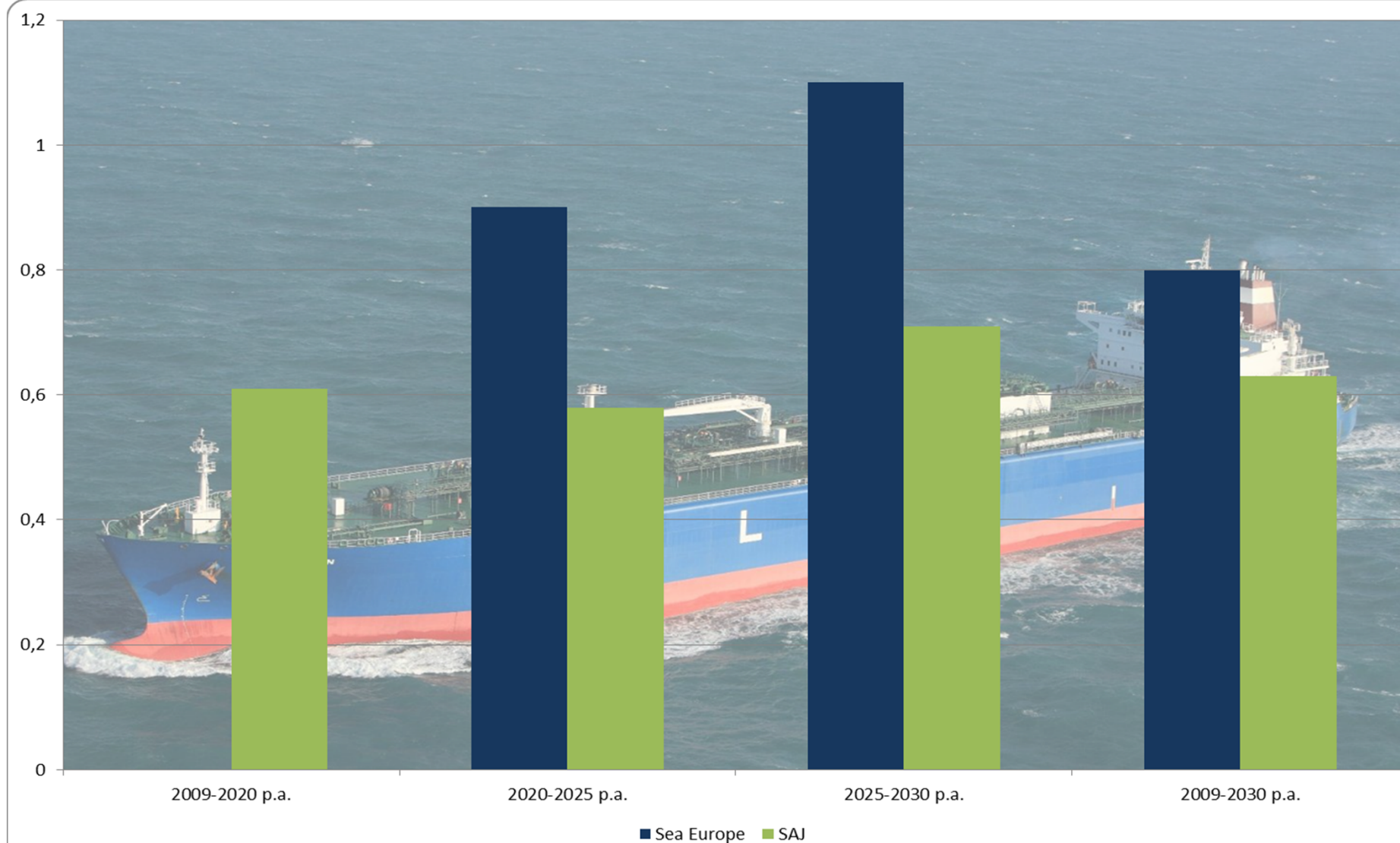
Sources: ISFEM memorandum, JECKU EPM presentations

LNG Carriers (mGT)



Sources: ISFEM memorandum, JECKU EPM presentations

LPG Carriers (mGT)

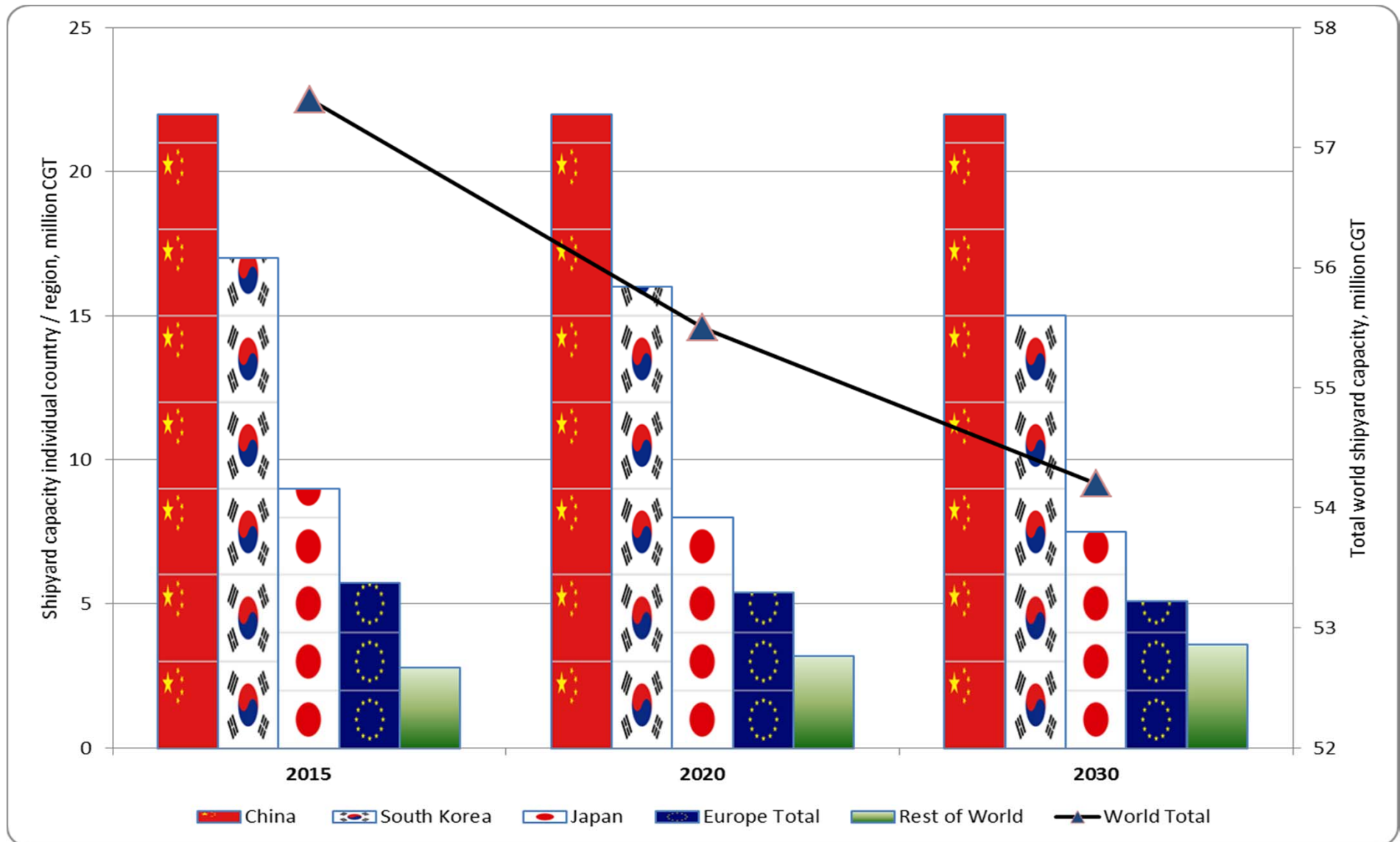


Sources: ISFEM memorandum, JECKU EPM presentations.

Shipyard capacity

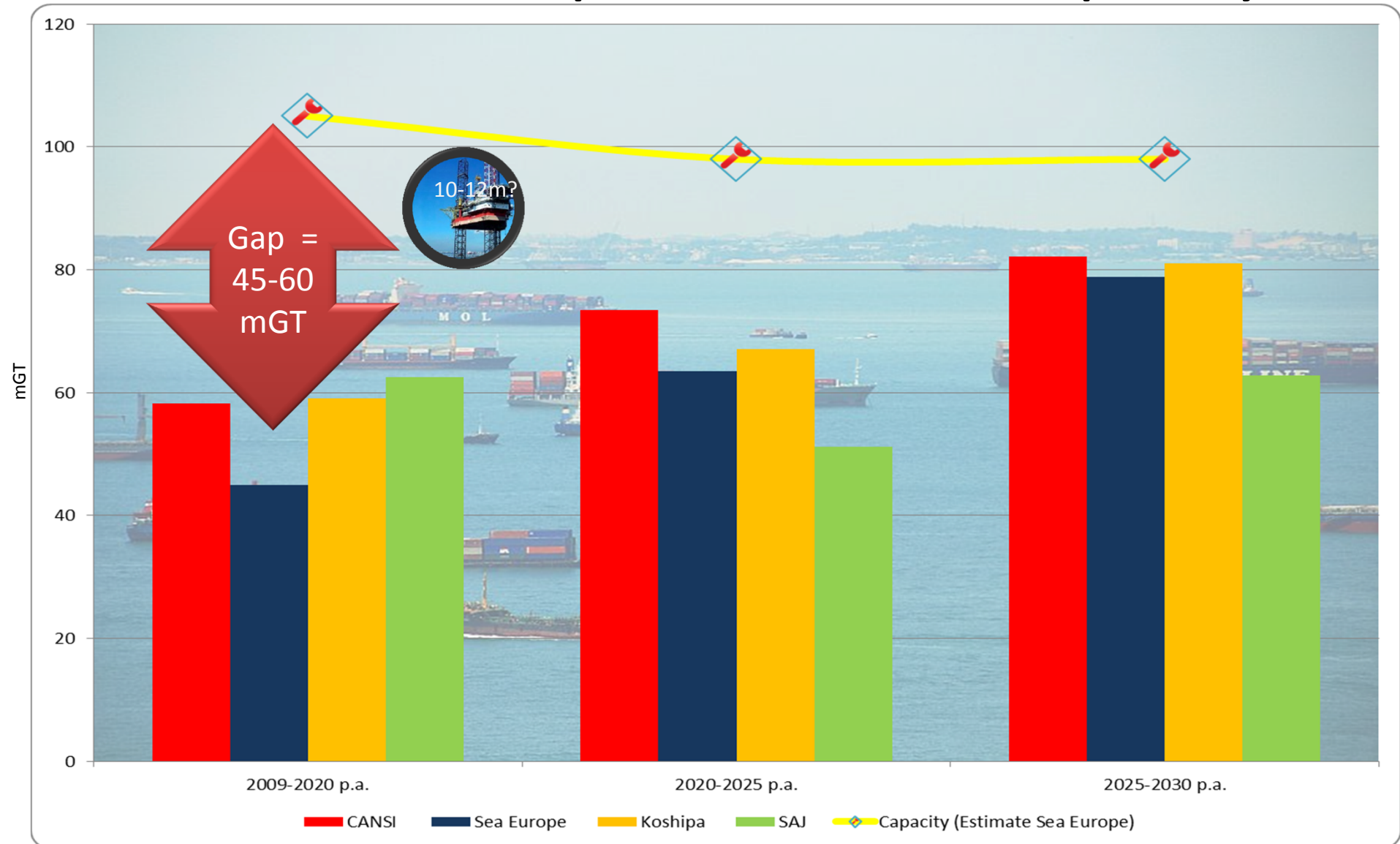
- Amongst experts at ISFEM and EPM, lengthy debates may occur when this subject is being discussed
- OECD definition of available capacity clearly takes into account long lifespan of yard facilities (still available when not demolished or poured over with concrete)
- Global capacity far outstrips demand, utilisation sharply decreasing
- Exceptions: closed markets such as USA or Brazil see increasing capacity utilisation (energy boom main driver, i.e. shale & pre-salt)
- Globally, short and mid term, there is now less capacity being marketed ('available') than e.g. five years ago. (Some) yards are being closed or focus on offshore; should have upward price effect.
- But: overinvestment and state involvement continue to distort markets
- IMF, August 2013: "State-owned companies are a key source of economic vulnerability."

Capacity Forecast



Source: Forecast Sea Europe, 2013. Note: long term capacity estimate $\neq$ currently marketed capacity.

Newbuild Requirement vs. Capacity



Source: forecasts various associations (capacity forecast: Sea Europe). Note: long term capacity estimate $\neq$ currently marketed capacity.

Running a healthy shipbuilding business

- Sustainability is the key in the current changing world, and it is necessary that we all transform ourselves from old routines to develop new ways to survive: this needs investment. We need to keep in mind that the only reasonable way to source such investment is from our earnings, and must ensure that such reserves are retained for our future success.
- Contracts signed at marginal or no profit will prove detrimental to a shipyard's future
- What security does running a shipyard at a no profit level offer to our clients? High chances of yard non-delivery, even cancellations by shipyard creditors aiming to prevent further loss
- This year, many examples of shipyard investments gone awry: tens of thousands of jobs lost, at state as well as private sector shipyards
- Diversification in shipyard product portfolio, closure of surplus capacity and downsizing or retraining of workforce is in many cases reasonable / necessary
- Cost competitiveness continues to be found abroad for many shipbuilders. Block or hull outsourcing or entire production relocation likely to continue.
- No more capacity expansion, focus on efficiency improvement. Close inefficient yards.
- Stimulate M&A, technical co-operation and portfolio and activity switches, e.g. into offshore structures, renewable energy markets.
- Attitude required from us: teamwork and professionalism, cross-industry and cross-border
- Finally: it is important for our industry to continue our forecasting studies, seeing future uncertain circumstances around shipbuilding industry.

Thank you for your kind attention!

