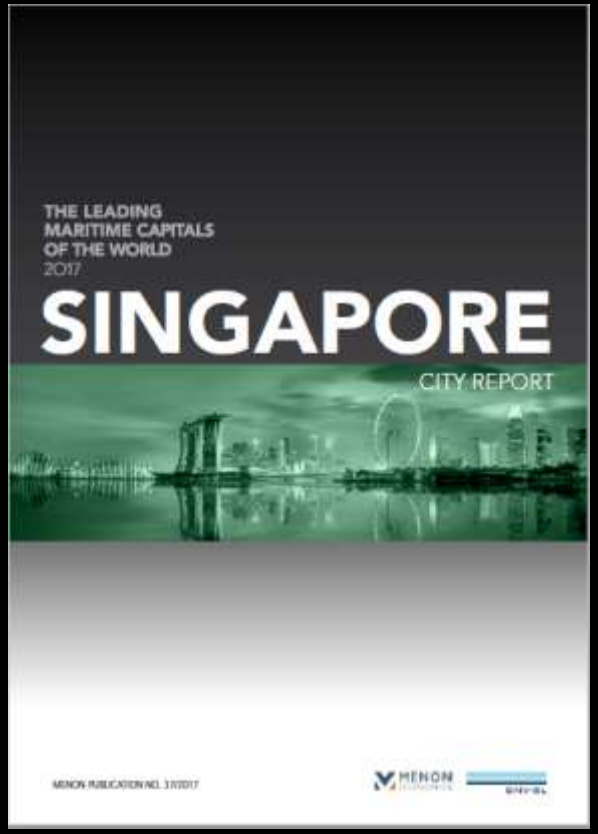
Singapore as a Leading Maritime Innovation Centre

Presentation at SMI Forum 30 Oct 2017

Dr Oecon Erik W. Jakobsen,
Managing partner in Menon Economics
Professor in Strategic management at USN

MENON IS:

- A research based economic analyses and advisory firm
- Based in Oslo
- 50 high-level economists, of whom ¼ with ph.d
- Serving governments, organizations, investors and companies
- Spesialized in maritime industries



THE **LMC** REPORT RECEIVED MEDIA ATTENTION ALL OVER THE WORLD

TradeWinds

The Economic Times
Business

BBC WORLD NEWS

THE STRAITS TIMES

TradeArabia
BUSINESS NEWS INFORMATION

HELLENIC SHIPPING NEWS WORLDWIDE
Online Daily Newspaper on Hellenic and International Shipping

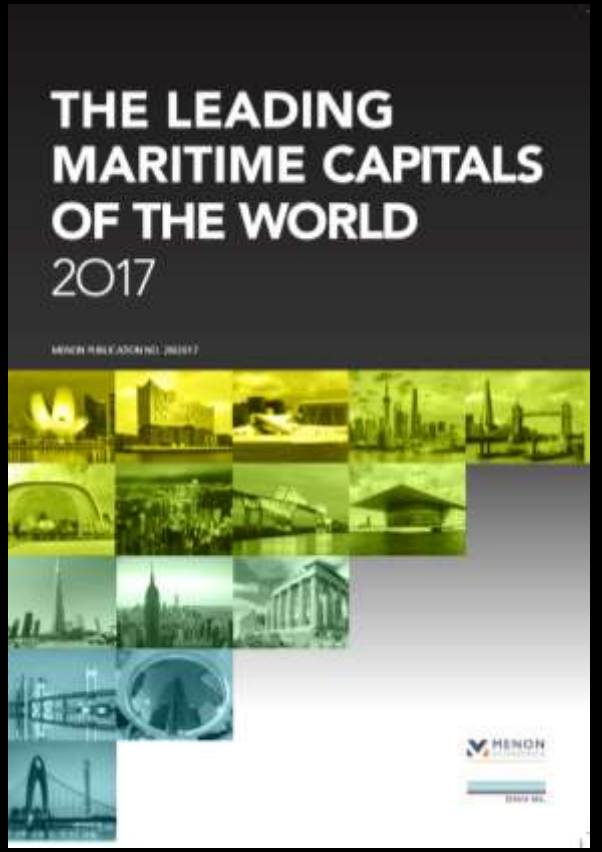
BUSINESS VANCOUVER

INTERNATIONAL INSTITUTE OF MARINE SURVEYING

AJOT
American Journal of Transportation

SPLASH24/7

The Maritime Executive
INTELLECTUAL CAPITAL FOR EXECUTIVES



Is a leading maritime capital

=

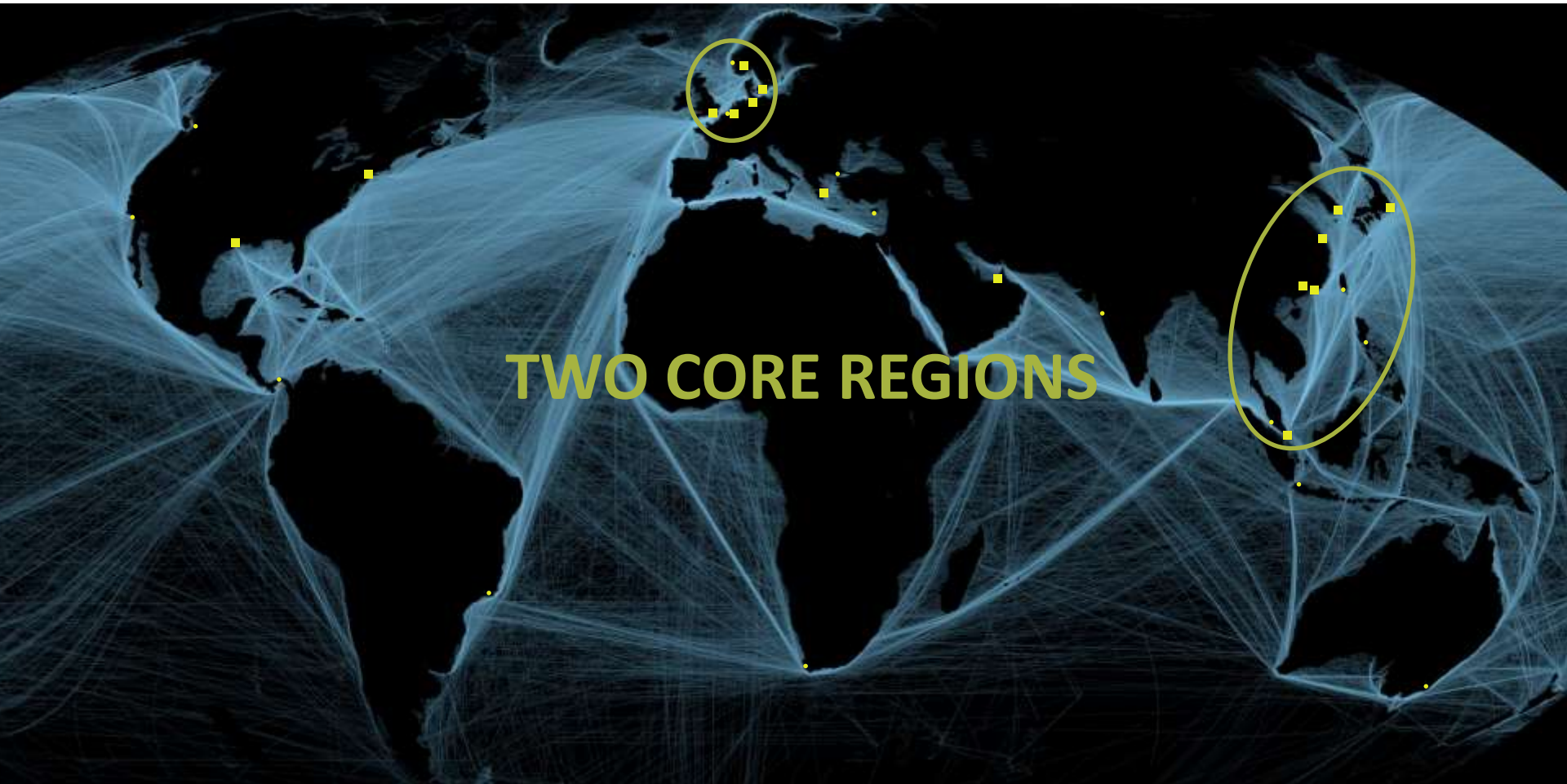
Leading Maritime Innovation Centre?

Leading Maritime Innovation Centre => Leading maritime capital

WORLD MARITIME TRAFFIC DURING ONE YEAR

CITIES COMPETE TO ATTRACT

THE MOST COMPETITIVE AND INNOVATIVE MARITIME COMPANIES


TWO CORE REGIONS

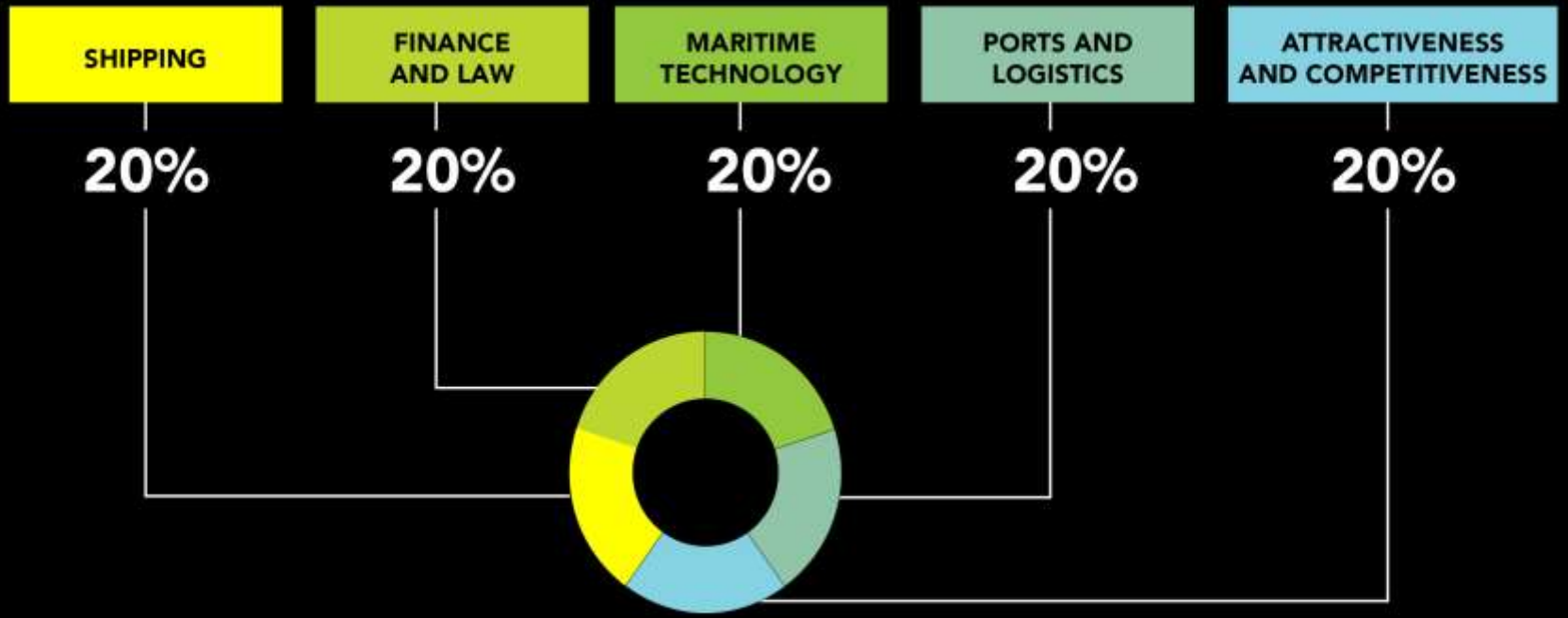
What is a leading maritime city?

1. A large and sophisticated shipping community – with owners, HQs and operation
2. A large port with varied and advanced logistics services
3. A specialised technological milieu, composed of yards, equipment producers, maritime R&D and innovative start-ups
4. Complete supply of specialised world-class services of finance, law and insurance

What are the drivers?

- Strategic location
- Favorable and stable political framework
- Transparent and efficient legal framework
- Proximity to large, demanding customers
- Local rivalry
- Large pool of talents
- Rich and open flow of knowledge and ideas
- Relationships based on **trust**
- Soft location factors

FIVE PILLARS – EQUALLY WEIGHTED



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NOMINATED CITIES

Benchmarked on 24 objective indicators

- SINGAPORE
- TOKYO
- OSLO
- HAMBURG
- SHANGHAI
- ROTTERDAM
- LONDON
- HONG KONG
- NEW YORK
- DUBAI
- COPENHAGEN
- ATHENS
- BUSAN
- HOUSTON
- GUANGZHOU
- KUALA LUMPUR
- MUMBAI
- ANTWERP
- SYDNEY
- JAKARTA
- LOS ANGELES
- BERGEN
- ISTANBUL
- VANCOUVER
- KAOHSIUNG
- RIO DE JANEIRO
- LIMASSOL
- MANILA
- PANAMA CITY
- CAPE TOWN

APPENDIX A: LIST OF OBJECTIVE INDICATORS OF 30 CITIES

	SHIPPING					FINANCE & LAW						PORTS AND LOGISTICS				MARITIME TECHNOLOGY				ATTRACTIVENESS AND COMPETITIVENESS				
CITY																								
SINGAPORE	4	2	2	4	13	2	5	-	10	3	3	3	4	5	7	6	12	7	1	1	5	4	26	1
TOKYO	2	5	3	2	5	15	2	4	4	7	4	14	7	7	26	4	1	8	5	17	14	4	27	11
OSLO	10	16	7	1	4	5	3	1	2	4	2	28	30	-	19	21	4	3	4	6	2	11	23	6
HAMBURG	3	3	5	15	12	8	7	-	3	20	17	8	10	6	3	11	5	5	15	13	7	11	18	17
SHANGHAI	6	7	9	13	10	7	4	-	1	2	10	2	3	4	8	2	-	1	2	24	27	7	25	21
ROTTERDAM	14	15	12	22	11	6	9	2	5	14	18	9	5	2	12	8	-	13	-	16	2	17	7	4
LONDON	7	6	6	7	3	1	1	5	6	10	12	13	25	-	4	26	3	6	11	9	7	1	30	5
HONG KONG	5	4	8	6	8	4	18	-	11	6	5	5	8	1	17	15	-	16	10	3	14	7	29	1
NEW YORK	13	25	4	7	18	3	6	3	9	1	1	16	19	10	15	10	-	21	12	5	11	3	28	14
DUBAI	12	11	19	15	21	8	10	-	-	8	18	4	14	3	9	12	-	10	-	8	16	11	17	3
COPENHAGEN	8	9	10	12	2	10	20	6	7	5	14	27	15	-	6	17	-	20	19	2	1	4	16	10
ATHENS	1	1	1	2	1	12	28	7	8	18	12	17	28	-	2	20	11	15	-	20	21	27	9	24
BUSAN	22	8	24	15	24	29	14	-	-	12	6	6	1	12	14	1	6	4	3	4	19	17	14	19
HOUSTON	21	24	15	26	6	24	23	-	-	-	-	24	6	-	21	23	2	2	12	9	11	16	3	14
GUANGZHOU	17	18	20	18	9	18	12	-	-	13	11	1	2	-	30	3	-	12	6	25	27	25	19	21
KUALA LUMPUR	15	17	13	7	7	20	22	-	-	9	6	10	11	-	18	16	-	14	9	15	20	17	1	8
MUMBAI	16	13	21	10	17	20	11	-	-	11	8	19	13	-	23	24	8	9	7	30	25	17	24	20
ANTWERP	19	22	18	18	16	16	13	-	-	17	18	11	12	-	13	26	-	19	-	18	10	22	6	11
SYDNEY	29	28	26	26	-	12	17	-	-	19	16	23	9	9	11	25	-	25	-	12	9	7	21	8
JAKARTA	11	12	14	4	14	27	29	-	-	16	9	18	23	-	16	14	7	22	16	26	29	27	5	26
LOS ANGELES	25	26	22	26	-	24	19	-	-	-	-	7	17	-	1	9	-	24	-	11	11	7	10	14
BERGEN	18	20	16	11	19	26	15	-	-	-	-	30	22	-	5	19	-	18	14	6	2	15	15	6
ISTANBUL	9	10	17	26	-	18	16	-	-	21	19	21	21	11	24	5	9	17	18	21	23	17	12	28
VANCOUVER	27	21	25	18	15	17	27	-	-	-	-	22	16	-	10	22	-	28	-	14	6	14	22	11
KAOHSIUNG	26	27	28	22	25	29	24	-	-	-	-	12	18	-	28	7	-	26	8	28	17	25	20	21
RIO DE JANEIRO	20	23	11	22	26	10	8	-	-	-	-	26	26	-	20	13	-	11	-	29	25	24	4	30
Limassol	23	14	23	13	20	20	30	-	-	22	18	29	29	13	25	26	-	30	-	19	18	1	2	18
MANILA	24	19	27	18	22	27	21	-	-	15	14	20	24	8	27	26	-	23	17	27	30	29	11	29
PANAMA CITY	28	29	30	26	-	12	25	-	-	-	-	15	27	-	22	26	-	26	-	22	24	30	8	24
CAPE TOWN	30	30	29	22	23	30	26	-	-	-	-	25	20	-	29	18	-	29	-	23	22	22	13	26

30

NOMINATED CITIES

Benchmarked on 24 objective indicators

15

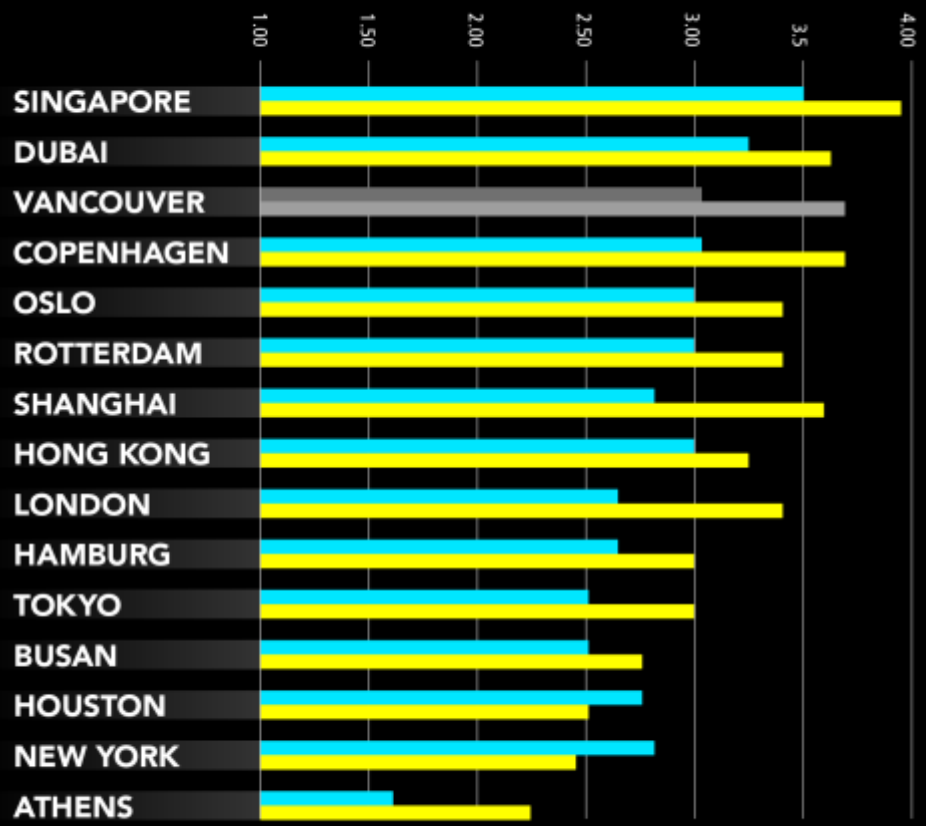
LEADING MARITIME CITIES

Benchmarked on both objective indicators and Industry Expert assessments

TOTAL RANKING OF THE LEADING MARITIME CAPITALS OF THE WORLD 2017

MENON ECONOMICS

1	2	3	4	5
SINGAPORE	HAMBURG	OSLO	SHANGHAI	LONDON



The experts' assessments of the policy framework in their own city.

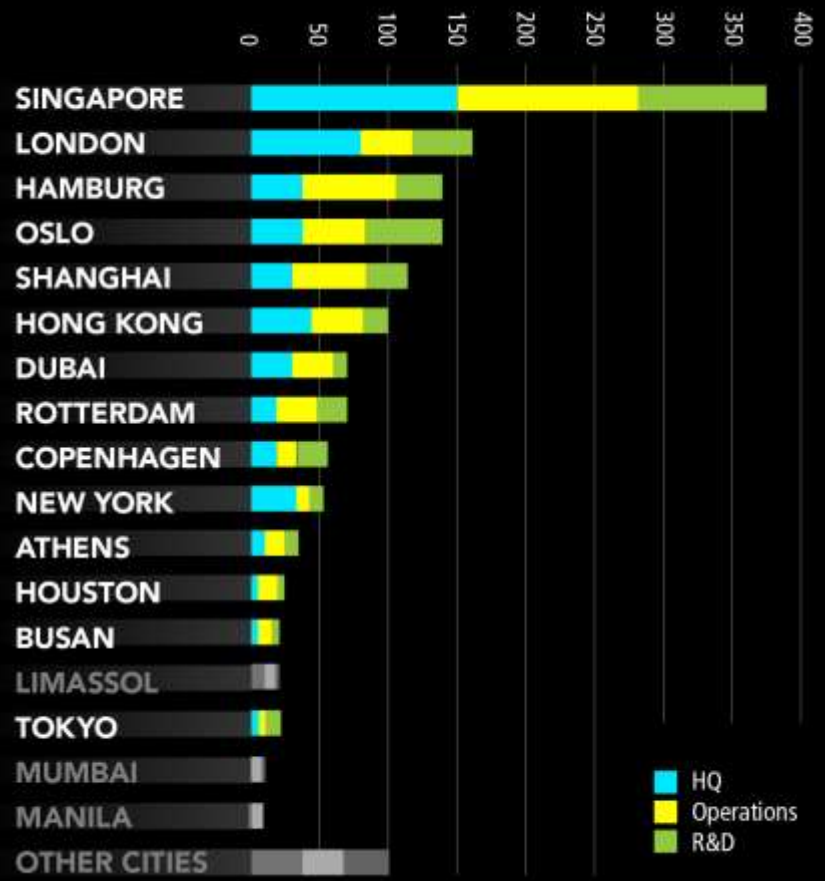
(Cities ranked by the average score on the two indicators.)

Source: Menon (2017)

Policy framework - overall assessment of taxes, subsidies and regulations
(1=Highly unattractive; 4= Highly attractive)

The government and governmental bodies are supportive of the maritime industry
(1=Disagree; 4= Agree)

MOST ATTRACTIVE CITIES FOR RELOCATING MARITIME COMPANIES



Expert opinion regarding the most attractive cities for relocating maritime companies

Number of experts that rank the cities among the three most attractive for different functions (HQ, Operations and R&D)

Source: Menon (2017)

- **Digitalisation**

  - *Ability to apply and capitalize on existing technology – no limits*

- **Climate change and environmental problems**

  - *Ability to develop, implement and scale-up solutions*

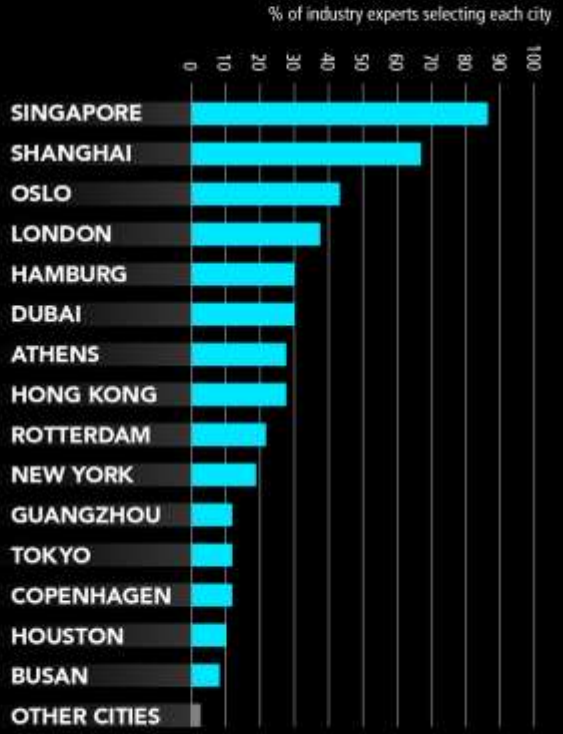
- **High growth and integration of ocean industries**

  - *Ability to adapt to changes in solutions and growth patterns – flexibility pays off*

THE LEADING MARITIME CITIES OF THE FUTURE

Industry experts answer to: "Looking forward five years from now, which cities will be the five leading maritime centers of the world?"

Source: Menon (2017)



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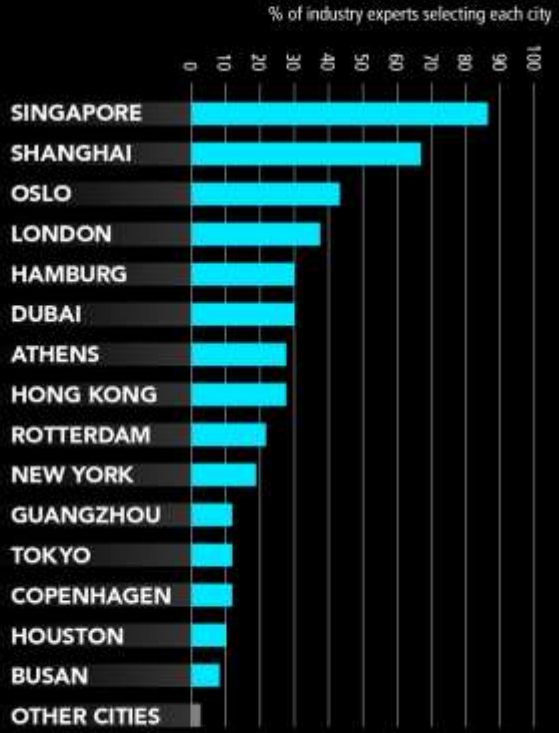
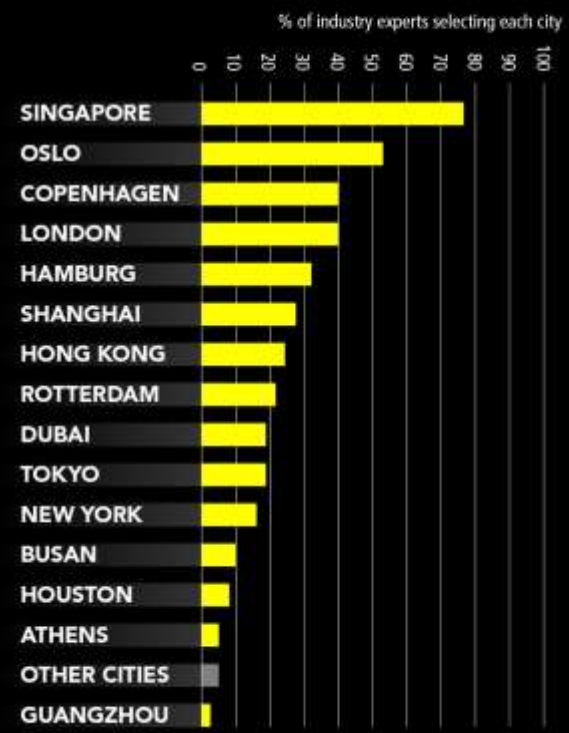


Industry experts answer to: "Which cities have the strongest capabilities and are best positioned for the digital transformation of the maritime industry?"

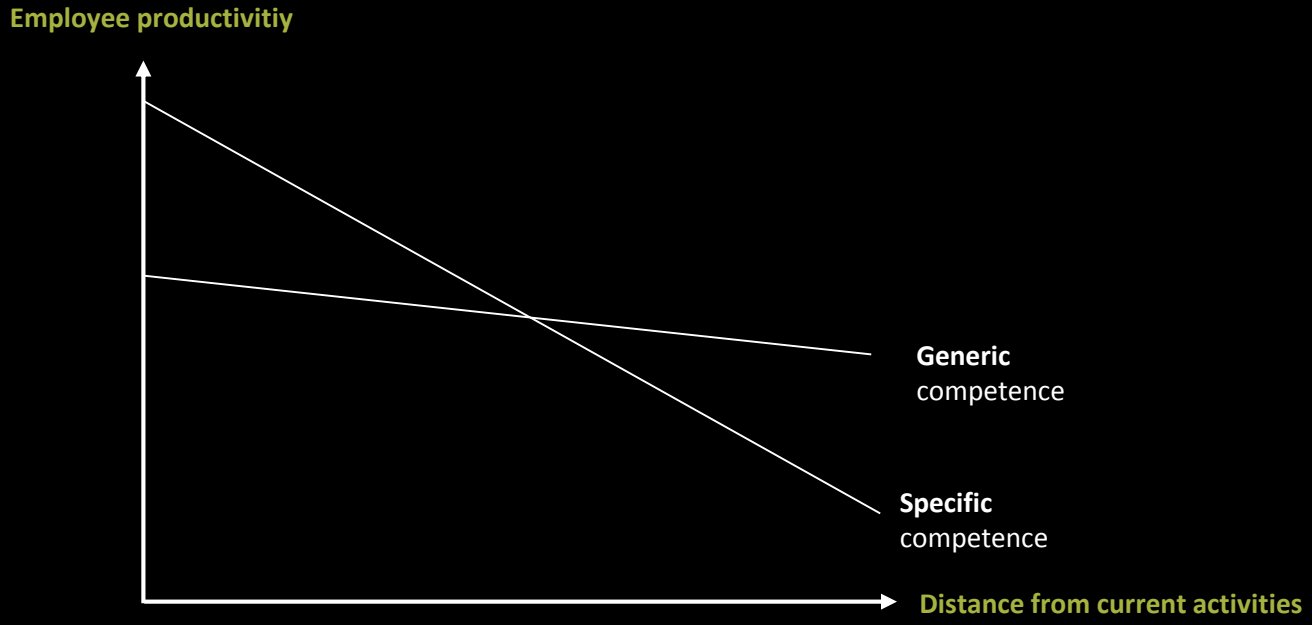
Source: Lloyd's (2015)



Does Singapore have the (dynamic) capabilities to retain its position?

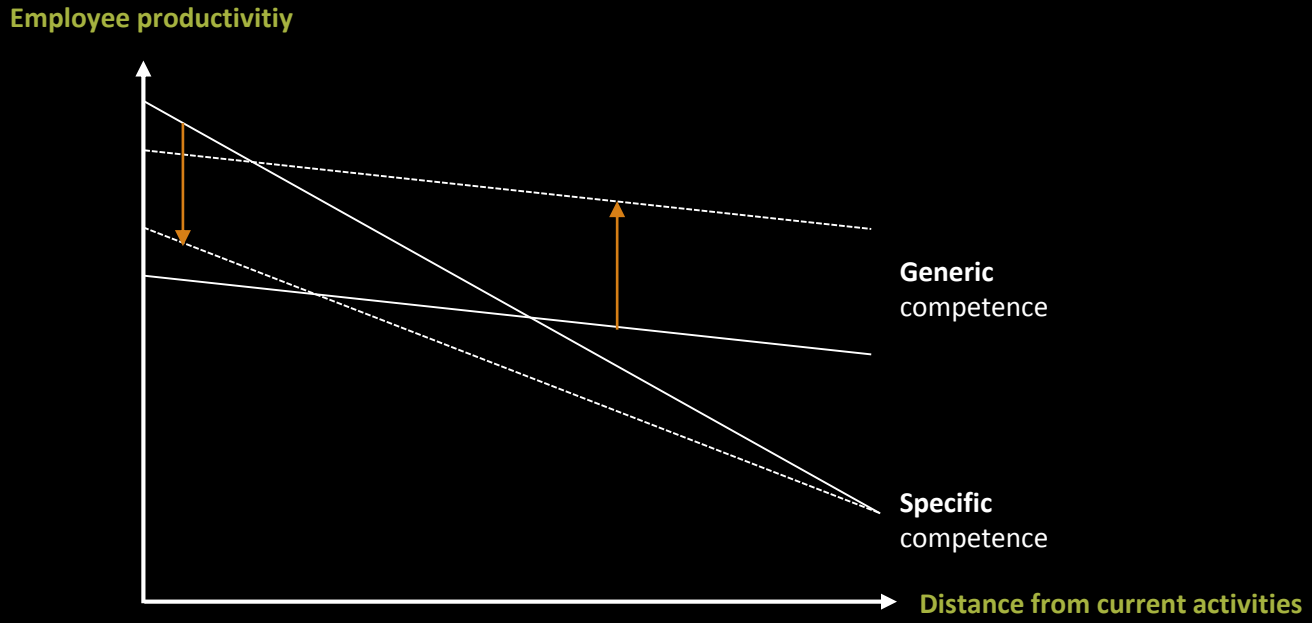
- Ecosystem
- Trust & openness
- World class applied research
- World class education
- People with the right mindset
- Business models
- organisational models

Your employees' competence should be as tailormade as possible to the tasks that they shall execute – as long as these are predictable



If students are uncertain about future demands for competence, they will go for generic studies.

Hence, the strongest talents with generic education can outperform the specialists



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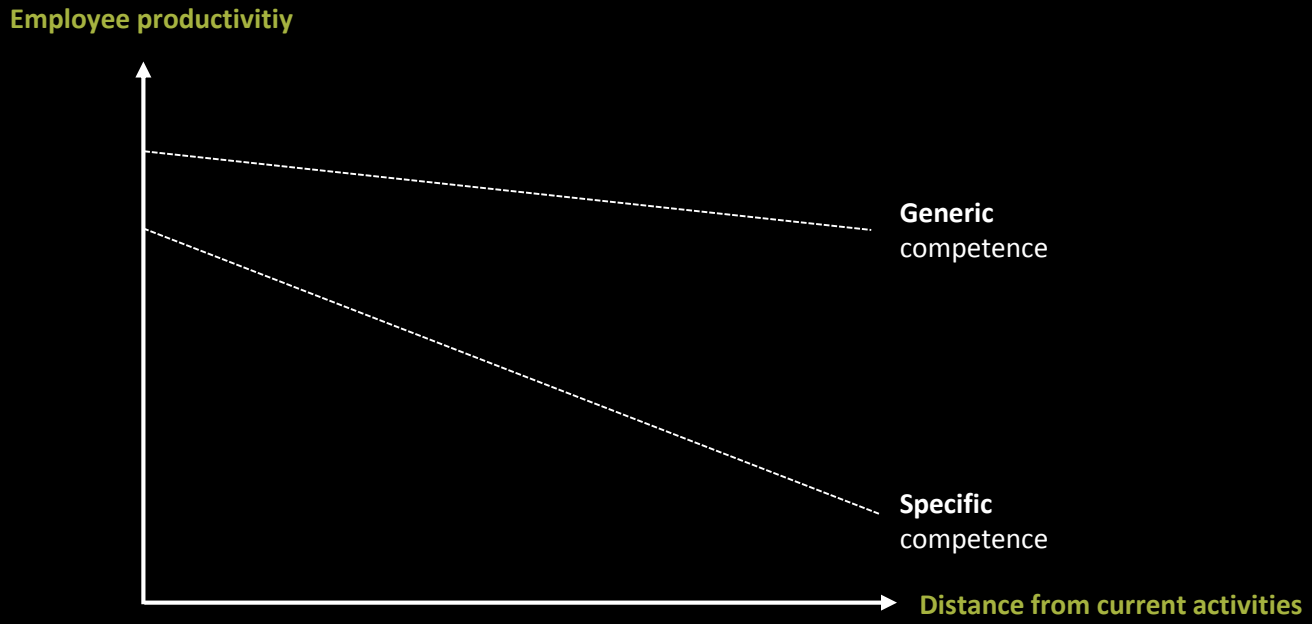
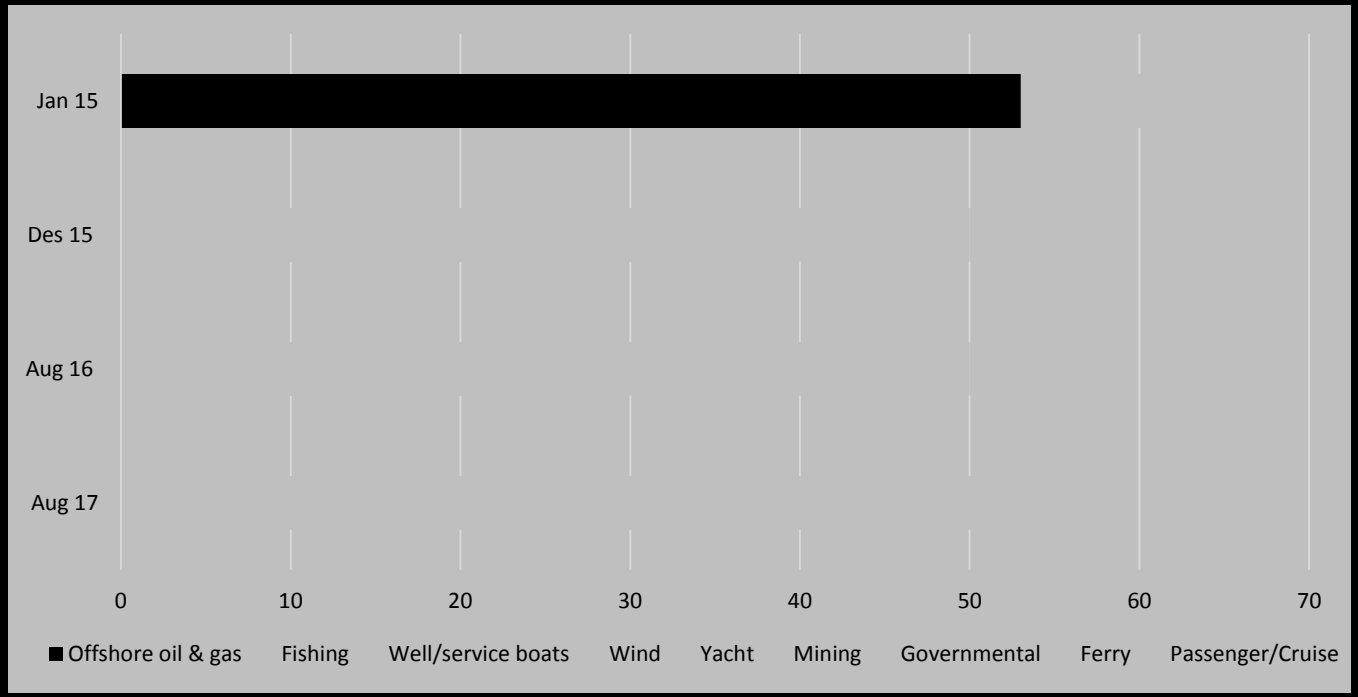
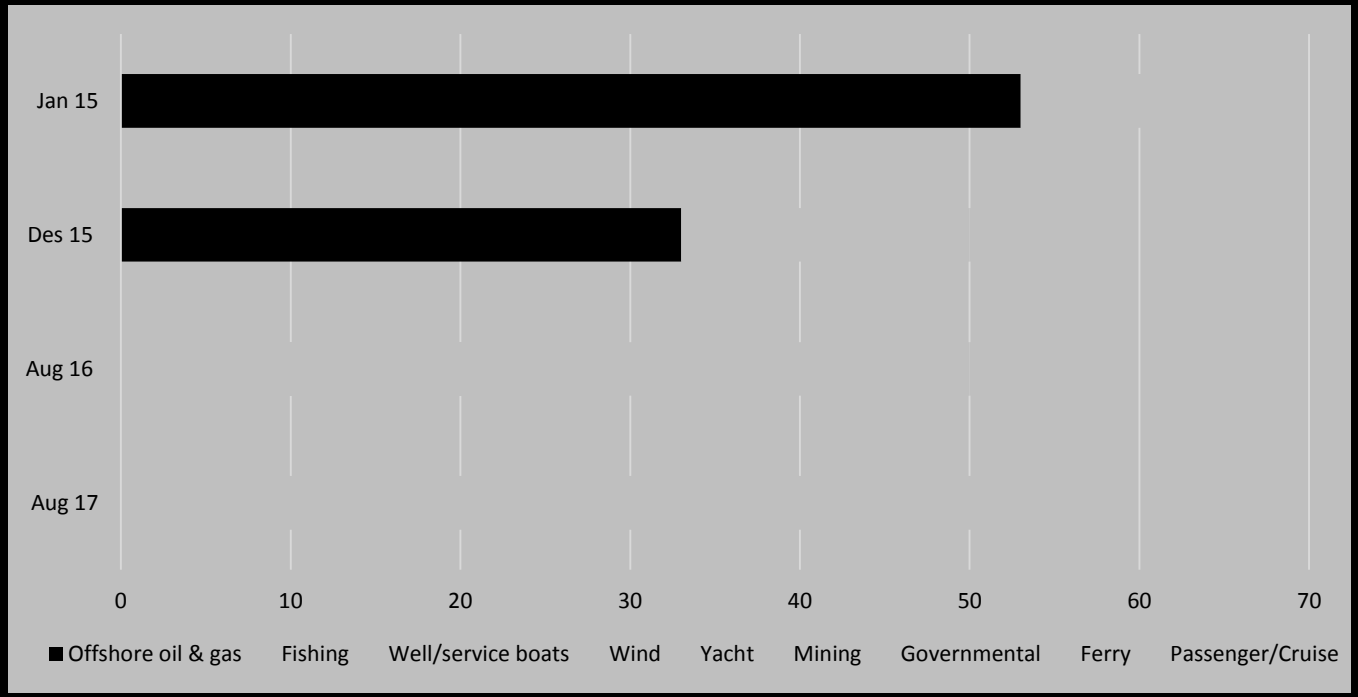


Norwegian yards – offshore vessels gradually disappeared



Order book at Norwegian yards January 2015-August 2017. Number of vessels (larger than >40m). Source: Norsk Industri

Norwegian yards – offshore vessels gradually disappeared



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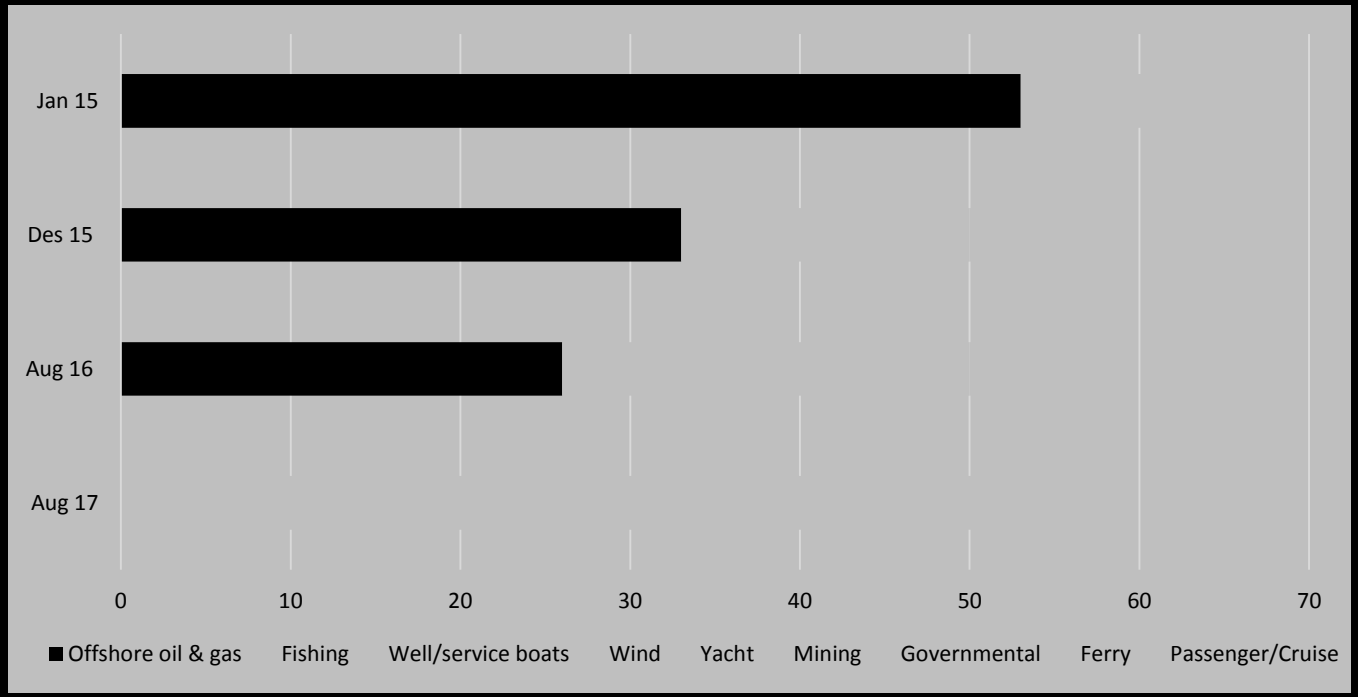

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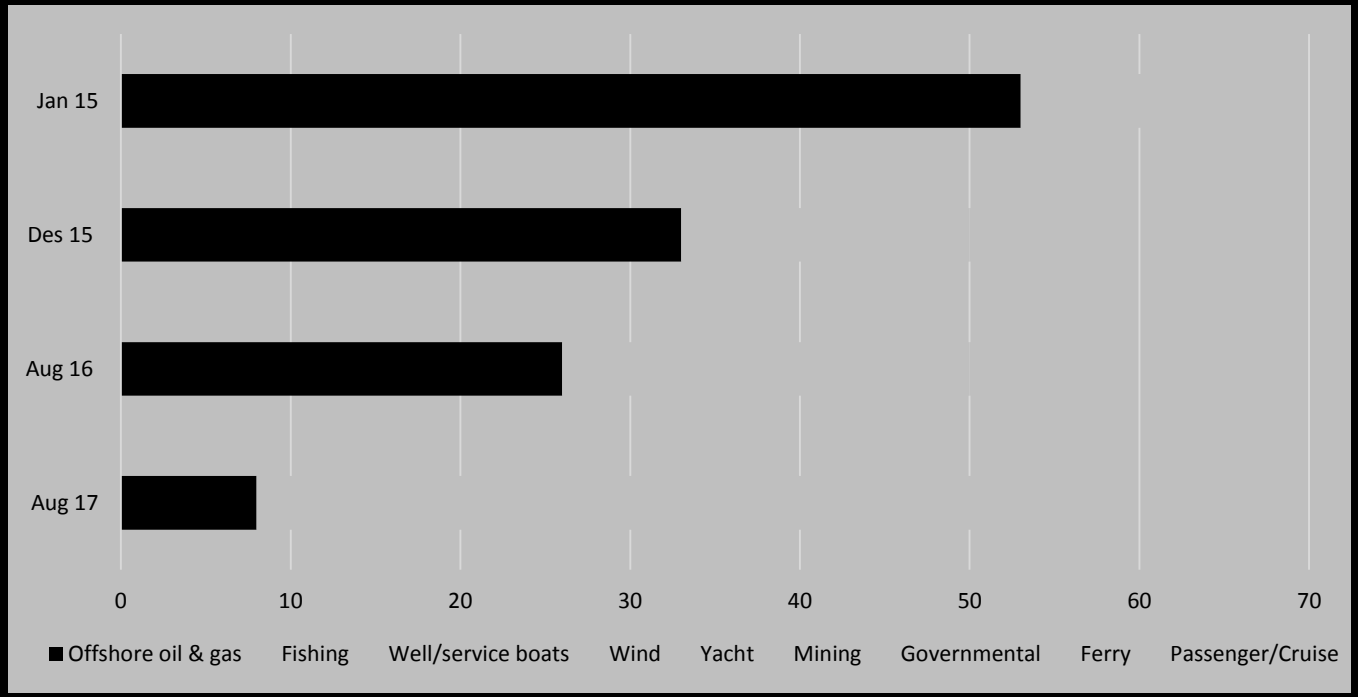
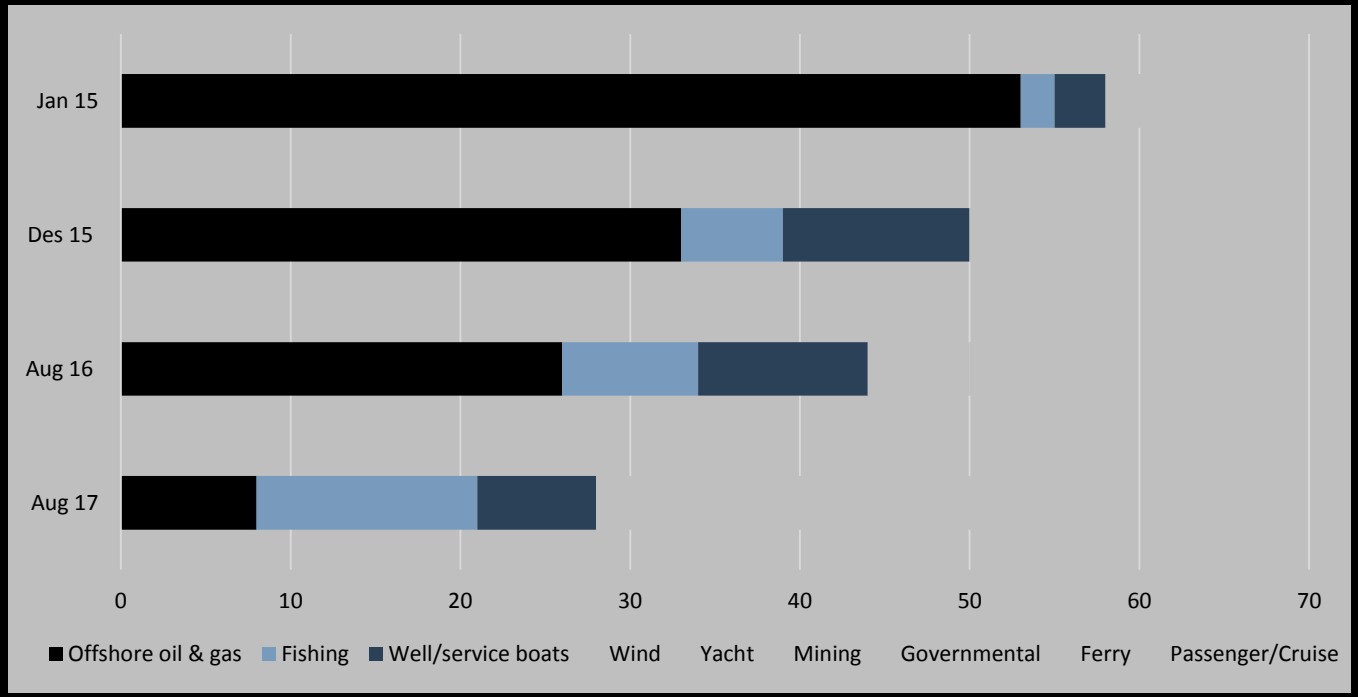


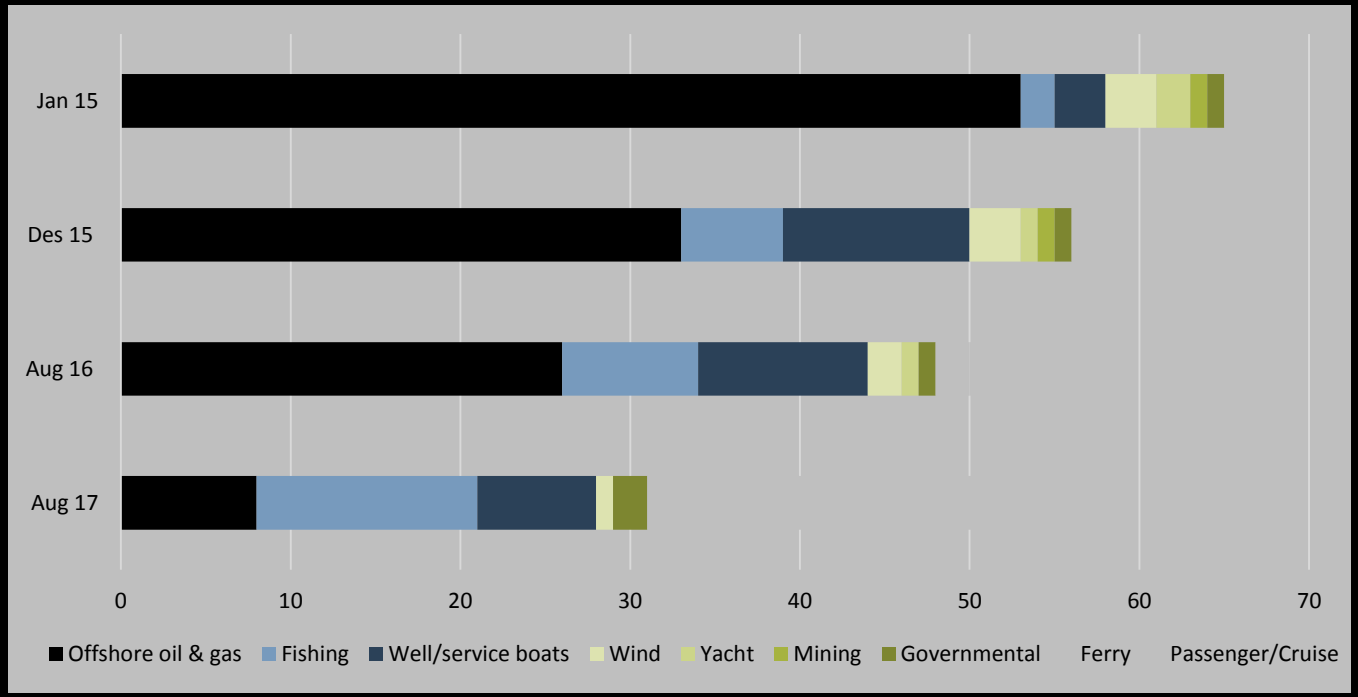
Order book at Norwegian yards January 2015-August 2017. Number of vessels (larger than >40m). Source: Norsk Industri

… but were replaced by advanced fishing vessels and wellboats



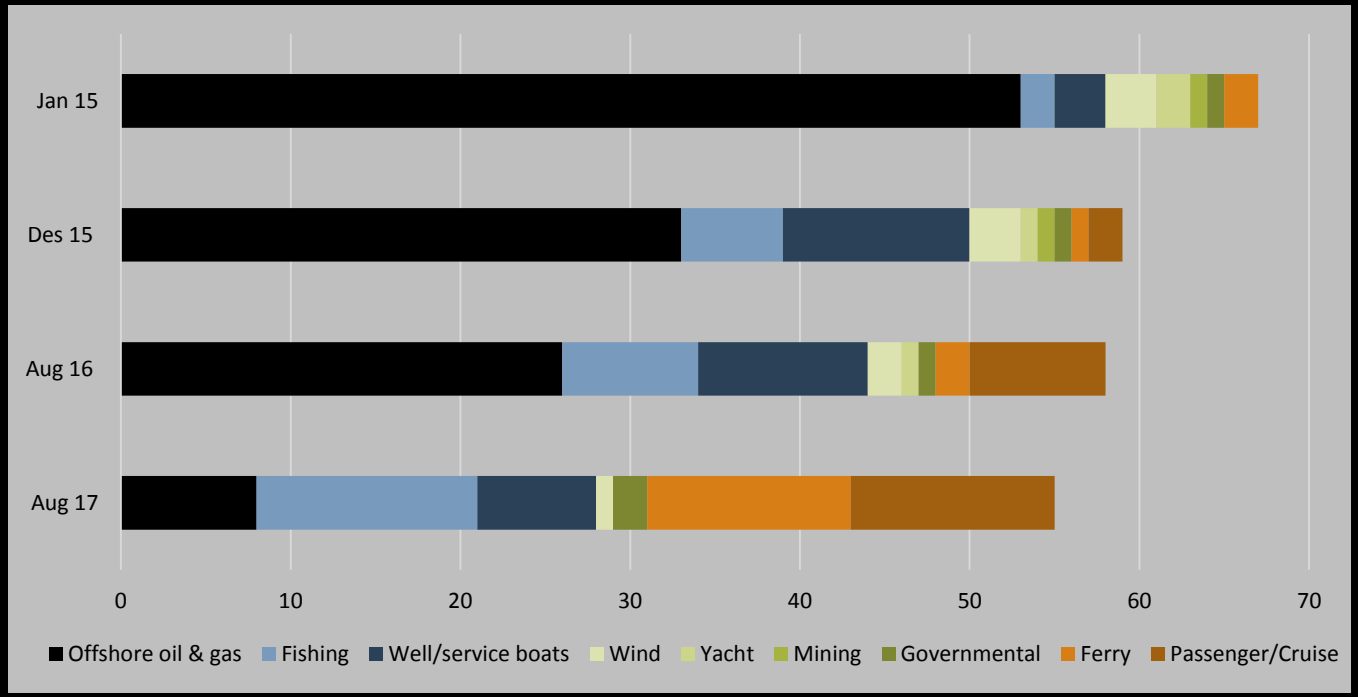
Order book at Norwegian yards January 2015-August 2017. Number of vessels (larger than >40m). Source: Norsk Industri

… and other specialised vessels for ocean operations



Order book at Norwegian yards January 2015-August 2017. Number of vessels (larger than >40m). Source: Norsk Industri

… and particularly maritime tourism



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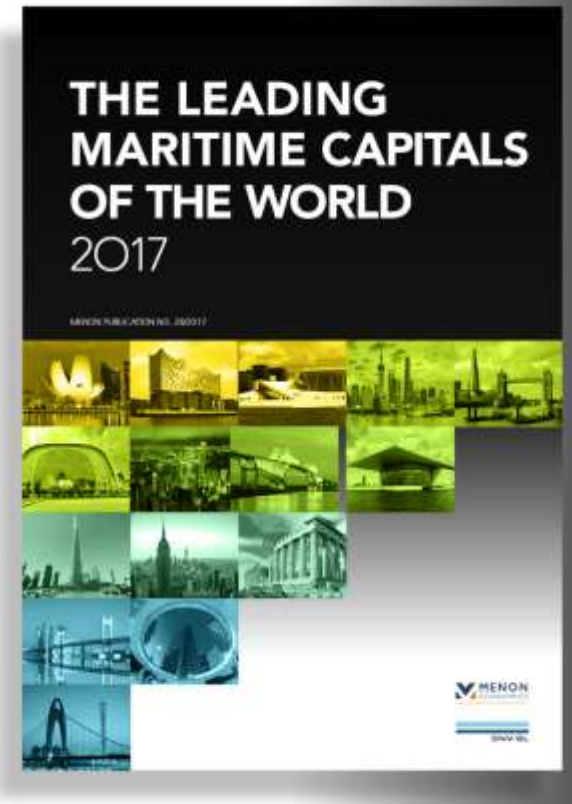
What is innovative today, will be conventional tomorrow

It is not Singapore's products and technologies that constitute your competitiveness,

but the capability to continuously create something new and better

– through collaboration in the ecosystem



Thank you for your attention!

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