

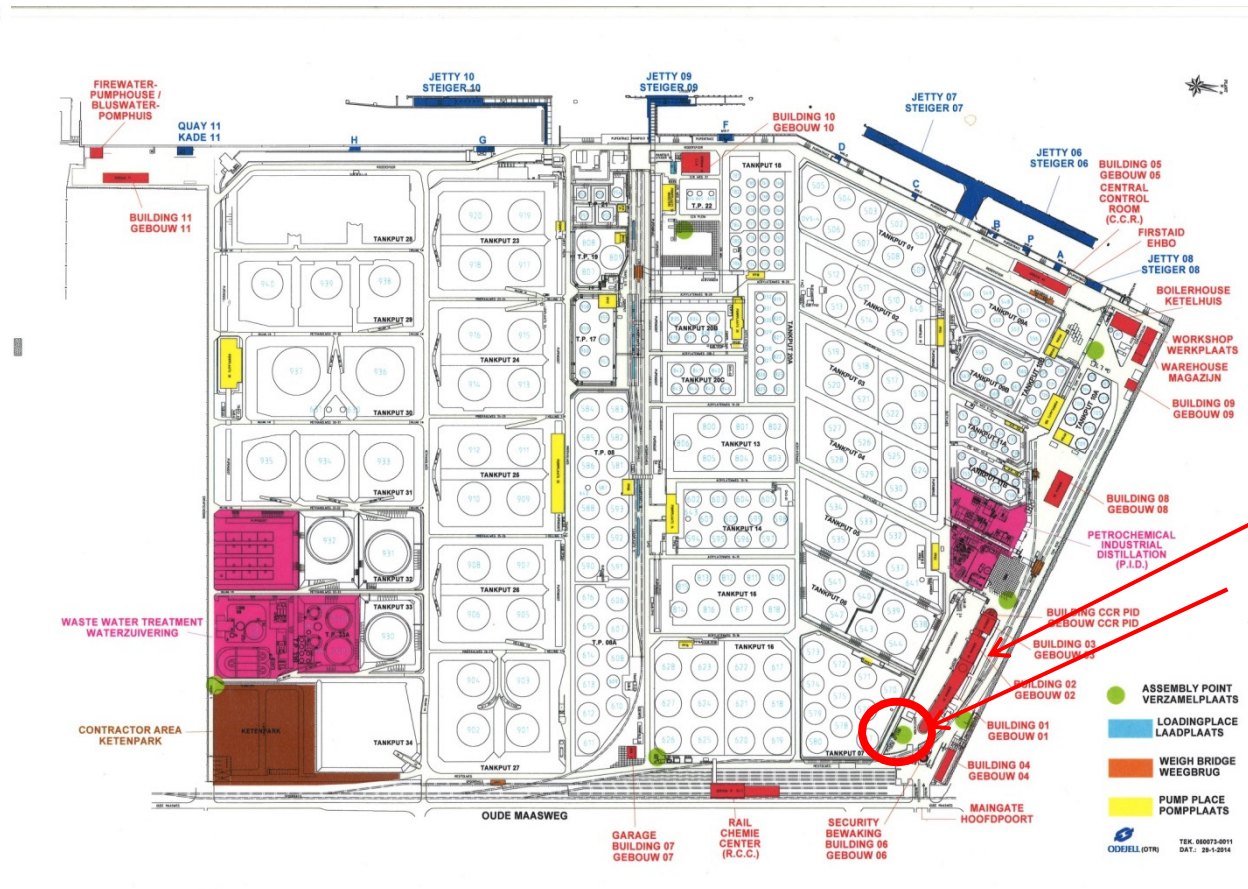
# Odfjell SE – Capital Market Day



Rotterdam, May 10th 2016

# SAFETY FIRST

- Evacuation Alarm (continuous high pitched alarm from within the buildings)
- Follow the emergency exit signs
- During tour follow ODFJELL staff instructions



Office

Assembly point



# Welcome

- Odfjell's first capital market day
- Proud to present at our Rotterdam terminal
- 2015 was a turning point for our Odfjell
  - Project Felix became much more than a cost saving exercise. Apart from achieving significant cost savings, we have also during the year implemented a wide range of improvement measures, including optimisation of how we trade and operate our fleet, energy and fuel economising, right-sizing of our organisation and other initiatives.
  - In February this year we announced that we had reached our target of savings in excess of USD 100 million on an annual basis, which significantly improves our competitive position... but we are not declaring victory just yet!
  - A key objective for us is that cost-cutting and focus on operational efficiency shall not jeopardise our QHSE performance. On the contrary, we see strong QHSE results as a prerequisite for proper and sustainable operations.



# Welcome

- 2016 started well
  - Strongest quarterly EBITDA since 2008
  - Odfjell's competitiveness continues to improve
  - Tank terminal improvements continue
- Our key focus in 2016 is to continue building strength, enabling us to secure continued development of Odfjell and to allow for asset renewal and expansion. This includes initiatives to further improve our cash situation and balance sheet while at the same time emphasising operational improvements and quality of service.
- Our aim is to become the most efficient integrated chemical transportation company in the world.
- We are also committed to our terminals business, as a great stand-alone infrastructure business but even more attractive for us with its potential for synergies with the chemical tankers.



# Agenda

10:00 - 11:00	<b>Introduction</b>	Kristian Mørch	CEO Odfjell SE
	<b>1Q 2016 results</b>	Kristian Mørch/Terje Iversen	CEO/CFO Odfjell SE
11:00 - 12:00	<b>Chemical Tankers</b>	Harald Fotland/Arild Viste	SVP Odfjell Tankers/Global Head of Tanker Trading
12:00 - 12:30	<b>Lunch</b>		
12:30 - 13:10	<b>Port operations</b>	Torger Trige	Project Manager Odfjell Tankers
13:10 - 13:30	<b>Ship management</b>	Helge Olsen	SVP Ship Management
13:30 - 14:30	<b>Odfjell Tank Terminals</b>	Frank Erkelens/Koert Schouten	CEO/CFO Odfjell Terminals BV
14:30 - 15:30	<b>Rotterdam terminal/PID</b>	Theo Olijve	Managing Director Odfjell Terminals Rotterdam
15:30 -	<b>Tour of the terminal</b>	Theo Olijve	Managing Director Odfjell Terminals Rotterdam
	<b>Closing remarks</b>	Kristian Mørch	CEO Odfjell SE



**FIRST QUARTER  
PRESENTATION  
2016**

**9 May 2016**



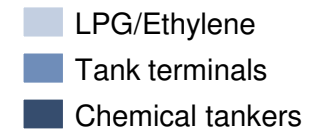
# Agenda

- **Highlights**
- **Financials**
- **Operational review**
- **Market update and prospects**
- **Q&A**

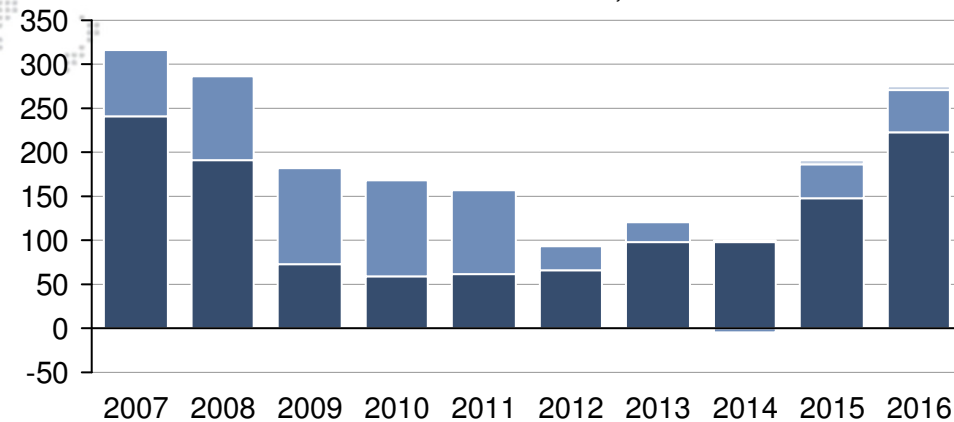


# Highlights

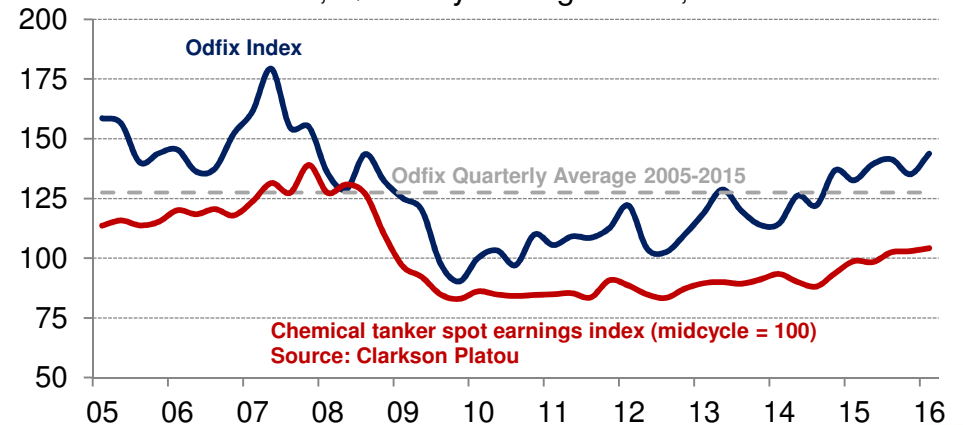
- Strongest quarterly EBITDA since 2008
- Odfjell's competitiveness continues to improve
- Tank terminal improvements continue
- Net result 1Q16 of USD 24 mill (4Q15: USD -18 mill)
- Improved EBITDA of USD 69 mill (4Q15: USD 45 mill)
- Significant reduction in voyage expenses compared to previous quarters mainly due to expiry of bunker hedges
- Impairments in Odfjell Gas as partial cancellation of newbuilding programme is increasingly likely
- Odfjell Terminals continues to improve, with first profitable quarter since 2013



Annualised EBITDA<sup>1</sup>, USD mill



Odfix, Quarterly average Index, 1990=100



1. Proportional consolidation method according to actual historical ownership share



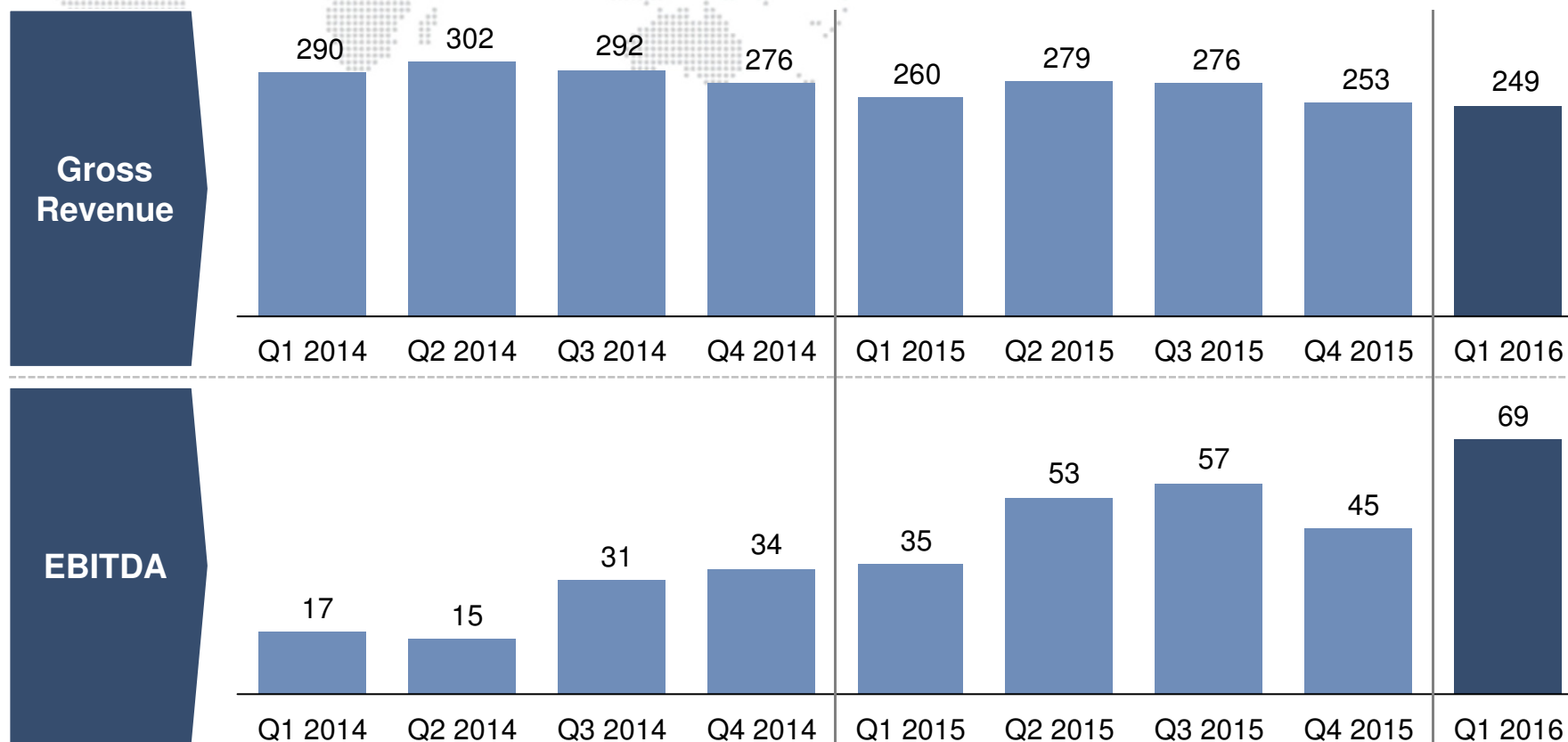
# Income statement<sup>1</sup> – First quarter 2016 Odfjell Group

USD millions	1Q 2016	4Q 2015
Gross revenue	249	253
Voyage expenses	(69)	(95)
TC expenses	(41)	(40)
Operating expenses	(46)	(47)
General and administrative expenses	(23)	(25)
Operating result before depr. (EBITDA)	69	45
Depreciation	(30)	(32)
Impairment	(10)	(13)
Capital gain (loss) on non-current assets	12	-
Operating result (EBIT)	41	(0)
Net finance	(13)	(15)
Taxes	(5)	(2)
Net result	24	(18)

1. Proportional consolidation method

# Quarterly figures<sup>1</sup> – Odfjell Group

Quarterly Gross Revenue and EBITDA, USD millions



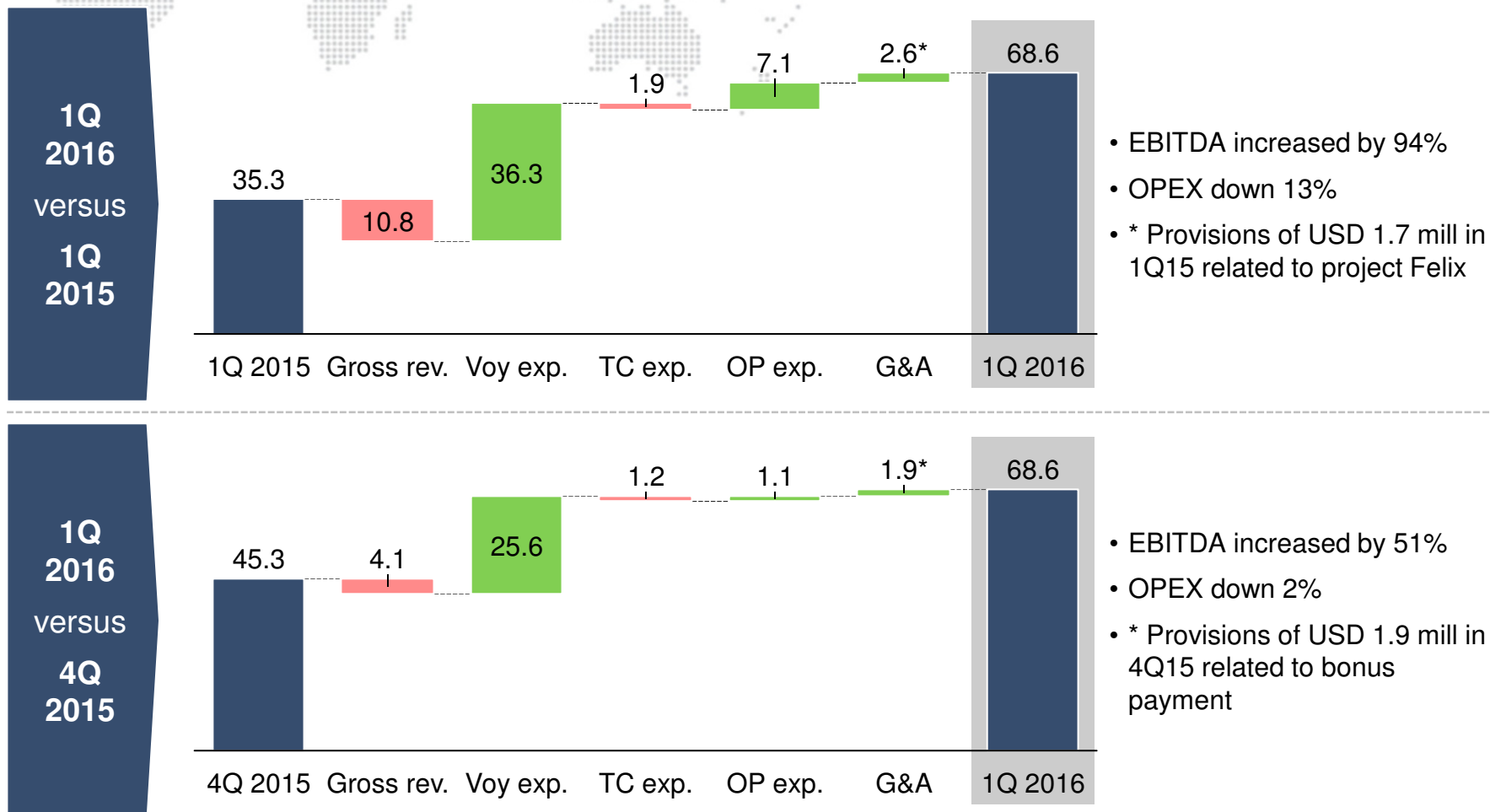
### 1Q16 versus 4Q15

- Reduced revenue mainly due to bunker adjustment clauses
- Strong increase in EBITDA mainly due to expiry of loss making bunker hedges

1. Proportional consolidation method

# EBITDA variance<sup>1</sup> – Odfjell Group

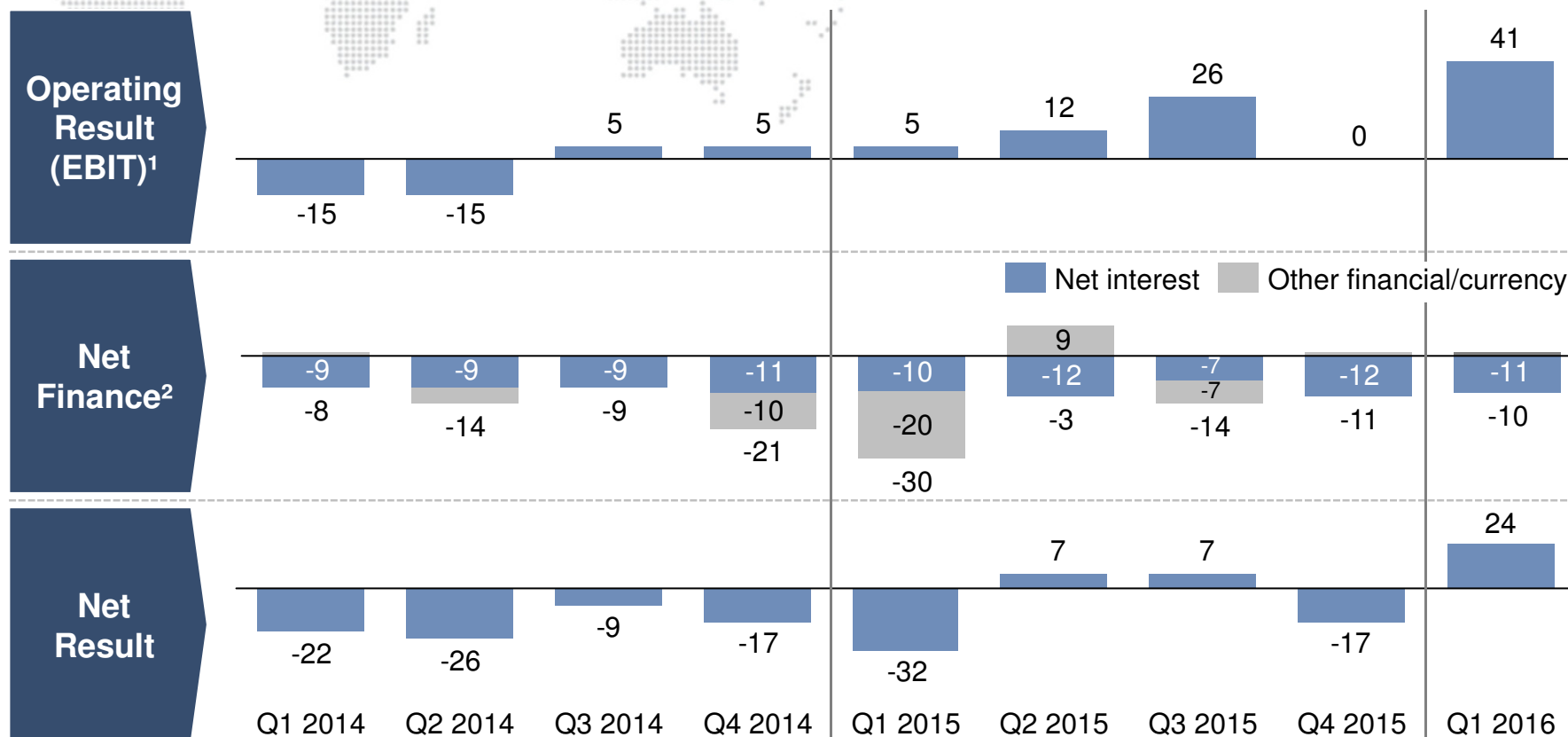
Quarterly EBITDA, USD millions



1. Proportional consolidation method

# Quarterly figures<sup>1</sup> – Odfjell Group

Operating Result (EBIT)<sup>1</sup>, Net Finance<sup>2</sup> and Net Result, USD millions

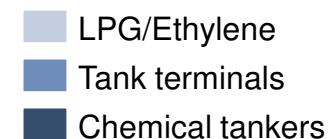


- Continued EBIT improvement
- EBIT 1Q includes negative effect of bunkers hedging USD 0.9 mill (USD 20.5 mill) and net impairment/gain of USD 2 mill (negative USD 13 mill)
- Net interest remain stable

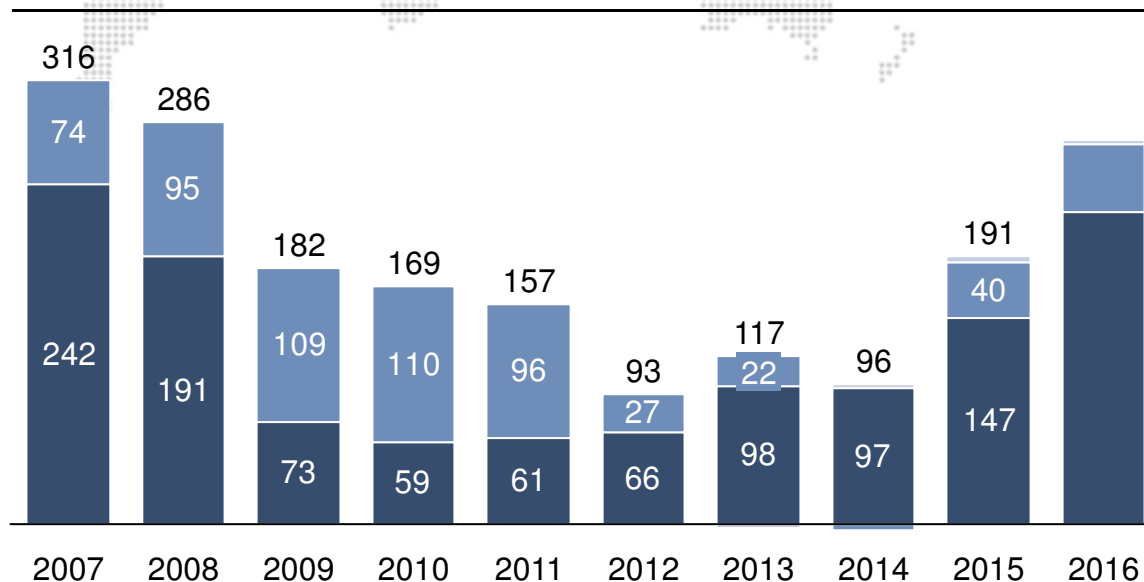
1. Proportional consolidation method  
 2. Equity method



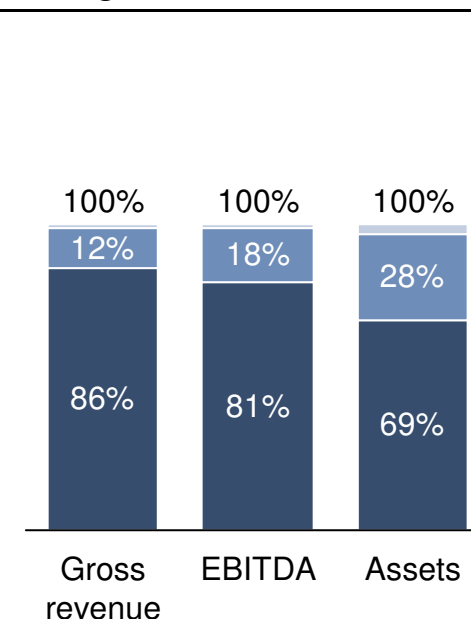
# Results per segment<sup>1</sup>



Annualised EBITDA<sup>1</sup>, USD millions



Segment details, 1Q 2016



USD millions	1Q 2016			4Q 2015		
	Chemical tankers	Tank terminals	LPG/Ethylene	Chemical tankers	Tank terminals	LPG/Ethylene
Gross revenue	215	31	4	219	29	5
EBITDA	56	12	1	33	11	1
EBIT	39	4	(2)	0	(1)	1

1. Proportional consolidation method according to actual historical ownership share

## Income statement<sup>1</sup> – 1Q16 chemical tankers

USD millions	1Q 2016	4Q 2015
Gross revenue	215	219
Voyage expenses	(67)	(93)
TC expenses	(41)	(39)
Operating expenses	(33)	(33)
General and administrative expenses <sup>2</sup>	(18)	(21)
<b>Operating result before depr. (EBITDA)</b>	<b>56</b>	<b>33</b>
Depreciation	(22)	(23)
Impairment	(7)	(11)
Capital gain/loss on fixed assets	12	-
<b>Operating result (EBIT)</b>	<b>39</b>	<b>(0)</b>

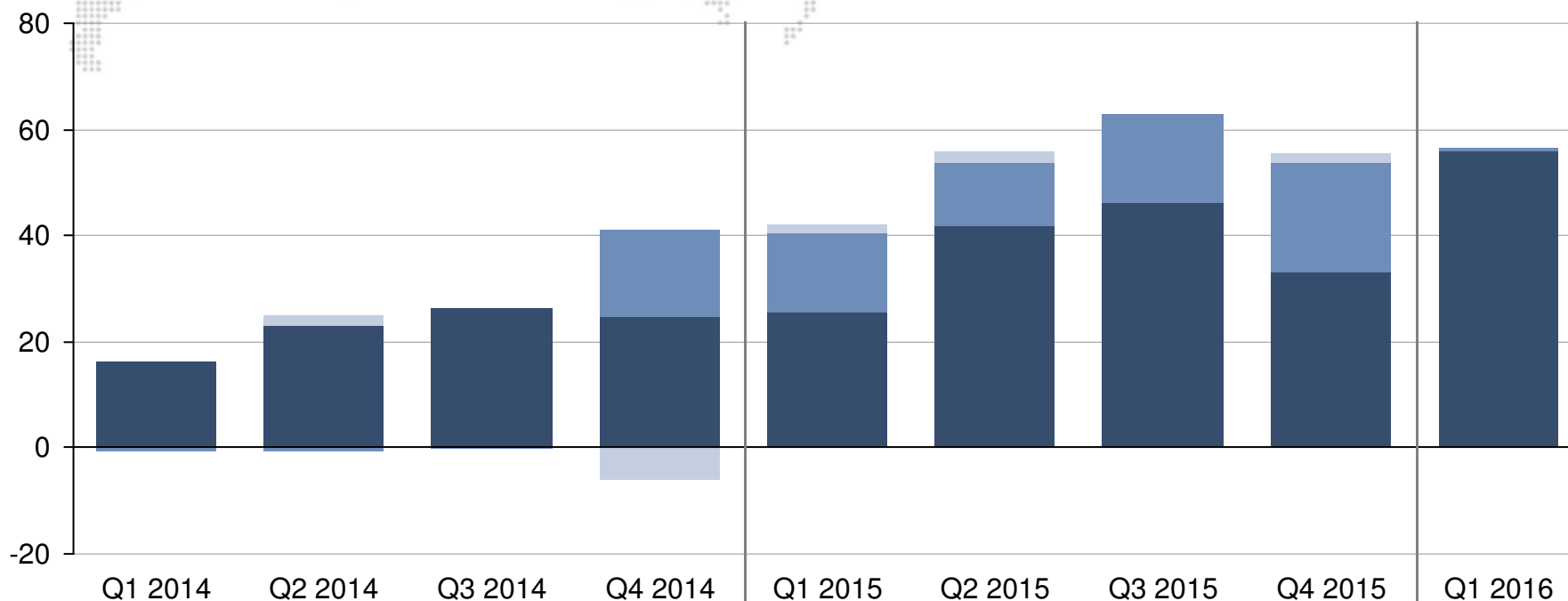
- EBITDA margin increased from 15% to 26%
- EBIT 1Q includes negative effect of bunkers hedging USD 0.9 mill (USD 20.5 mill) and net impairment /gain of USD 5 mill (negative USD 11 mill)

1. Proportional consolidation method  
 2. Including corporate functions

# Quarterly figures - Chemical tankers EBITDA adjusted for non-recurring items

Quarterly Operational EBITDA (adjusted for provisions and derivatives)  
 USD millions

Provisions  
 Bunker derivatives  
 EBITDA

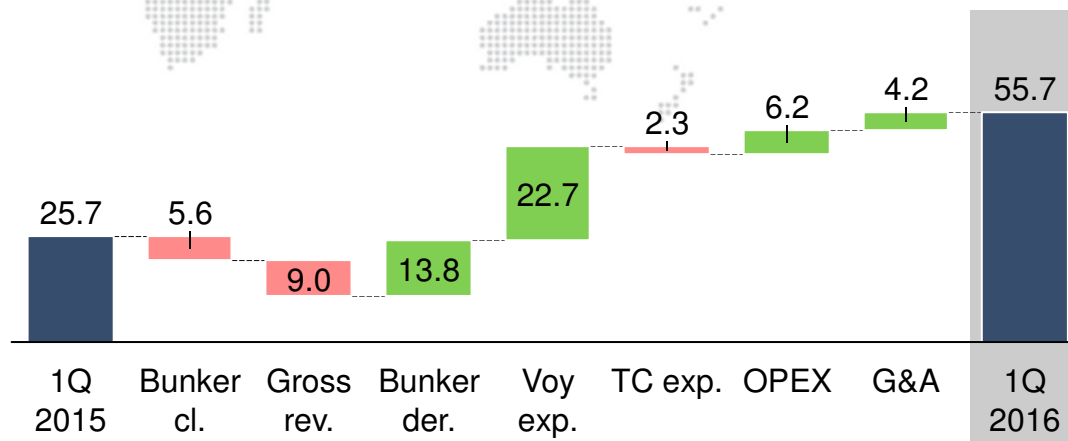


- Bunker derivatives negative USD 0.9 mill in 1Q16
- In total USD 64.3 mill booked as voyage cost related to bunker derivatives in 2015
- Total provisions/one-offs of USD 5.5 mill in 2015

# EBITDA variance – Chemical tankers

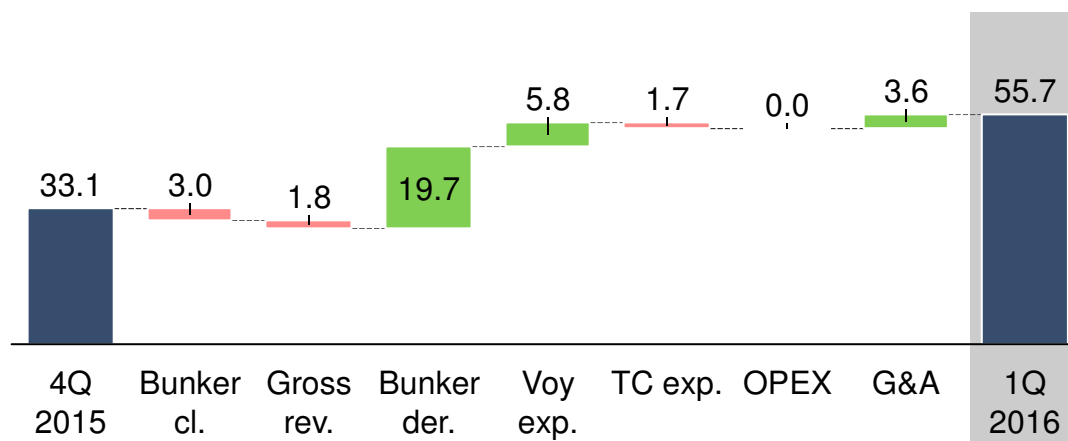
Quarterly EBITDA, USD millions

**1Q 2016  
versus  
1Q 2015**



- EBITDA increased by 116%
- OPEX down 16%

**1Q 2016  
versus  
4Q 2015**



- EBITDA increased by 68%
- OPEX unchanged

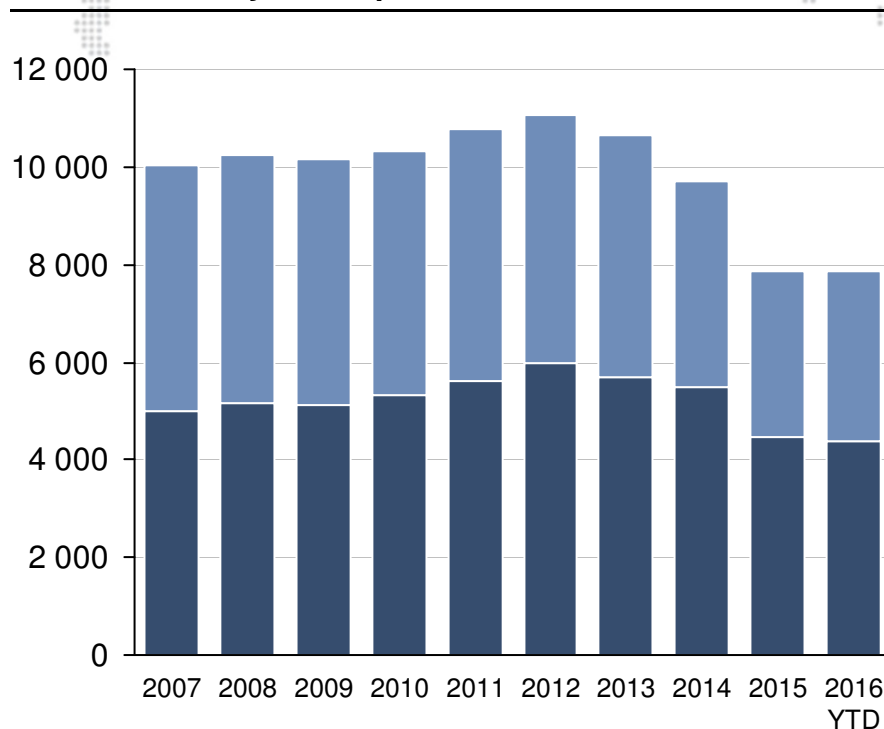


# Vessel operating expenses – Chemical tankers

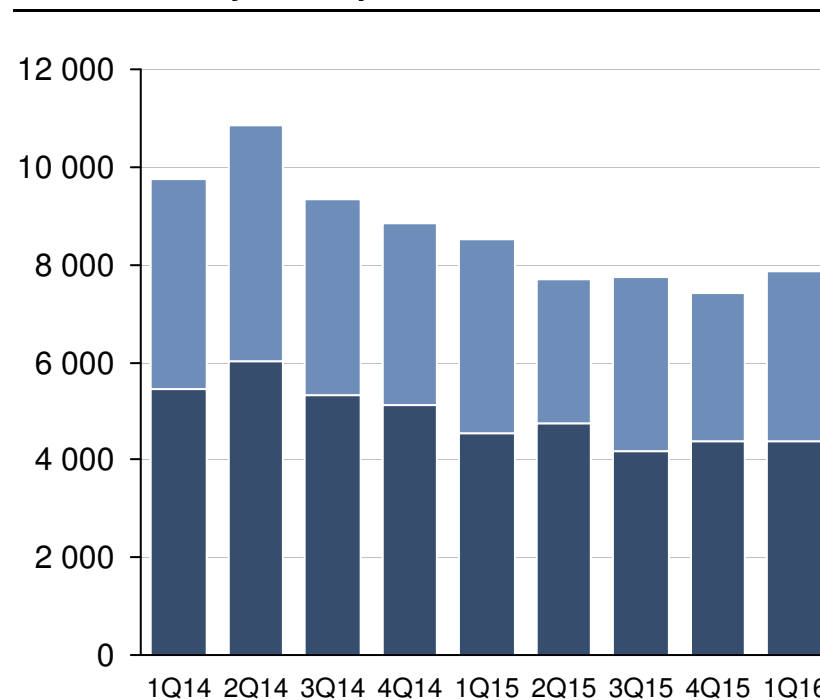
Vessel operating expenses (OPEX), USD/day

■ Non-crew OPEX  
■ Crew cost

Yearly development, 2007 - 2016 YTD



Quarterly development, 1Q 2014 - 1Q 2016

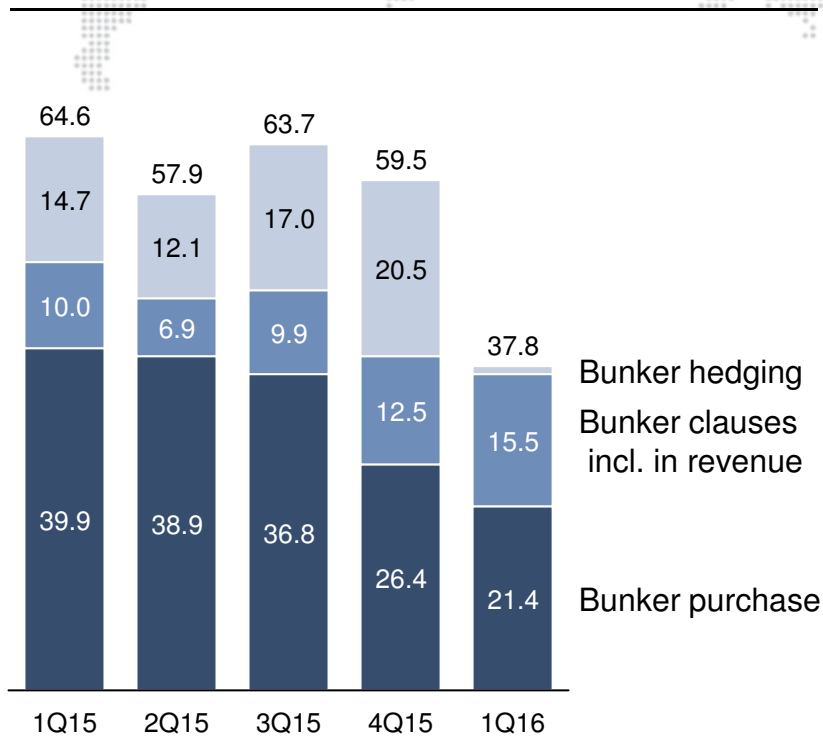


- Project Felix initiatives give significant and continued positive results
- OPEX at stable levels



# Bunker development

**Quarterly net bunker cost**  
USD millions 1Q 2015 - 1Q 2016



**Platts 3.5% FOB Rotterdam**  
January 2012 - April 2016

USD per metric tonne



- Net bunker cost in 1Q USD 369 per tonne before hedging vs. USD 371 in 4Q
- Bunker clauses in CoAs cover about 65% of the exposure
- 7% of remaining 2016 exposure is hedged at average USD 255 per tonne

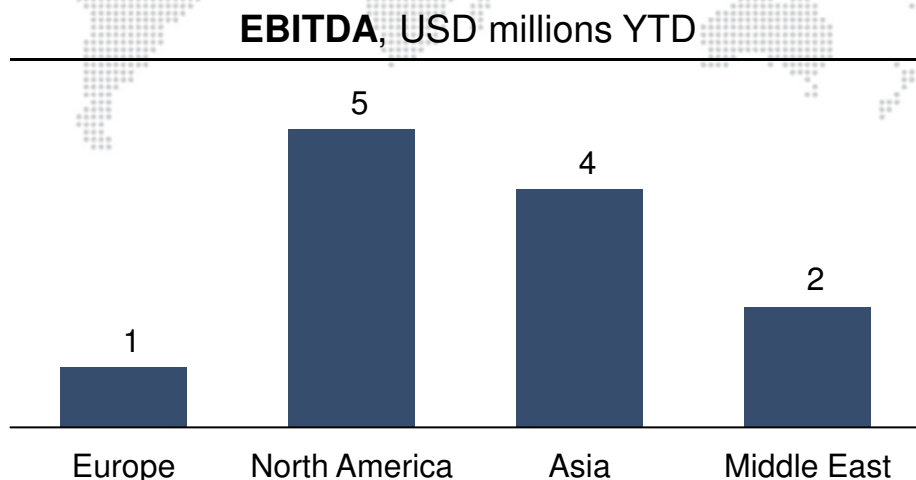
## Income statement<sup>1</sup> – 1Q16 tank terminals

USD millions	1Q 2016	4Q 2015
Gross revenue	31	29
Operating expenses	(13)	(14)
General and administrative expenses	(6)	(4)
Operating result before depr. (EBITDA)	12	11
Depreciation	(8)	(9)
Impairment	-	(3)
Operating result (EBIT)	4	(1)

- Slight increase in tank terminal results
- The occupancy rate remaining high at 98%

1. Proportional consolidation method

# Tank terminals EBITDA – By geographical segment



EBITDA Tank Terminals	1Q 2016	4Q 2015
Europe	1	1
North America	5	5
Asia	4	3
Middle East	2	2
<b>Total EBITDA</b>	<b>12</b>	<b>11</b>

### Comments

- Stable results in all areas
- Odfjell Terminals (Rotterdam) still improving

## Balance sheet<sup>1</sup> – 31.03.2016

Assets, USD millions	
Ships and newbuilding contracts	1 226
Other non-current assets/receivables	42
Investment in associates and JV's	374
<b>Total non-current assets</b>	<b>1 641</b>
Cash and cash equivalent	109
Other current assets	128
<b>Total current assets</b>	<b>238</b>
Assets held for sale	22
<b>Total assets</b>	<b>1 901</b>

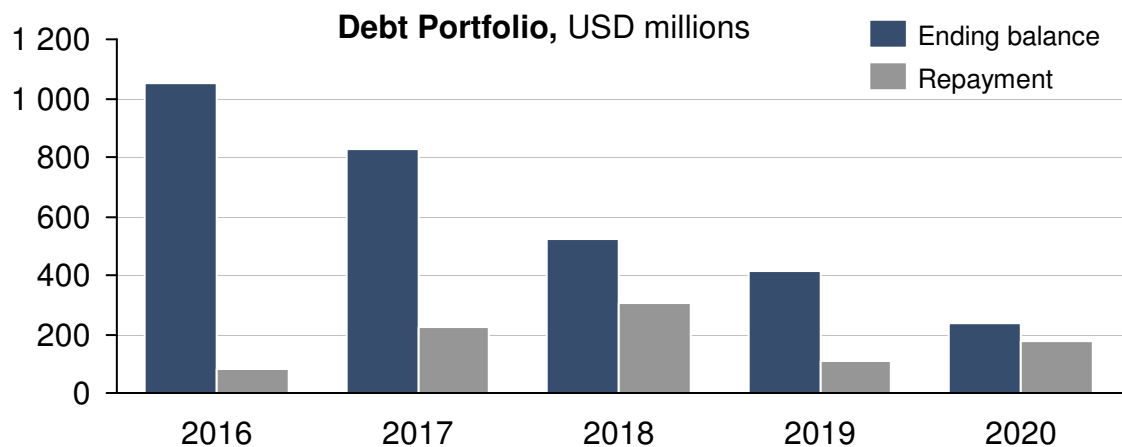
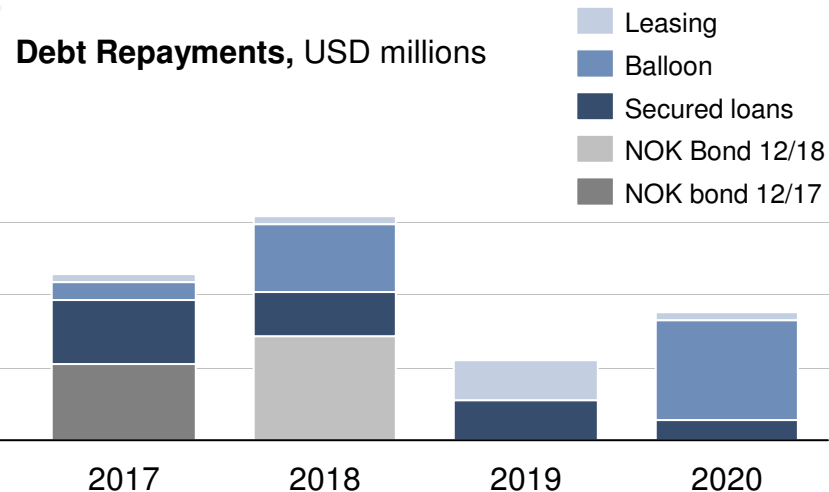
Equity and liabilities, USD millions	
Total equity	649
Non-current liabilities and derivatives	38
Non-current interest bearing debt	1 008
<b>Total non-current liabilities</b>	<b>1 047</b>
Current portion of interest bearing debt	121
Other current liabilities and derivatives	83
<b>Total current liabilities</b>	<b>205</b>
Liabilities held for sale	-
<b>Total equity and liabilities</b>	<b>1 901</b>

- Cash balance of USD 109 mill - excluding JV's cash
- Net investment in tank terminals JV's USD 311 mill
- Equity ratio 34.0% (33.2% end December)
- Treasury shares repurchased in 1Q with USD 25 mill
- Asset held for sale consist of planned vessel sales

1. Equity method

# Debt development – 31.03.2016

- The total return swap entered into December 2014 was redeemed at maturity in January 2016
- Repayment of short-term bridge loan facility of NOK 147 mill (USD 16.7 mill)
- Scheduled 2016 debt refinancing limited to an USD 10 mill facility



# Capital expenditure programme

USD millions – per 31.03.2016	Remaining 2016	2017	2018	2019	2020
<b>Chemical Tankers</b>					
Docking	11	14	14	14	14
Other investments (vessel retrofiting)	6	7			
<b>Odfjell Gas, 100%<sup>1</sup></b>					
Sinopacific, 4 x 17,000 cbm	TBD				
Sinopacific, 4 x 22,000 cbm	30	139			
<b>Tank Terminals, 100%</b>					
Planned capex	50	46	40	9	8

<sup>1</sup> Odfjell SE (50% owner) is committed to inject up to USD 45 mill in equity in 2016 - 2017. Due to delays at the yard the capital injections will most likely be significantly reduced and/or pushed to later than originally scheduled

## Terminal projects and expansions

- Our terminal in Tianjin, located in a new industrial development area, is moving forward for obtaining the required operating permits, as the permit process was severely affected by the explosion in the Tianjin old harbour last year.
- Expansions in Rotterdam are on track

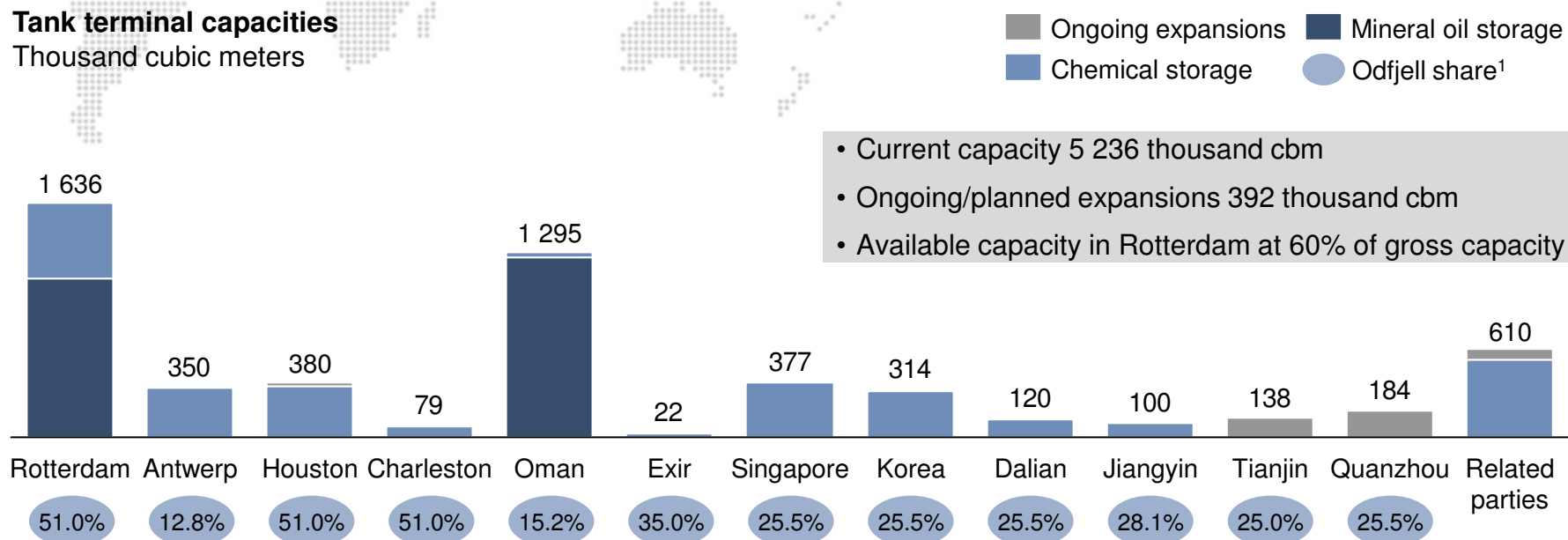




# Tank terminal capacity and commercial occupancy

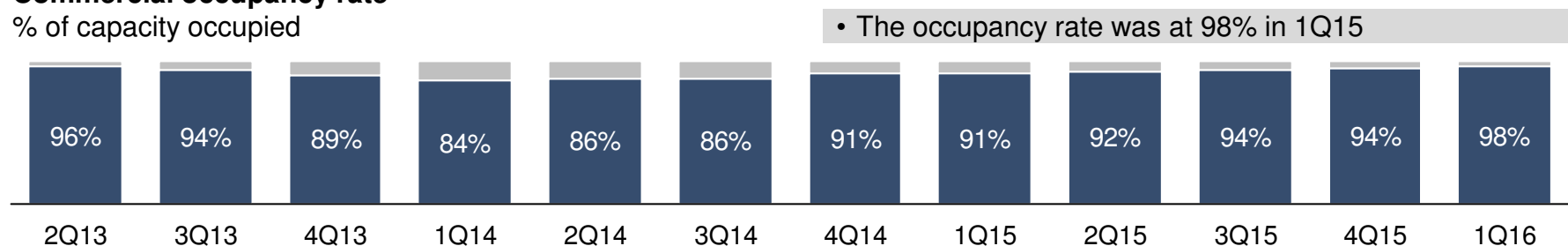
## Tank terminal capacities

Thousand cubic meters



## Commercial occupancy rate

% of capacity occupied

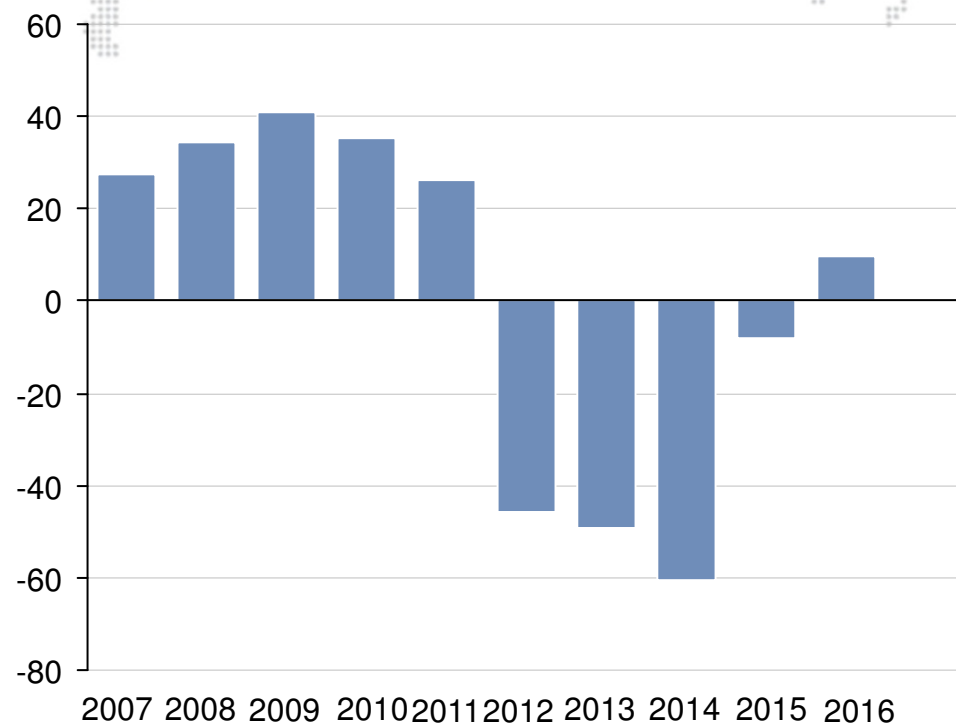


1. Odfjell's ownership share in the respective tank terminals is shown in percentage

## Odfjell Terminals Rotterdam – current status

### Annualised EBITDA for Odfjell Terminals (Rotterdam) (100%)

EUR millions



### Comments

- EBITDA USD 1.3 mill in 1Q16 (Odfjell share), compared to USD 0.3 mill last quarter
- Total commercial capacity end March 972,000 cbm, compared to 964,000 cbm end December, commercial occupancy at 98%
- The results at the terminal is expected to stabilize for the remainder of 2016

# Odfjell Gas Carriers

USD millions	1Q 2016	4Q 2015
Gross revenue	4	5
EBITDA	1	1
EBIT	(2)	1

## Comments

- Activity has been flat with active export markets to Asia
- Expect stable results from the gas segment
- Delays in construction of all eight gas carriers on order in China
- Most likely we will cancel the four 17,000 cbm gas carriers. The first in May and the remainder about every three months thereafter
- All instalments paid on the newbuildings are secured by refund guarantees
- The first 22,000 cbm gas carrier has planned delivery in April 2017 while the contractual delivery is in September 2016
- Impairment of USD 2.75 million related to the newbuilding programme

## Fleet development – Last 12 months

Fleet additions		DWT	Built	Tanks	Transaction
February 2016	Southern Owl	26 057	2016	Stainless	Long-term TC
May 2015	Horin Trader	19 856	2015	Stainless	Medium-term TC
April 2015	Marex Noa	12 478	2015	Stainless	Long-term TC

Fleet disposals, owned		DWT	Built	Tanks	Transaction
November 2015	Bow Victor	33 000	1986	Stainless	Recycling
August 2015	Bow Bracaria	5 846	1997	Stainless	Sale
July 2015	Bow Brasilia	5 800	1997	Stainless	Sale
July 2015	Bow Balearia	5 846	1998	Stainless	Sale

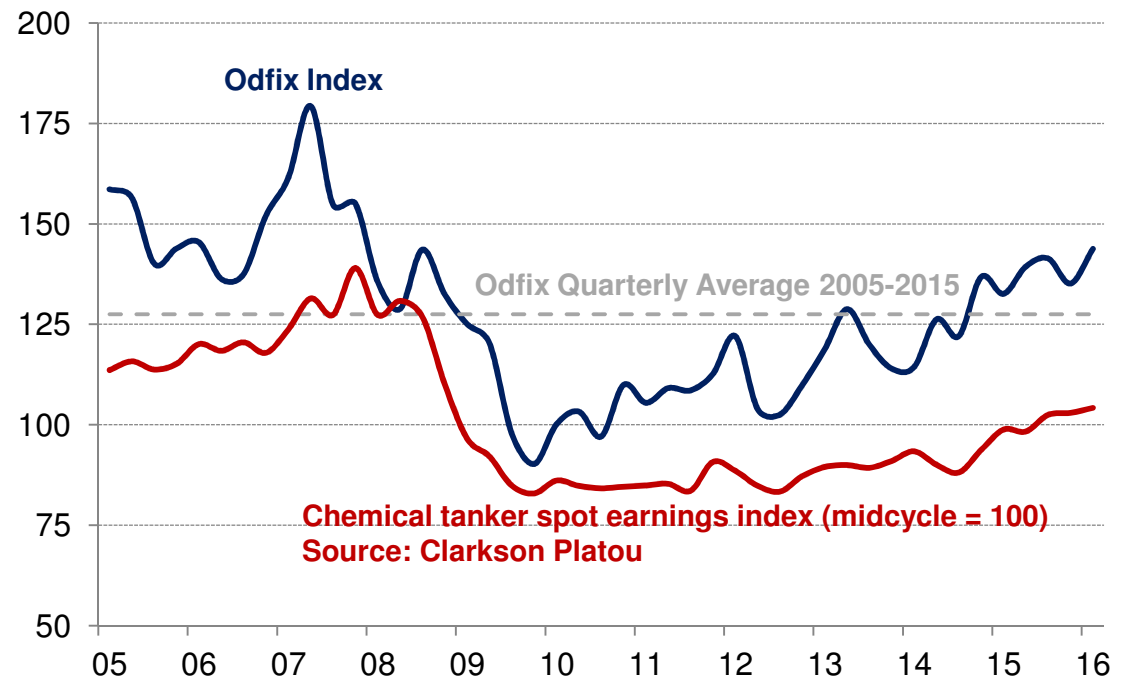
Short-term: Up to one year  
 Medium-term: 1-3 years

# Market update – Chemical tankers

## Comments

- Increase in utilization, while freight rates were slightly down
- Reduction in voyage cost primarily due to reduced bunker cost
- The strongest improvements were observed in our long haul trades
- US – Far East trade continues to ship stable volumes while we observe a drop in volumes out of the Far East
- Softer markets in 2Q16 will most likely give a slight reduction in time-charter earnings

Odfix, Quarterly average Index, 1990=100

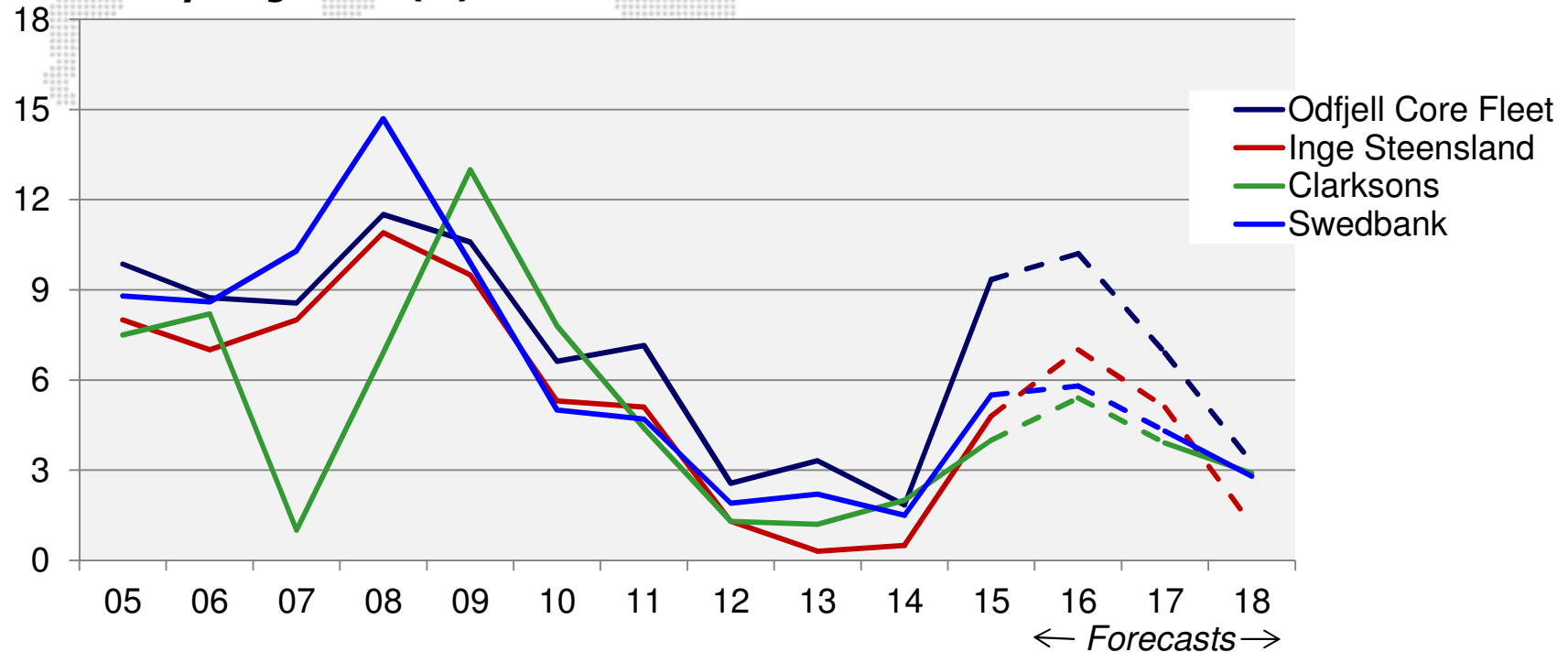


1. Odfix Index (1Q 1990 = 100)  
 2. Chemical tanker spot earnings index (midcycle = 100)  
 Source: Clarkson Platou

# Chemical tanker market

Chemical tanker year-on-year net fleet growth, 2005-2018F

Year-on-year growth<sup>1</sup> (%)



**Annual compound growth rate 2015-18:**

Odfjell estimate core fleet: 6.8%

Average other sources, full fleet: 4.3%

1. Differences between sources due to different fleet definitions. Stricter definition and thus, more limited fleet basis  
 2. IMO 2 tonnage ≥ 13,000 dwt, predominantly trading in chemicals. Assuming current orderbook and outphasing at 30 years (Europe built) or 25 years (Asia built).

## Prospects

- Our forecast for 2Q is a slight reduction in net earnings for the chemical tankers, mainly driven by a softening spot market. Reduced export volumes in the Far East and slower activity due to the onset of summer in the Northern Hemisphere are the main reasons
- The results at Odfjell Terminals (Rotterdam) is expected to stabilize for the remainder of 2016. We plan to further increase the storage and distillation capacity, which will add to the profitability. The performance of the other terminals is otherwise stable

## Executive Management - Priorities during 2016

- Key focus continue to be on “building strength”
  - Focus on initiatives that improve cash and balance sheet
  - A balance sheet that gives room for growth within our core business
  - Strong focus on operational improvements, and quality of service
- Top line improvement initiatives ongoing
- Fleet renewal programme for the advanced chemical tankers
- Reduce our commitments in Odfjell Gas



# Odfjell Chemical Tankers, Felix and Moneyball



Odfjell Tankers – Harald Fotland

Rotterdam, May 10<sup>th</sup>, 2016

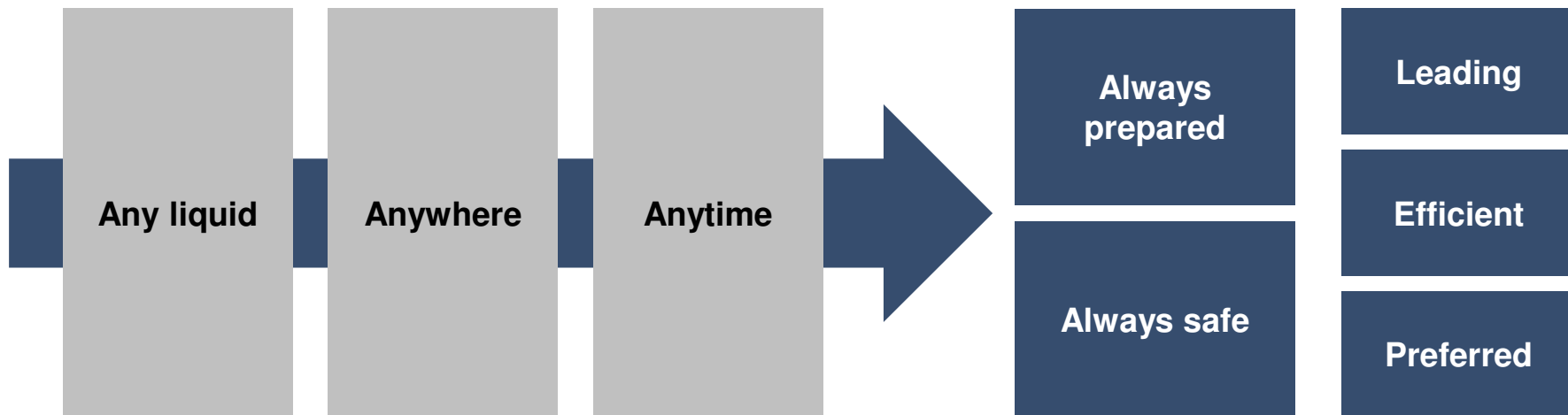


# Agenda

- **Odfjell Tankers**
- Project Felix
- Project Moneyball



# Logistics solutions— the purpose of being for Odfjell





# Our fleet – a balanced mix of owned and TC

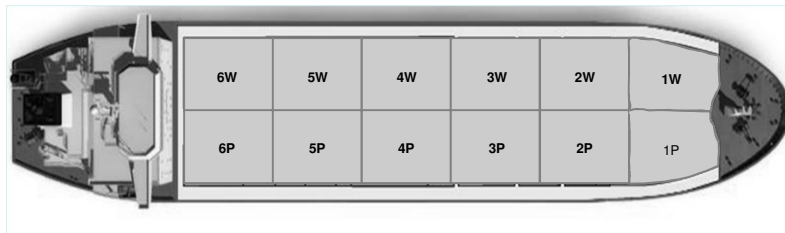
Tonnage category	Control type		Vessel details		
	Owned	TC	Average size	Average tanks	
<b>Super segregators</b> (Kvaerner + Poland)	18	4	22	40 kDWT	47
<b>Coated MR Tonnage</b> (MIPO + SLS)	4	2	6	48 kDWT	24
<b>Large chemical tankers</b> (SS 27-36 kDWT)	2	7	9	32 kDWT	19
<b>Medium chemical tankers</b> (SS 19-26 kDWT)	1	15	16	21 kDWT	22
<b>Regional/Cabotage tonnage</b>	14	5	19	18 kDWT	20





# Any liquid - Diversified to meet any client need

## Basic chemical tanker

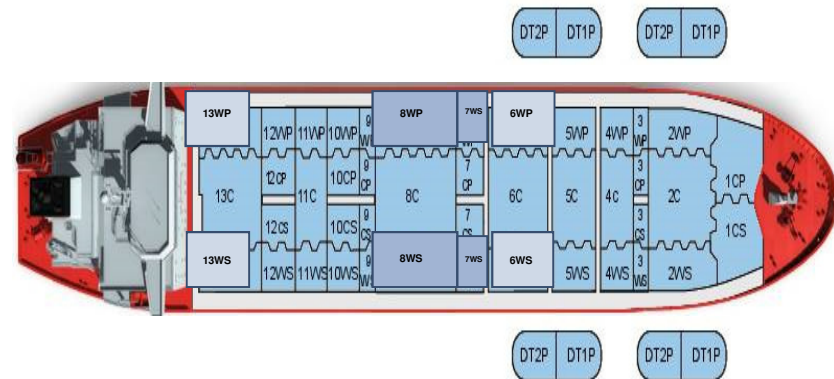


**Standardized and cost efficient**

**Scale effect on basic equipment across similar ships**

**Experienced crew with cost focus**

## Sophisticated super-segregator



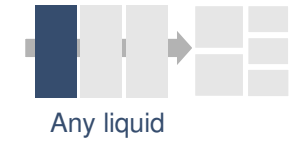
**Tailor-made and responsive**

**Complex and flexible equipment**

**Experienced crew with cost focus, comprehensive technical competencies and training**

**Pool and cargo optimization**

**Continuous monitoring of performance**



# Any liquid

We ship more than 600 different kinds of liquids

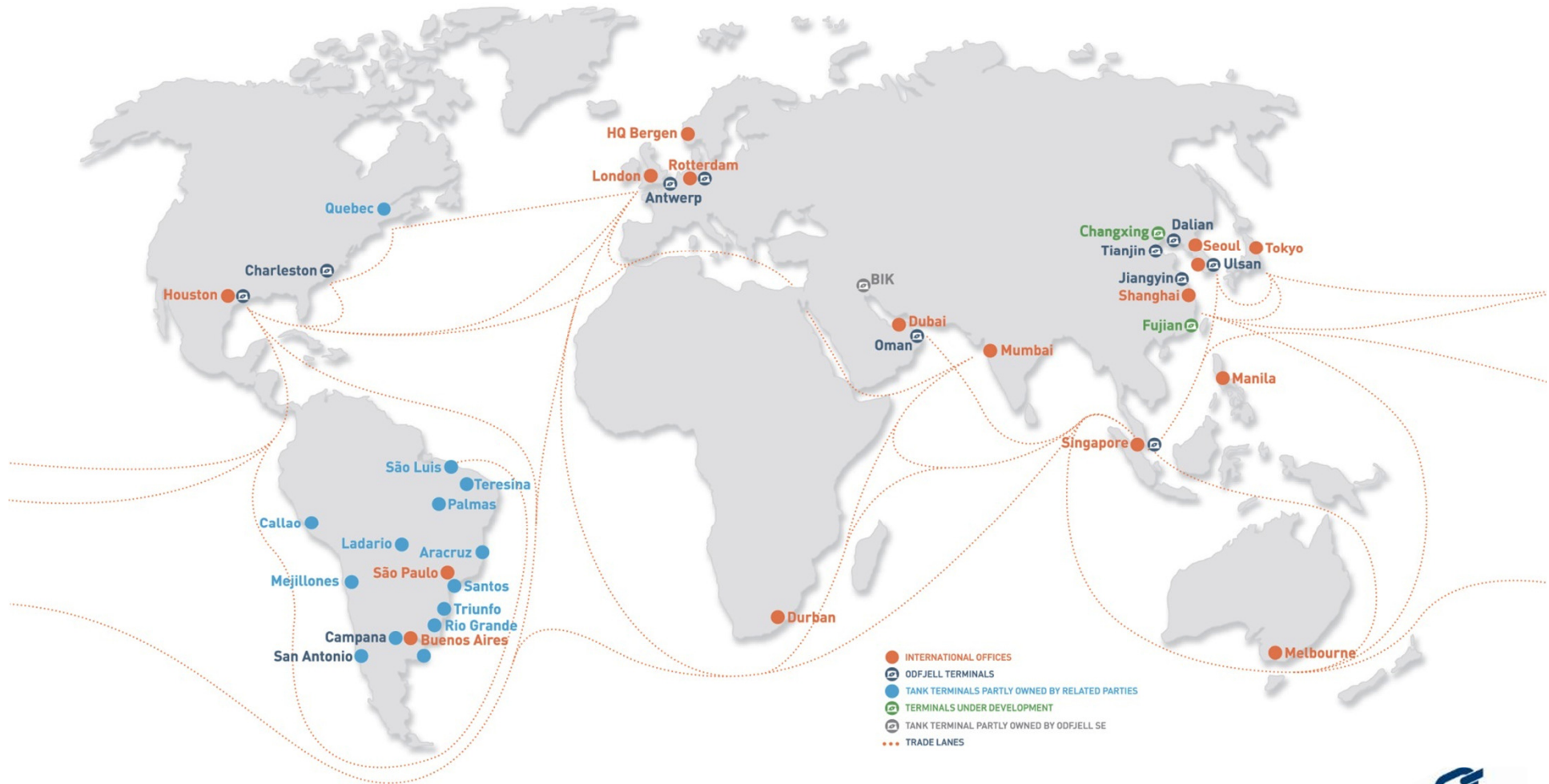
Material Product	Oil & Gas	Minerals	Agriculture	
Intermediate products and fuel	Clean petroleum products (e.g. gasoline, jet fuel, naphtha)	Organic chemicals (e.g. methanol)	Inorganic chemicals (e.g. acids, caustic soda)	Vegetable oil, animal fats and petrochemicals
		Specialty chemicals		
	Plastic converters, fibers	Coatings, adhesive	Detergents, edible oils, bio-fuels, spirits, wine	
Finished products	Textiles, packaging, electrical, automotive and building materials		Personal care, home care, green energy	





# Anywhere

We have a global footprint





# Anytime

Frequent sailings from major ports is crucial to our demanding customers

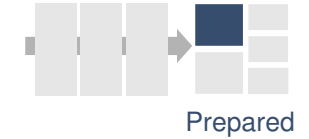
## Example trade areas

<b>Asia Pacific</b>	
<b>USG-SAM</b>	
<b>NWE-SAM</b>	
<b>Middle East Export/Import</b>	

## Example frequencies

- 12 full voyages round-the-world annually
  - All ships are super-segregators
- 
- >25 round-trips annually
  - Serving trades with mix of super-segregators and smaller tonnage
- 
- ~25 full round-trips annually
  - Serving trade with mix of super-segregators and smaller tonnage
- 
- ~30 round-trips annually to several destinations with products out of Middle East





# Always prepared

Our people are our stars – performing every day

## Odfjell is competence management and people development

## Did you know...

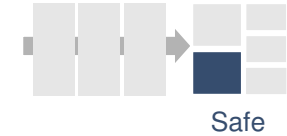
 	<b>Team work</b>
 	<b>Specialist knowledge</b>
 	<b>Monitoring and control</b>
 	<b>Extensive training</b>

*... the average Odfjell operator has 12 years of experience in the position*

*... Odfjell has in addition to statutory training requirements for Chemical Tankers, in average more than 20 internal training requirements for our various positions*

*... Our Officer pool consists of 587 highly experienced officers, internally trained by Odfjell*





# Always safe

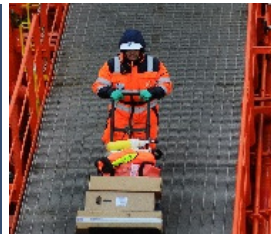
QHSE at the core of Odfjell

## Q Quality



- The Odfjell culture is **systematic work** and **continuous development**
- “What is measured gets done”
- Feedback oriented

## H Health



- “We shall evaluate risk, review performance and share experience”
- **Rigorous incident reporting scheme** – learn and improve

## S Safety



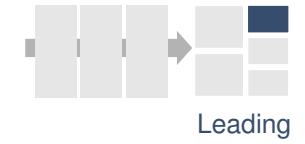
- We base our work on a **zero accidents philosophy** – a KPI from SVPs to ratings on-board
- **Comprehensive QMS documentation** to comply with strict vetting regimes

## E Environment



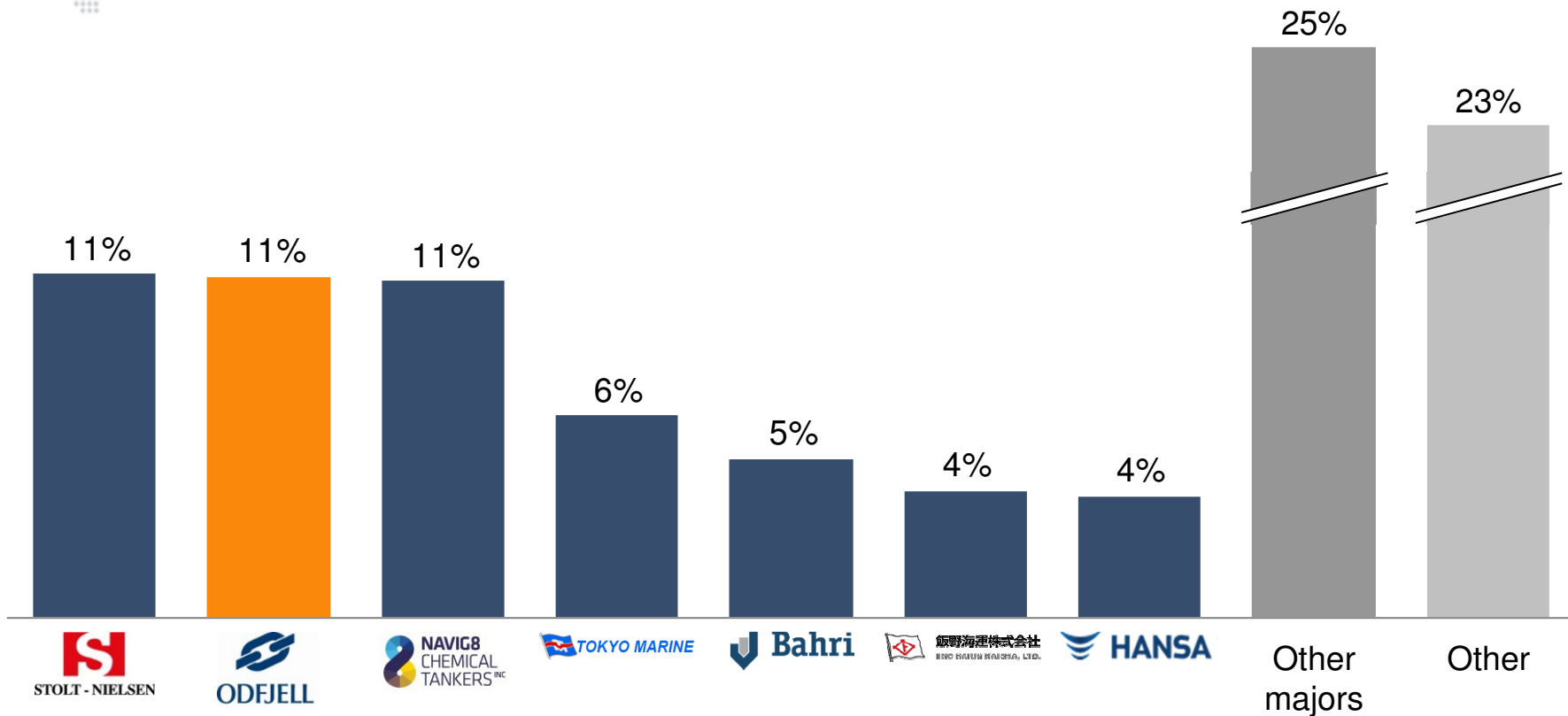
- Adopted UN sponsored **CSR scheme**, we put focus on business ethics, human rights, non-discrimination and anti-corruption
- Comprehensive **fuel efficiency** program reducing environmental footprint





# Odfjell: A leading chemical tanker company

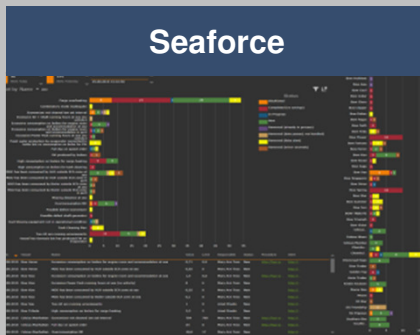
Odfjell is a leading deep-sea chemical tanker company, DWT market share of core deep-sea fleet (%)





# Efficient - continuously improving performance

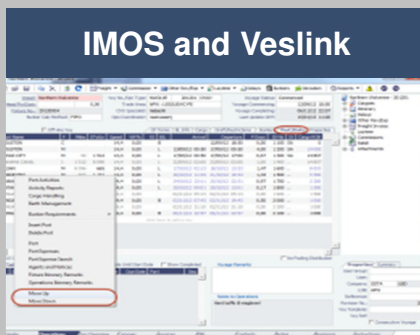
Using analytical tools and data



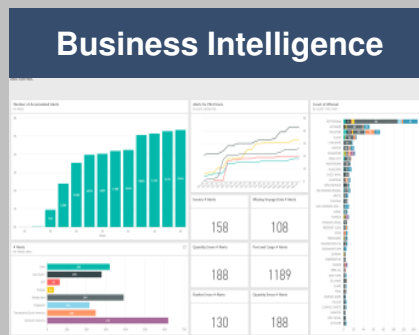
**Seaforce**  
Bunkers performance system



**ORCA**  
Best in class «Chemical tanker» stowage system



**IMOS and Veslink**  
Merging various shipping applications into one truth



**Business Intelligence**  
Dashboards help operators and brokers react quickly

## Increasingly more efficient

Indexed daily bunker consumption, 2010=100



Indexed Opex per day, 2010=100





# Integrated ship management

Balancing a continuous focus on safety, cost and technical excellence

## An integrated chemical tanker operator: Ship owner and Ship manager

## Expertise and depth

### Owner perspective

- Long-term perspective
- Vessel portfolio development
- Industrial new-build programs
- Transparency and consistency throughout the value chain



### Ship manager performance

- Onshore ship management organization ~120 professionals
- Hub presence: Bergen, Singapore and Sao Paolo
- Management of Odfjell's dedicated crew pool

Own crew pool of ~2000 seafarers

Officers and ratings leading way in our Leader and followership program

State of the art training facilities for the best people development

The Odfjell Standard: Proper technical condition for superior performance

Zero incident culture: Not a vision, but a realistic ambition – every day



# Every year 600 customers choose Odfjell

## Selected customers

Muntajat

BASF  
The Chemical Company

OUPONT

Braskem

Bayer

SABIC

ExxonMobil

MITSUBISHI CHEMICAL

Statoil

bp

## Our stage



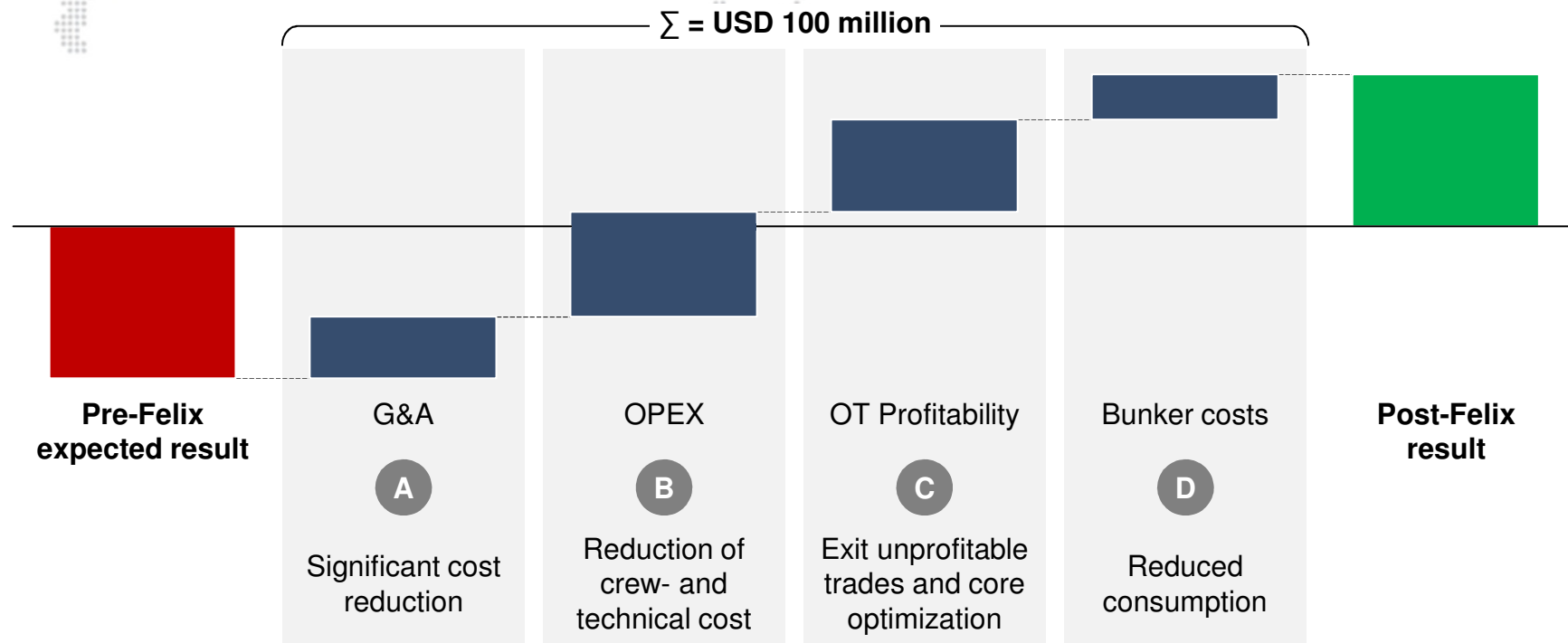


# Agenda

- Odfjell Tankers
- **Project Felix**
- Project Moneyball

# USD 100 million improvement ambition in Project Felix successfully achieved by end of 2015

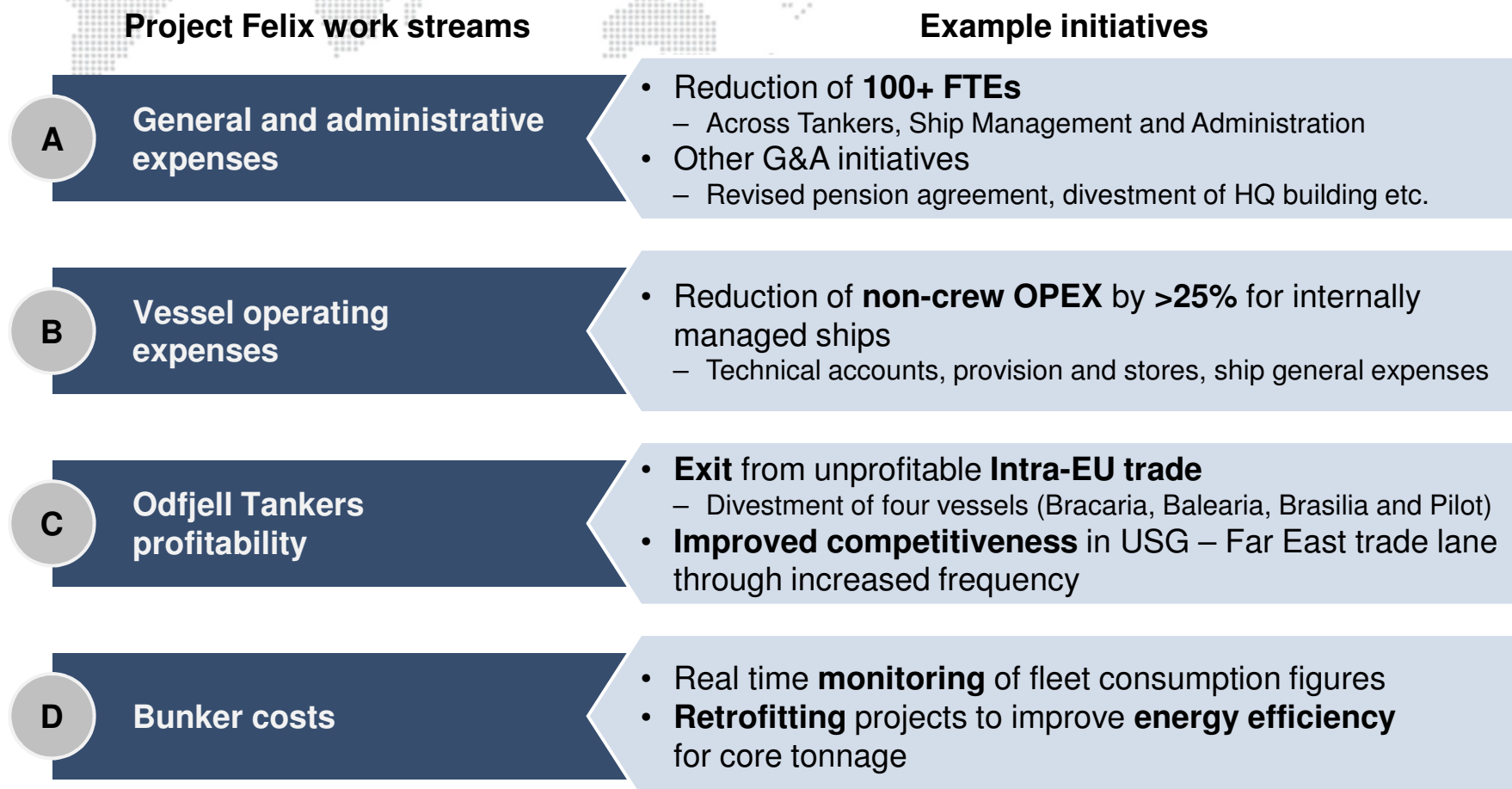
Improvement ambition for Project Felix  
Indicative only



Full-scale implementation kicked off January 2015, and effect realization completed by December 2015



# To ensure competitiveness we reviewed all aspects of our business



# Retrofitting of Kværner and Poland vessels yields fuel efficiency gains of 21% and 19% respectively

## Retrofitting status

- We have launched a retrofitting program for our super-segregators
  - New propeller blades
  - Install rudder bulb and fairing cone
  - Adjustments to gears
  - EPL<sup>1</sup> in combination with engine and CPP<sup>2</sup> settings
- Expect annual fuel consumption savings of ~20k tonnes when completed

Progress, # of ships converted:

	Compl.	2016	2017	Total
Kvaerner	6	4	1	11
Poland	2	2	4	8
<b>Total</b>	<b>8</b>	<b>5</b>	<b>5</b>	<b>18</b>

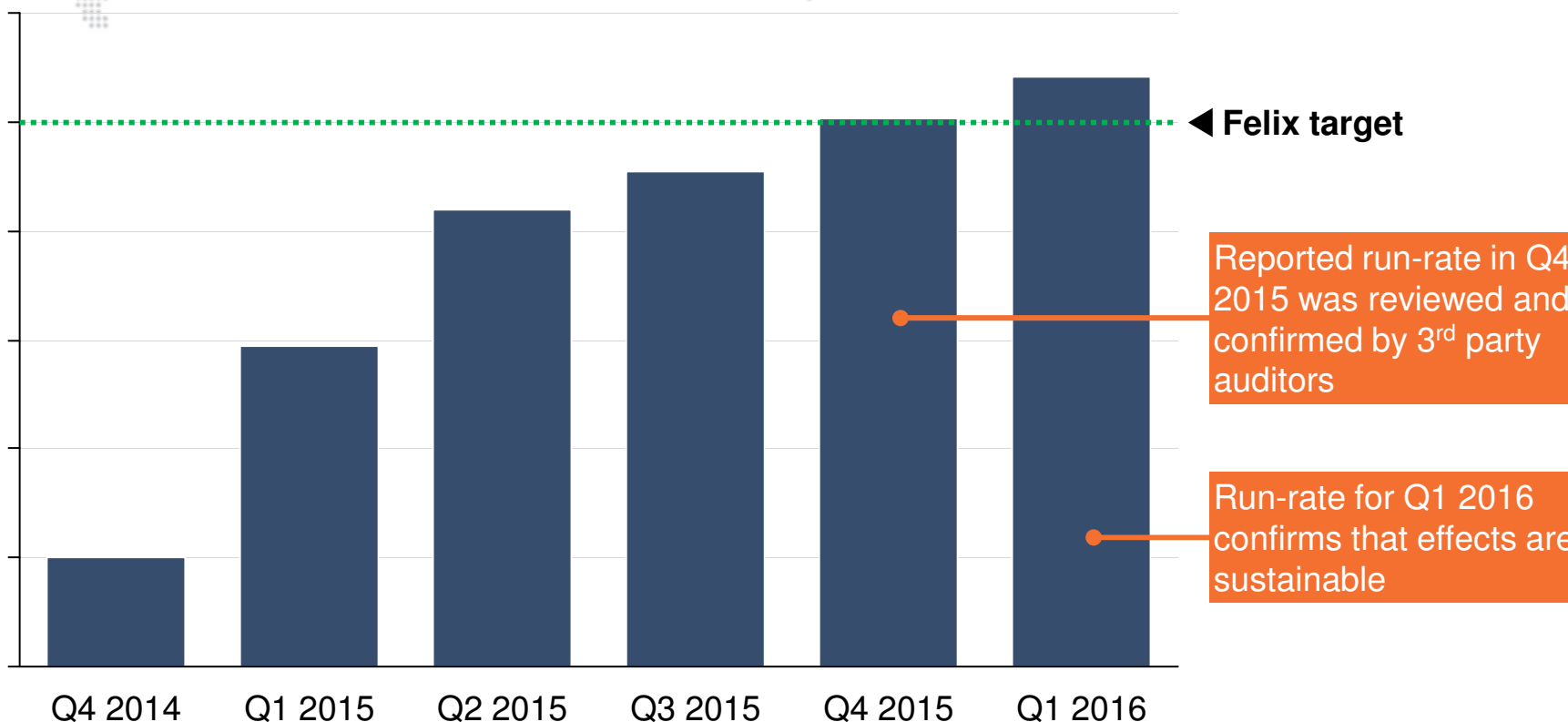
## Retrofitted Bow Clipper



1. Engine Power Limitation    2. Controllable Pitch Propeller

# Realized improvements in Project Felix are sustainable – full financial effect expected for FY 2016

Run-rate effect realization in Project Felix  
USD million per year





# Agenda

- Odfjell Tankers
- Project Felix
- **Project Moneyball**

# Odfjell Chemical Tankers is now changing focus from cost reduction to operational performance improvement


- After five years of negative results, **Project Felix** was necessary for Odfjell to **return to profitability**
- After **reaching the USD 100 million cost reduction ambition** in December 2015 Odfjell Chemical Tankers is now changing focus
- To **leverage the current positive momentum** in our organization, “**Project Moneyball**” was launched in January 2015, targeting **operational excellence**
- In Project Moneyball we combine our **internal expertise** with **external data sources** in order for Odfjell to conquer some of the largest challenges facing our industry today
- **Port time** for chemical tanker operators has increased significantly over the last decade due to port infrastructure not being able to keep up with a growing global fleet
- We want to find solutions that are **unique to Odfjell** to reduce port time for our vessels and in general improve our operational efficiency

*“It's unbelievable how much you don't know about the game you've been playing all your life.”*

**-Mickey Mantle**

# The “big data” trend is hitting the shipping industry

**- Vi har sovet i timen**  
 Skipsfartsnæringen henger etter i den digitale revolusjonen.



**“We have been sleeping at the wheel”**

OFFENSIV: Lasse Kristoffersen, administrerende direktør i Torvald Klaveness-gruppen, er oppvakt av hvordan rederiet kan bruke digital teknologi til å gjøre kundene mer bedre informert.

Jan I. Botby  
 (E24) Publisert: 06:48 - 06.04.2016, Oppdatert: 09:57 - 06.04.2016

- Vi har sovet i timen. Det er først det siste året vi har begynt å ta dette på alvor.

Det sier Lasse Kristoffersen, administrerende direktør i Torvald Klaveness-gruppen når E24 møter ham i forbindelse med årskonferansen til Norges Rederiforbund.

Han svarer på spørsmål om hvordan skipsfartsnæringen har tilpasset seg den fjerde industrielle revolusjonen – den digitale revolusjonen.

Kristoffersen forteller at rederiet, som alle andre, begynte å kle seg i hodet for noen år siden ved å spørre hva digitalisering betyr for deres business.

- Det første vi tenkte var egentlig «det var synd». Digitalisering er utrolig spennende, men det har ingenting med shipping å gjøre.

- Men så skjønte vi at det har veldig mye med shipping

**SHIPPINGWATCH** 2 May 2016

FRONTPAGE CARRIERS SUPPLIERS SERVICES OFF

CONTAINER TANKER BULK




Photo: Maersk

**New Maersk boss: Big data is the next revolution**

CARRIERS: Every month, the fleets at Maersk collect massive amount of data. Big data will be the next big revolution in shipping, says Paolo Tonon, new head of Maersk Maritime Technology to ShippingWatch.

BY KATRINE GRØNVALD RAUN  
 Published 10.04.15 at 10:43

**Investor** Banking + Capital Markets • Asset Management • Investors • Research + Ranking

Tapping into the Maritime-Tracking Space Race

Companies like exactEarth, Orbcomm and Spire Global have deployed satellite networks to collect data on shipping traffic for government and commercial users.

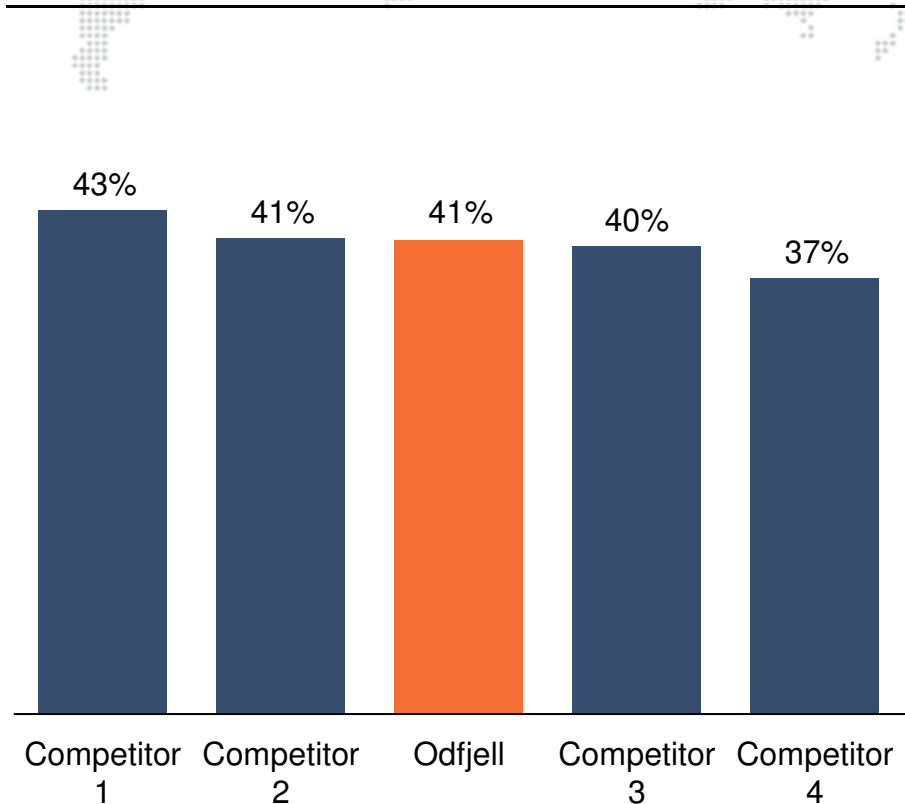
*By Fred R. Bleakley*



Large potential for applying big data techniques within chemical shipping

# Time in port is an industry-wide problem

Port time<sup>1</sup> (%) for major chemical tanker operators



Port time is a topic around the world

**Chemical Ships Often Delayed For Weeks in Crowded Texas Ports**  
 in International Shipping News · 21/09/2015

**Chemical tanker build-up causes congestion at western India ports**  
 23 December 2010 11:59

**Big Ships Play Texas Chicken in Congested Houston Channel**  
 The U.S. energy boom has turned a tiny bayou into one of the world's most crowded waterways  
 February 27, 2014 - 10:45 PM CET

1. Port time measured as percentage of time vessel was in stand-still (based on AIS data)

# Several external and internal factors influence port time – large differences between main global ports

## Drivers of time in port

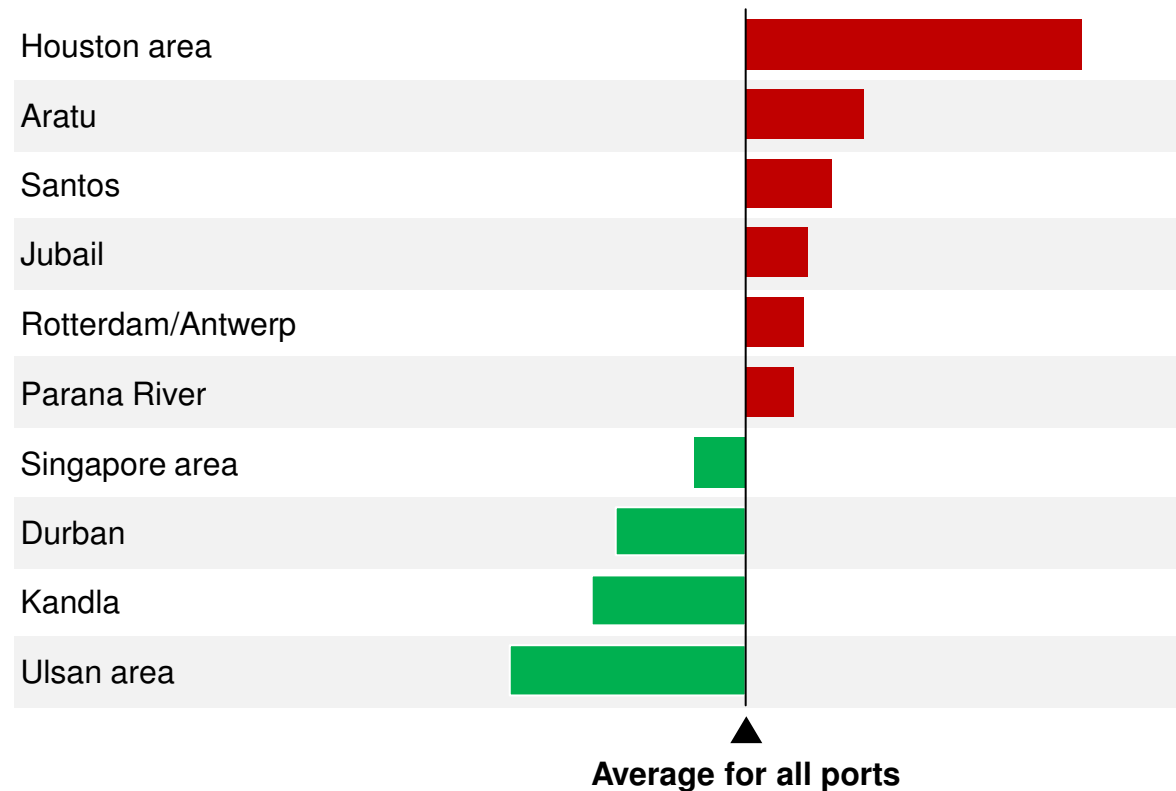
### External factors

- Growing parcel tanker fleet
- Limited port capacity additions
- Complex port infrastructure
- Port regulations

### Internal factors

- Planning
- Multi-berth operations
- Execution of port rotations

## Expected relative duration of complex cargo program in 10 main ports





# Project Moneyball working with several initiatives to reduce port time

## Project Moneyball

- Overall ambition: reduce port time to increase Odfjell's fleet utilization
- Main areas of improvement:
  - Commercial and cargo program
  - Operational efficiency
  - Leverage possibilities from increased data availability
- Involving several external stakeholders such as customers, terminals, port authorities and brokers

## Type of initiatives



Use **KPIs and statistics** as a means to improve vessels operational performance



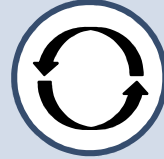
Consolidate cargo programs to **reduce number of berth calls**



Improved execution through better **planning processes and new tools**



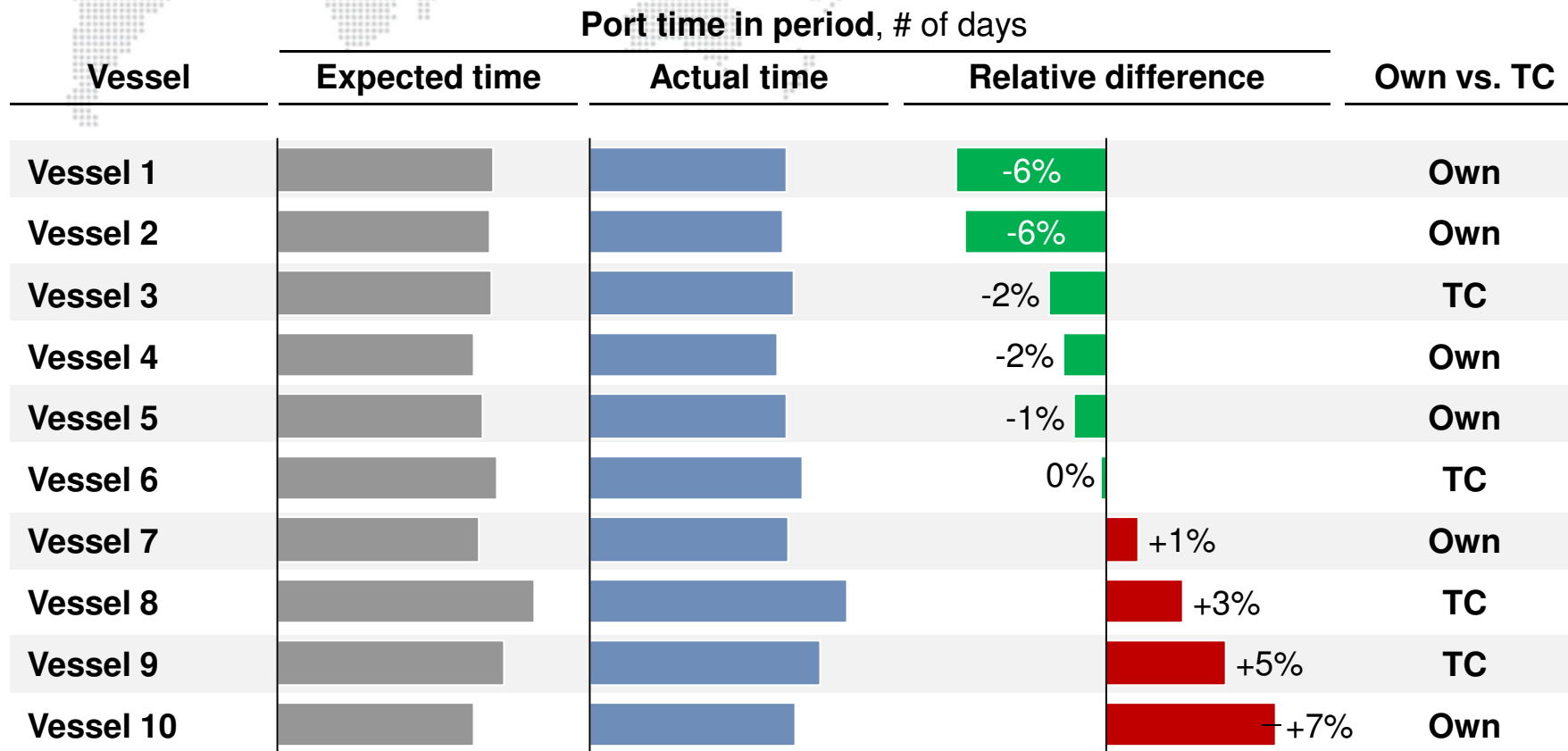
**Strategic partnerships**



**Automate certain administrative tasks** to free up capacity

# Internal benchmarking example: data gathering enables us to benchmark performance between our vessels

Based on port calls by one vessel class from period **January 2014 to December 2015**



**Insight can be used for both commercial purposes and planning of operations in port**

# Improved port efficiency will benefit both Odfjell, our customers and terminals



# Odfjell Tanker – Market Update



Market update – Arild Viste

Rotterdam, May 10<sup>th</sup>, 2015

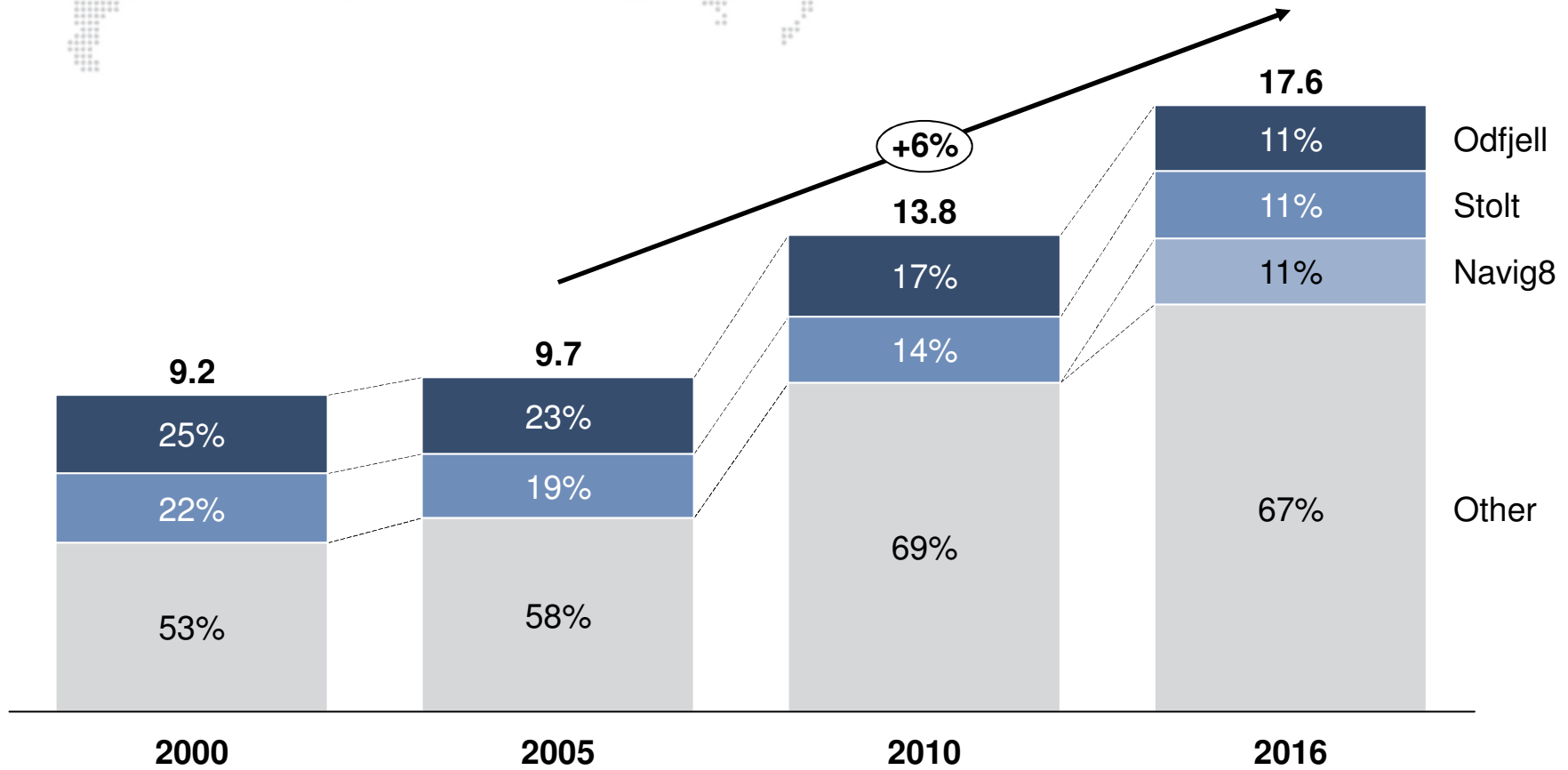


# Agenda

- **Competitive landscape**
- Market dynamics
- Our view

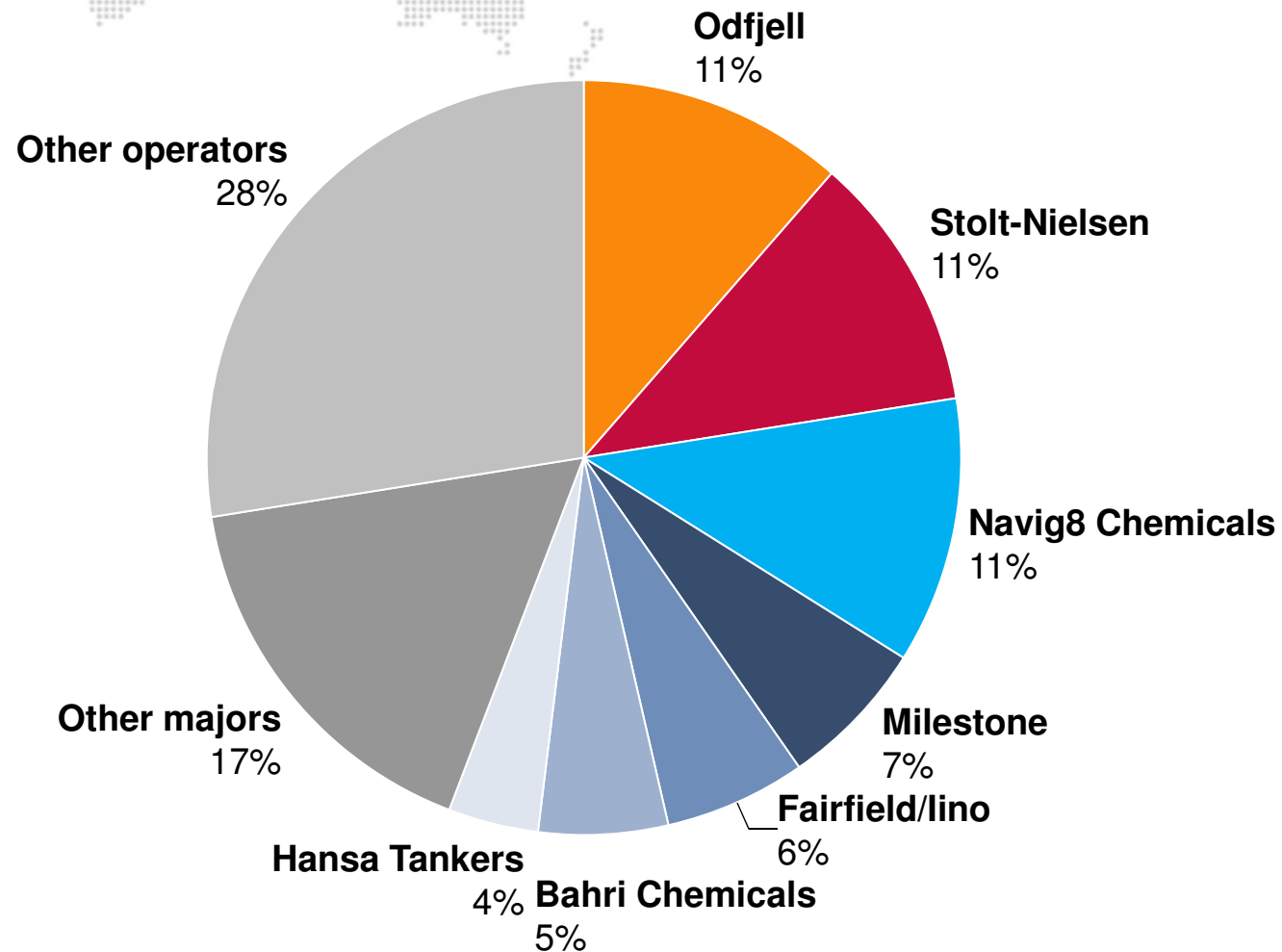
# Core deep-sea fleet has grown by ~6% p.a. since 2005 and Odfjell has been losing market share

Core deep-sea fleet by operator, million DWT



# New entrants and "short term investors" have been adding to a growing deconsolidation

Core deep-sea fleet market share by operator, March 2016 by operated DWT



Source: Odfjell FleetBase



## Welcome to the Hotel California (*Shipping*)

---

A tale of weary travelers (*Private Equity*) checking in for a night at a luxurious hotel in the heart of Los Angeles. Although the Hotel California (*Shipping*) draws travelers in with its inviting and tempting appeals, they soon figure out that it is a nightmarish place that can never be left behind. It is a perfect metaphor for the charms of California (*Shipping*) and its effects on the travelers (*Private Equity*) that find themselves suddenly caught within its glittering trap of fame and fortune without escape...





## Implications for Odfjell and the industry

- Increased competition from **new entrants**
- Emergence of “standard” designs like the J19’s are creating a **more liquid TC market**, which is an **opportunity for big operators** like Odfjell
- Short term investors have often sourced tonnage at shipyards unfamiliar with stainless steel, so **quality and deliveries may not be what they seem**
- Short term investors have generally **underestimated the value of an operational platform**
- **Consolidation is bound to happen**, as short term investors look to exit or find homes for their vessels

**We believe Odfjell has a unique platform that can handle more capacity, and we need to grow to maintain and regain market share**



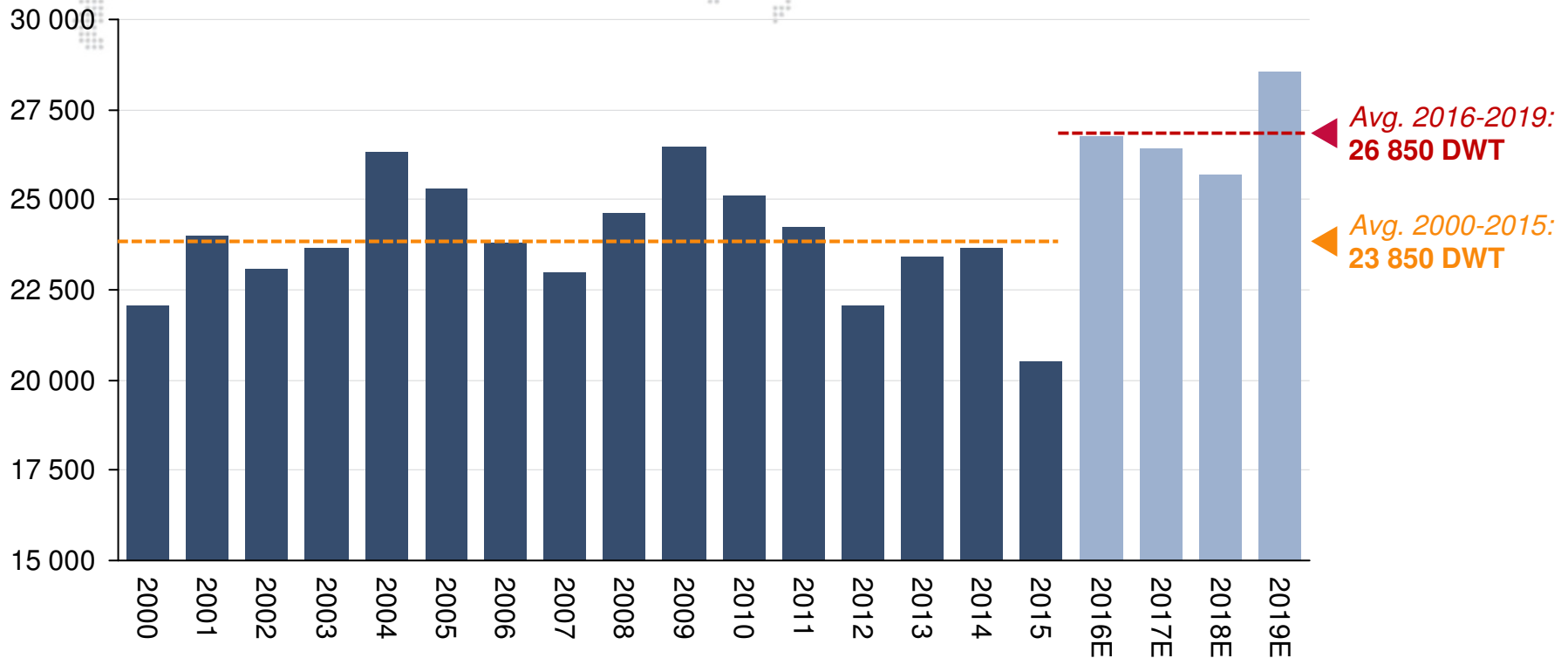
# Agenda

- Competitive landscape
- **Market dynamics**
- Our view

# Average size of core deep-sea stainless steel vessels delivered is increasing

Average size of core deep-sea stainless steel vessel additions<sup>1</sup>, 2000-2019E

Average DWT



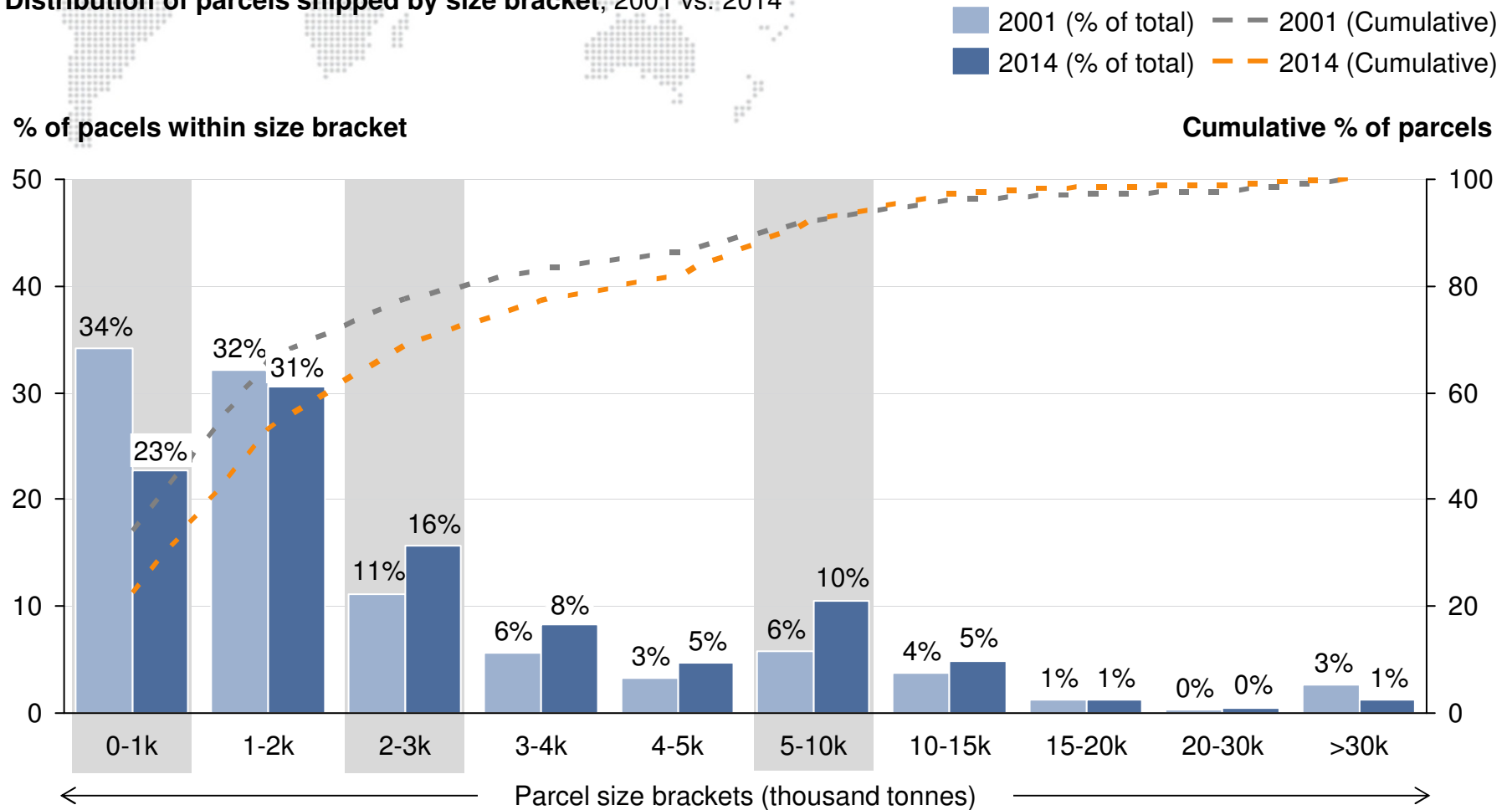
Delivery trend indicates 25 000 DWT vessels are replacing 19 000 DWT vessels

1. Includes only vessels 15 000 DWT and larger  
Source: Odfjell FleetBase



# The market has become increasingly commoditized – parcel sizes are increasing

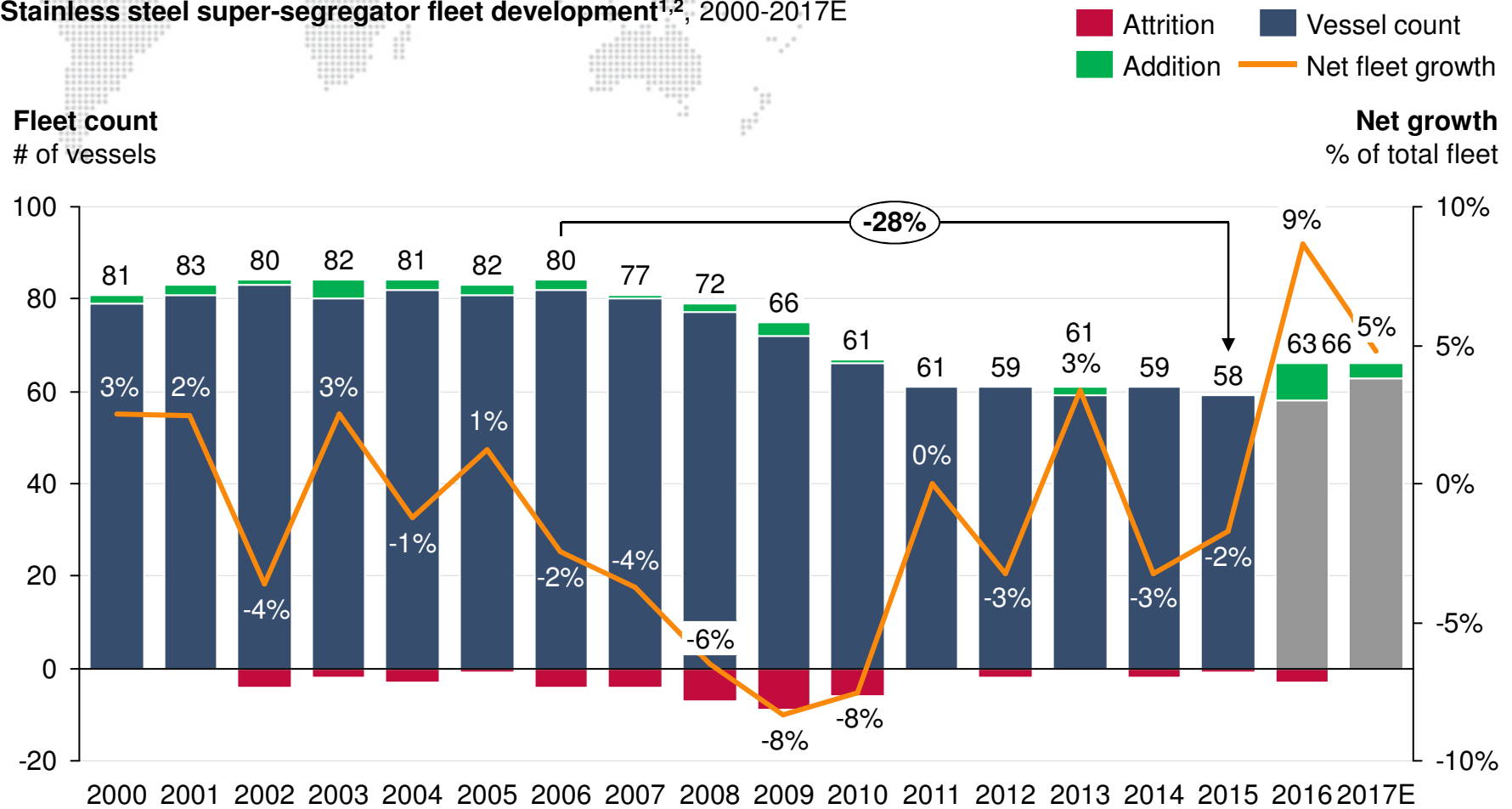
Distribution of parcels shipped by size bracket, 2001 vs. 2014



Source: Odfjell internal data

# The aggregate size of the super-segregator fleet has diminished since 2000

Stainless steel super-segregator fleet development<sup>1,2</sup>, 2000-2017E

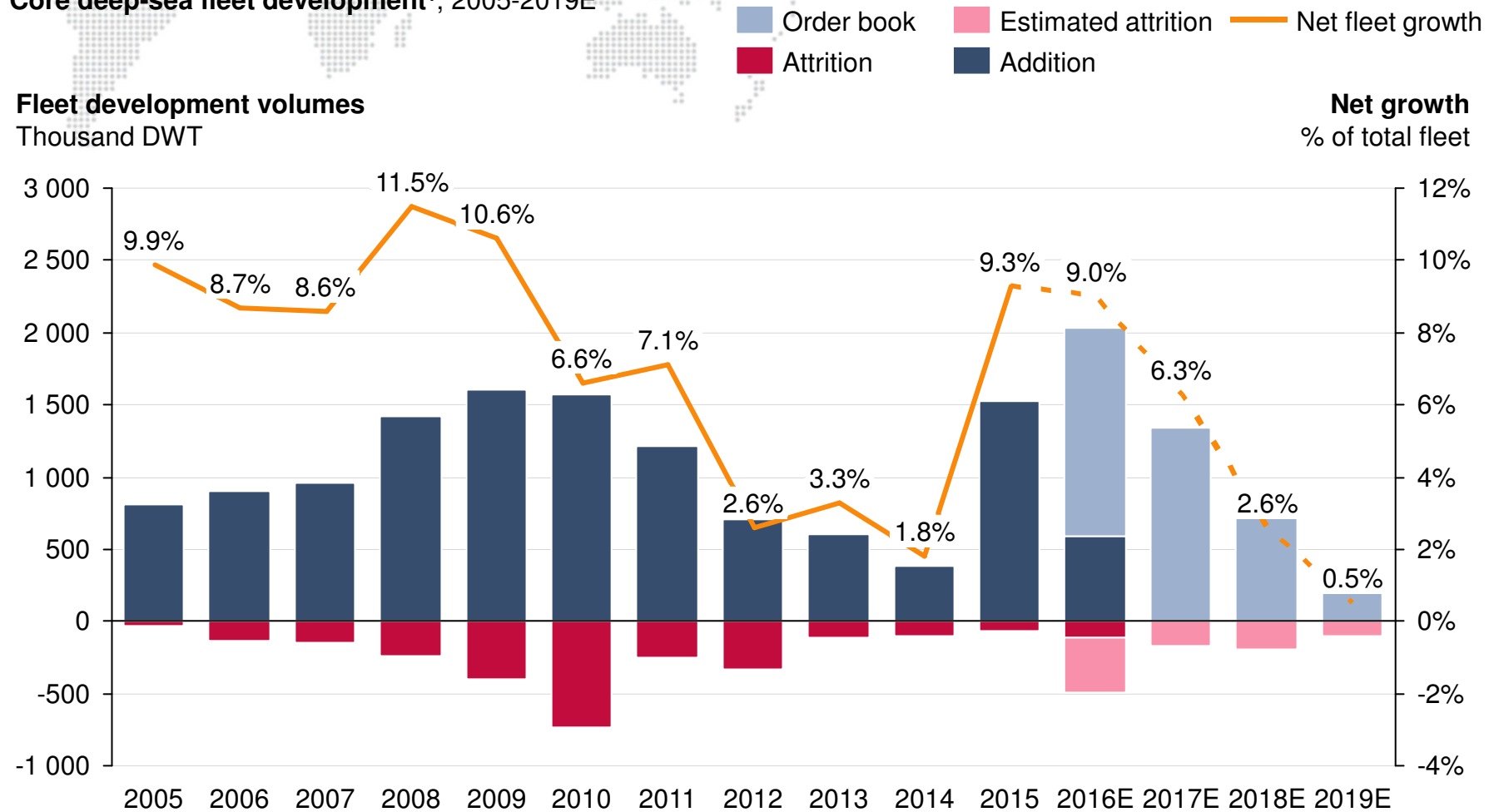


1. Super-segregators defined as vessels >25 kDWT with more than 30 segregations 2. Stolt and Sinochem adding tonnage in 2016/17  
Source: Odfjell FleetBase

# Growth in core deep-sea fleet has been very high in 2015/16

Assumption: Japanese built tonnage phased out after 20 years

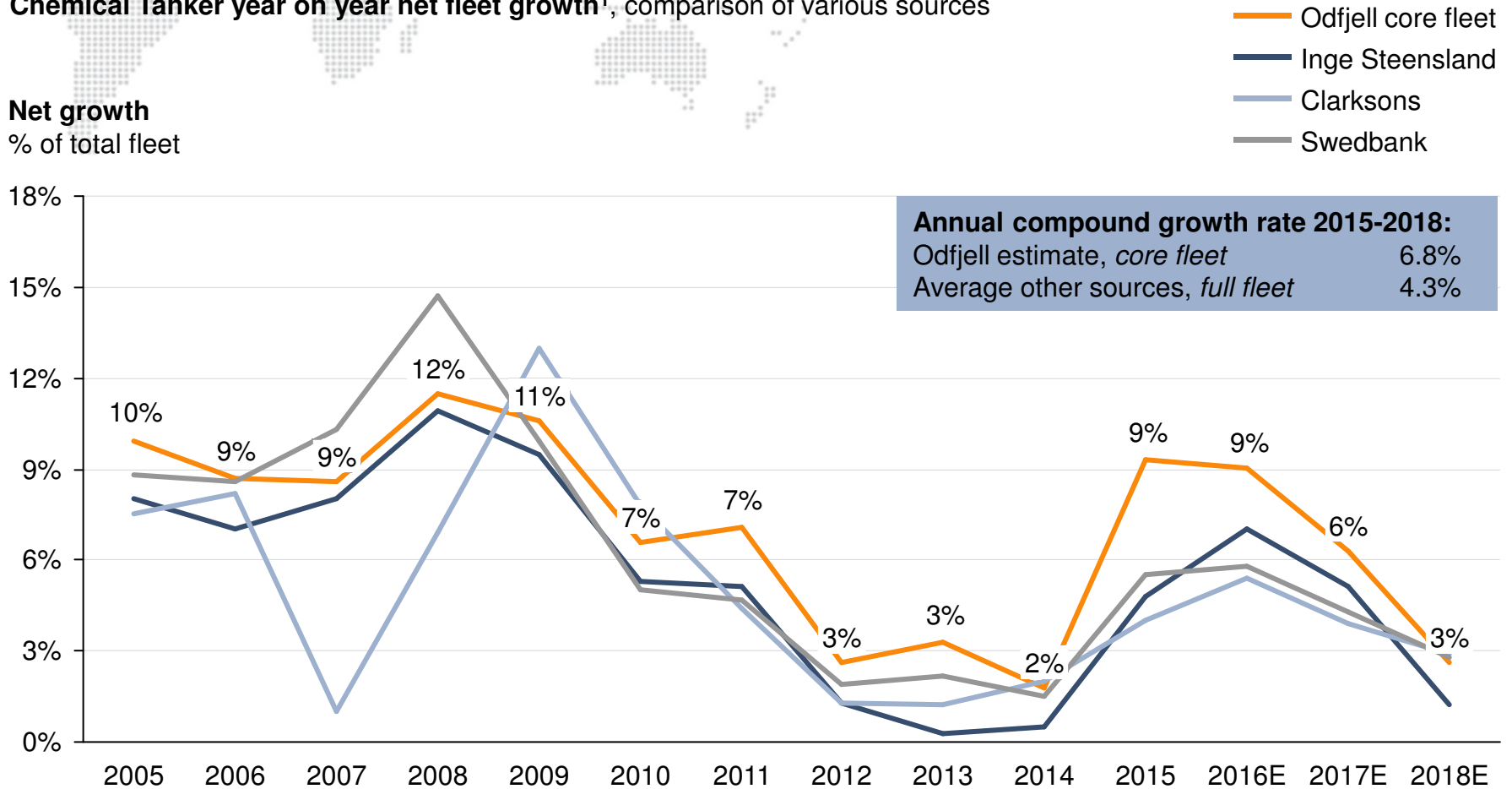
Core deep-sea fleet development<sup>1</sup>, 2005-2019E



1. Outphasing for Europe built vessels 30 years, outphasing for Japan built vessels 20 years, all other vessels 25 years

# Odfjell's view on supply higher than consensus - supply of chemical capacity may not be as high

Chemical Tanker year on year net fleet growth<sup>1</sup>, comparison of various sources

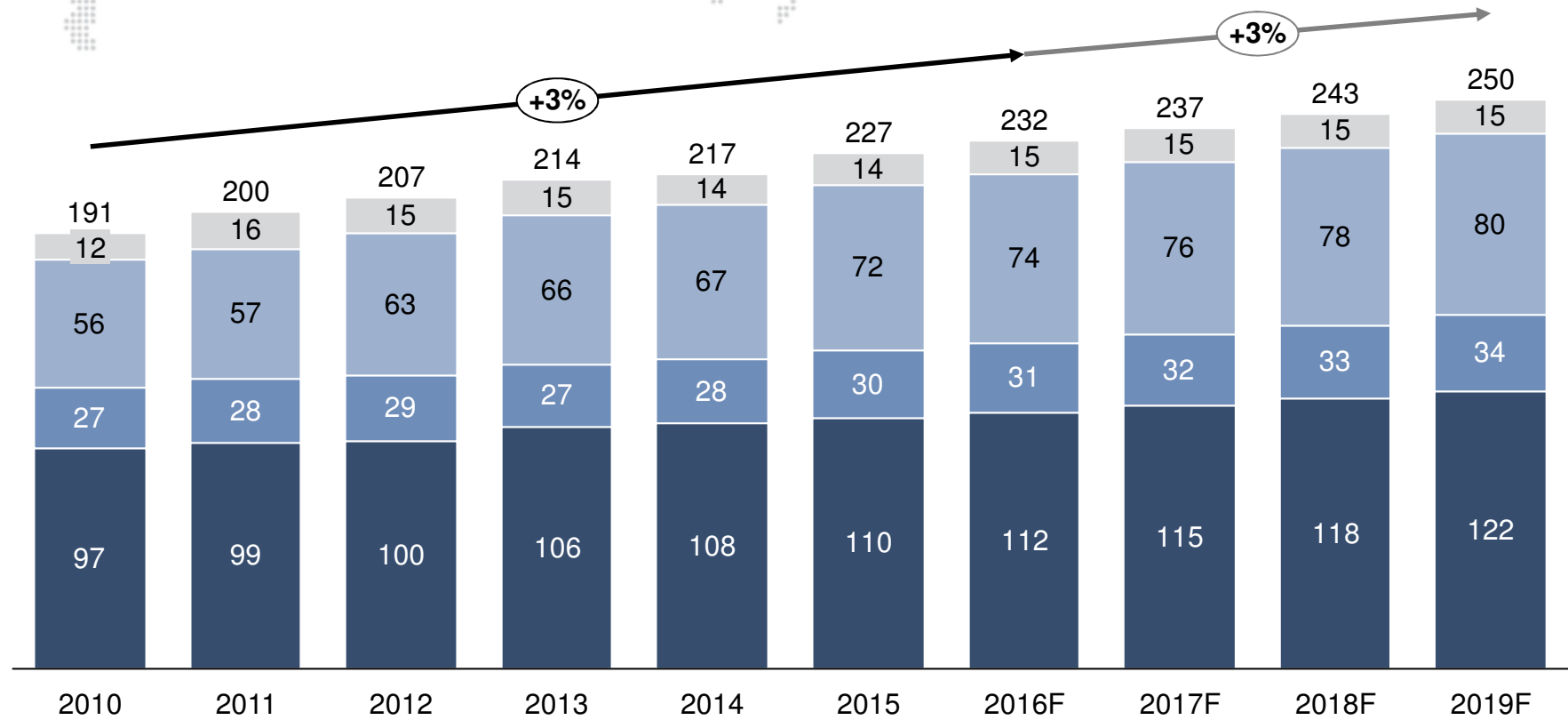


1. Differences between sources due to different fleet definitions. Odfjell with stricter definition of core chemical fleet  
 Source: Odfjell FleetBase, various external sources

# Seaborne chemical trade expected to grow by ~3% p.a.

Total seaborne chemical trade, metric tonnes per year

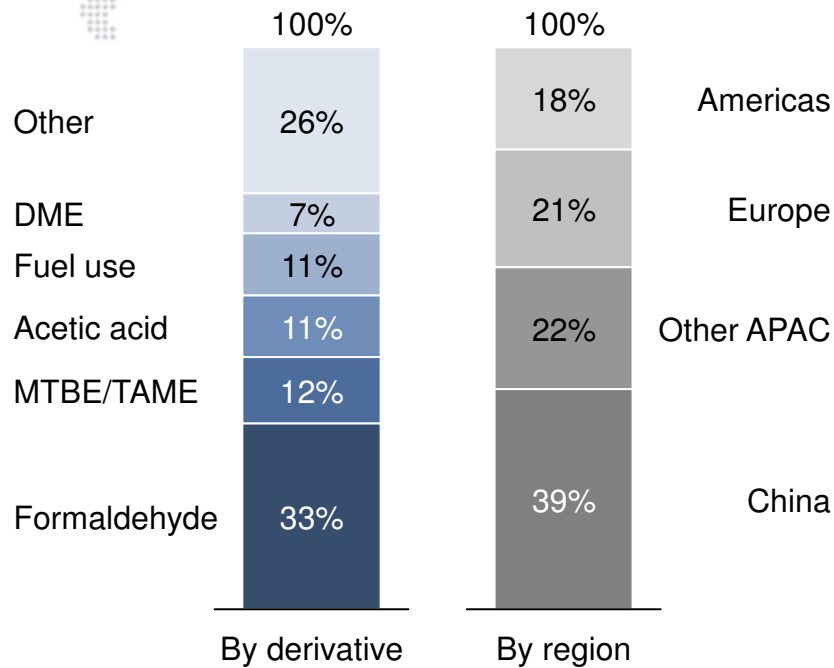
Organics
  Vegetable/Animal Oils  
 Inorganics
  Other cargoes



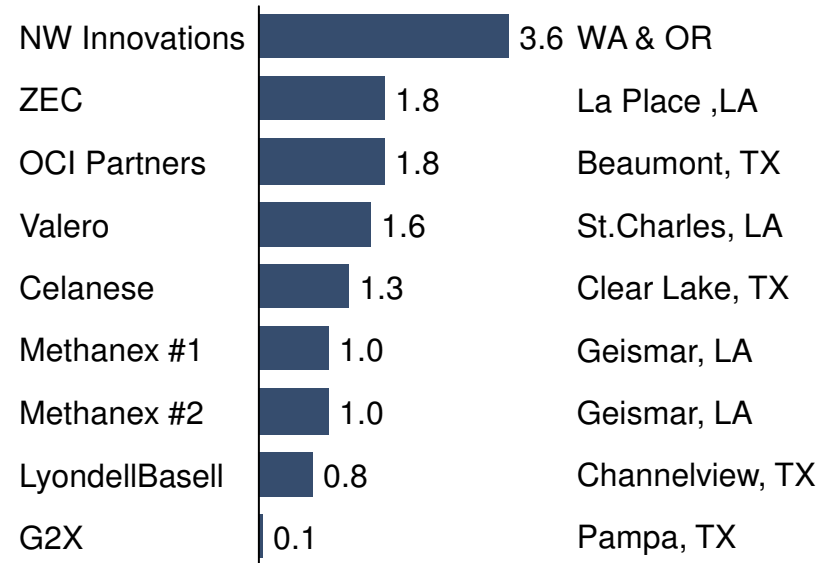


# Increased production of methanol in previous import locations will likely drive demand for long-haul trades

**Methanol demand, by derivative and region**



**North American plant announcements, capacity mtpa**



**New North American projects likely to change the US from a net importer to a net exporter of methanol**

# Other drivers of ton miles and possible growth in demand

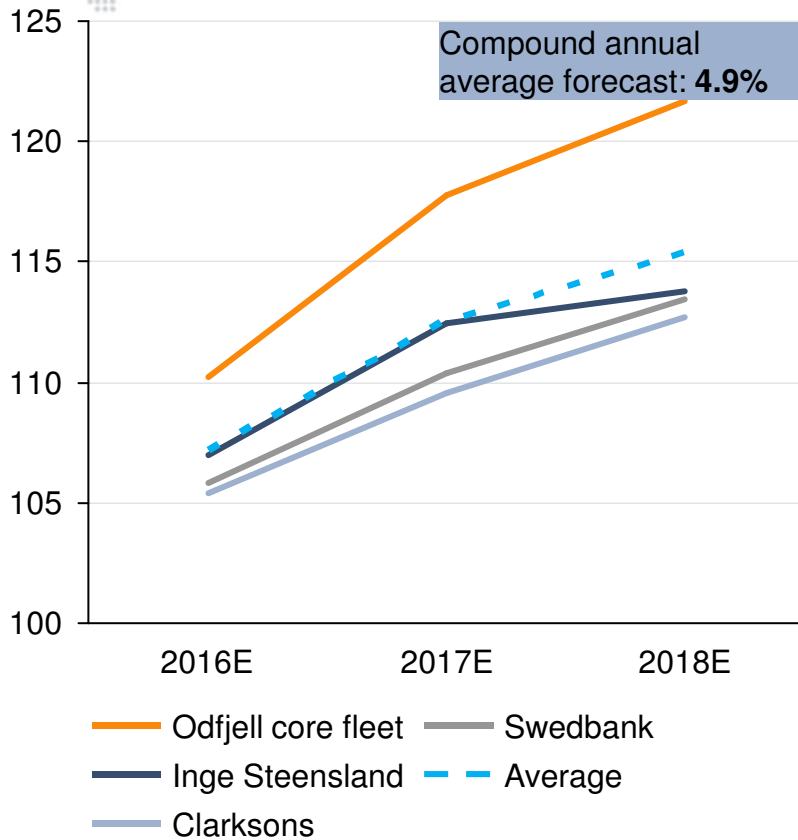
- Several Mega Projects in the US, Arabian Gulf and China coming on stream
- Shale Gas will leave US long in some chemicals, and short in others
- US Economy is in recovery
- European refineries are closing
- Continued urbanization and globalization
- Net population growth of 228 000 people every day
- Restrictions on CO<sub>2</sub> emissions require new products
- Stricter regulations
- Port infrastructure not ready for expected increase in demand
- Higher imbalance in trade
  - Leading to more ballast legs



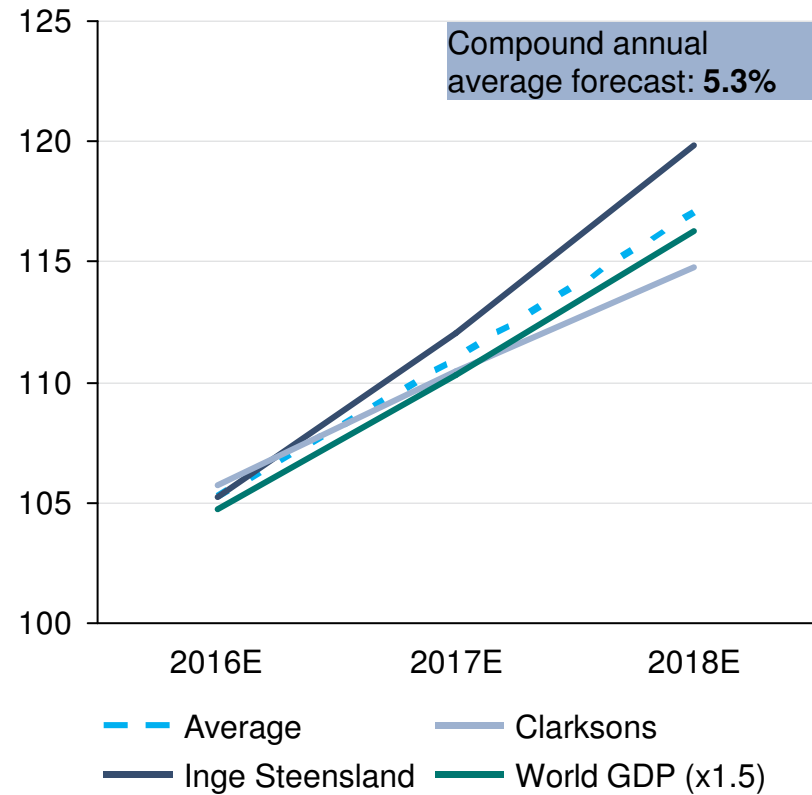
# The consensus is that supply and demand is fairly well balanced, which is also our view

## Chemical tanker supply and demand forecast, 2015-2018E

**Growth in supply**  
Indexed (2015 = 100)



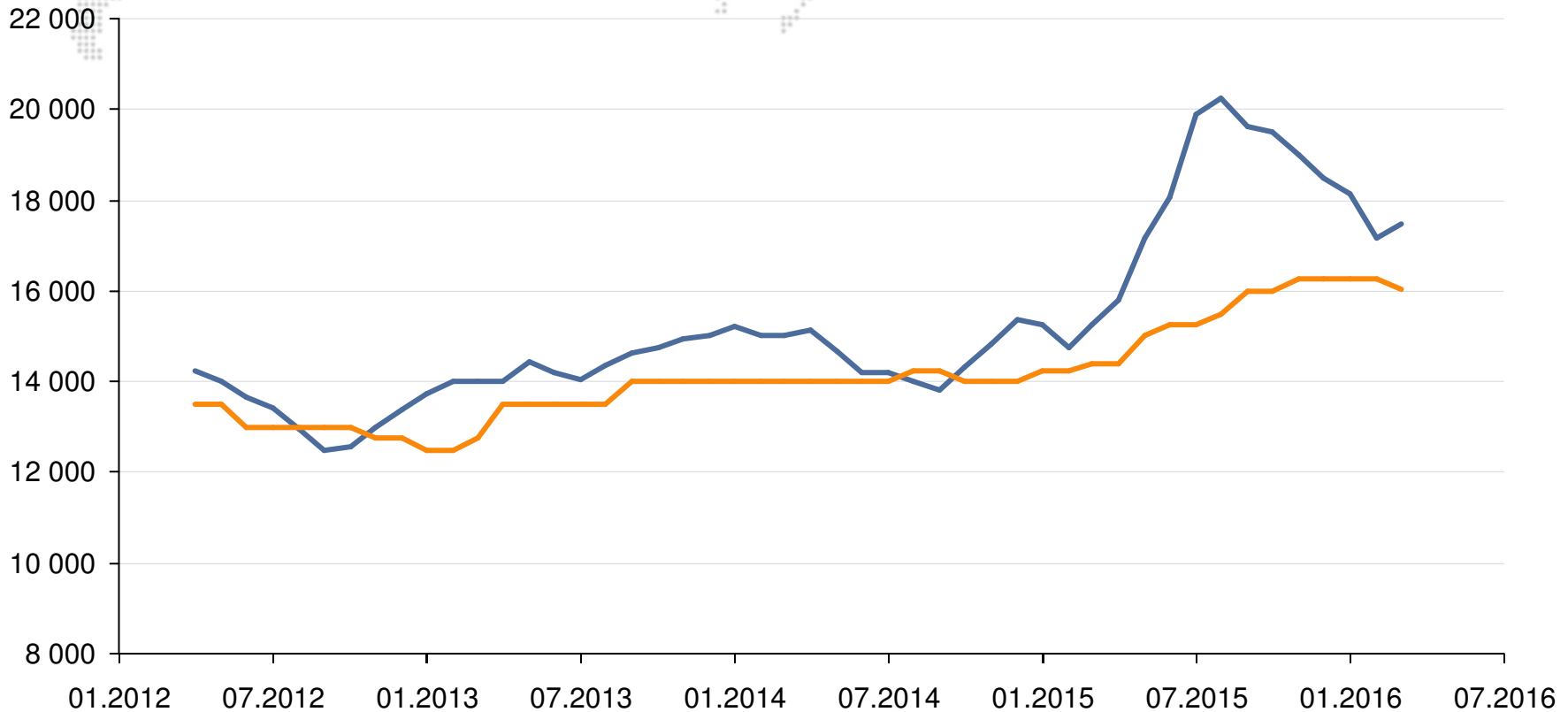
**Growth in demand**  
Indexed (2015 = 100)



# Chemical tanker market saw a positive development in 2015 – flat development in 2016

1 year Timecharter rates  
USD per day

— 47-48 000 DWT Products Tanker  
— 19 999 DWT SS Chemical Tanker



Month



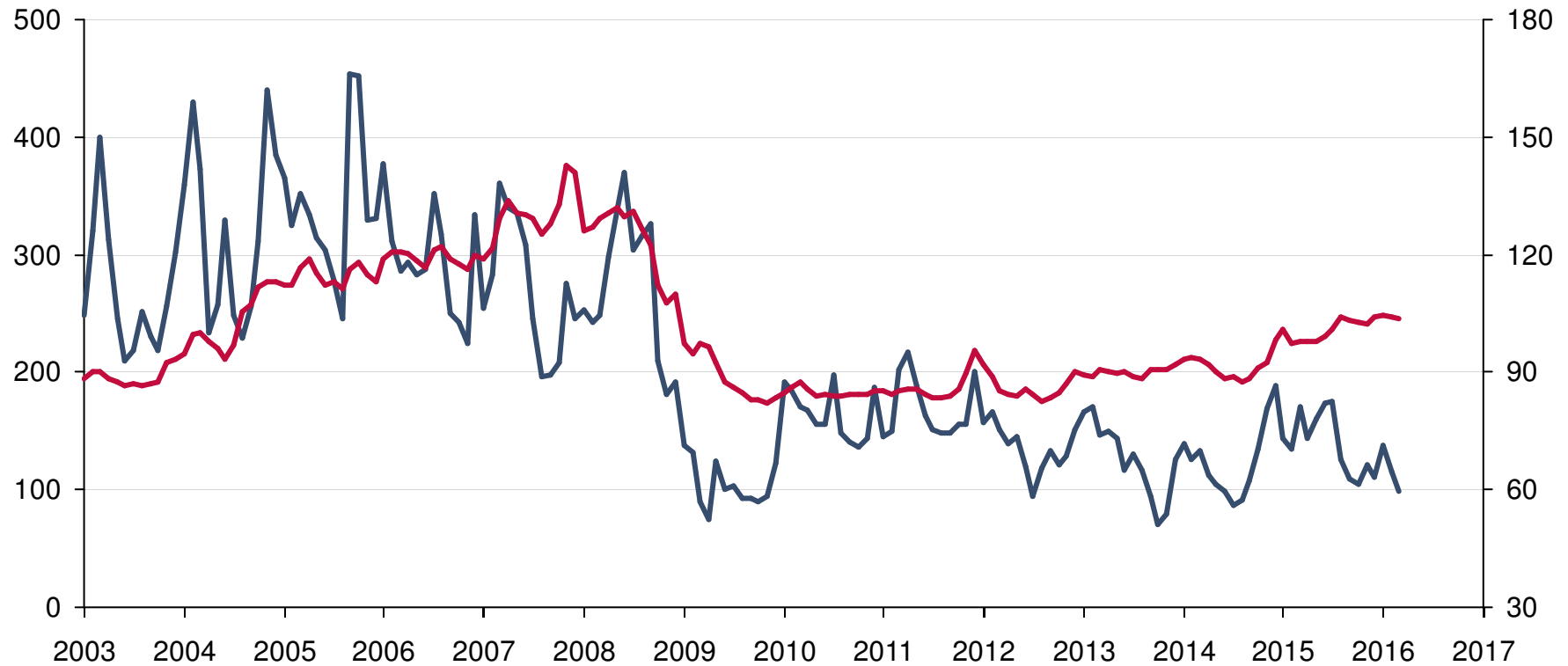
# Chemicals market and MR market (37k) is correlated

Comparison of earnings volatility between MR and chemicals market, 2003-2016YTD

- Clean 37k
- Clarksons Platou, Chemical Spot

Clean 37k Worldscale index (Rotterdam-New York)

Clarksons Platou Chemical Spot rate index





## But not all of these volumes will be relevant for the core chemical fleet

- Some of the products will be moved by more dedicated, larger tonnage
  - E.g. LR type tonnage (80-120 kDWT)
- Some producers likely to produce pellets rather than liquids
  - E.g. shale-gas sourced pellets
- Chemical plants often used to produce feedstock for other chemical plants, so total volume may be over estimated when looking at export trends



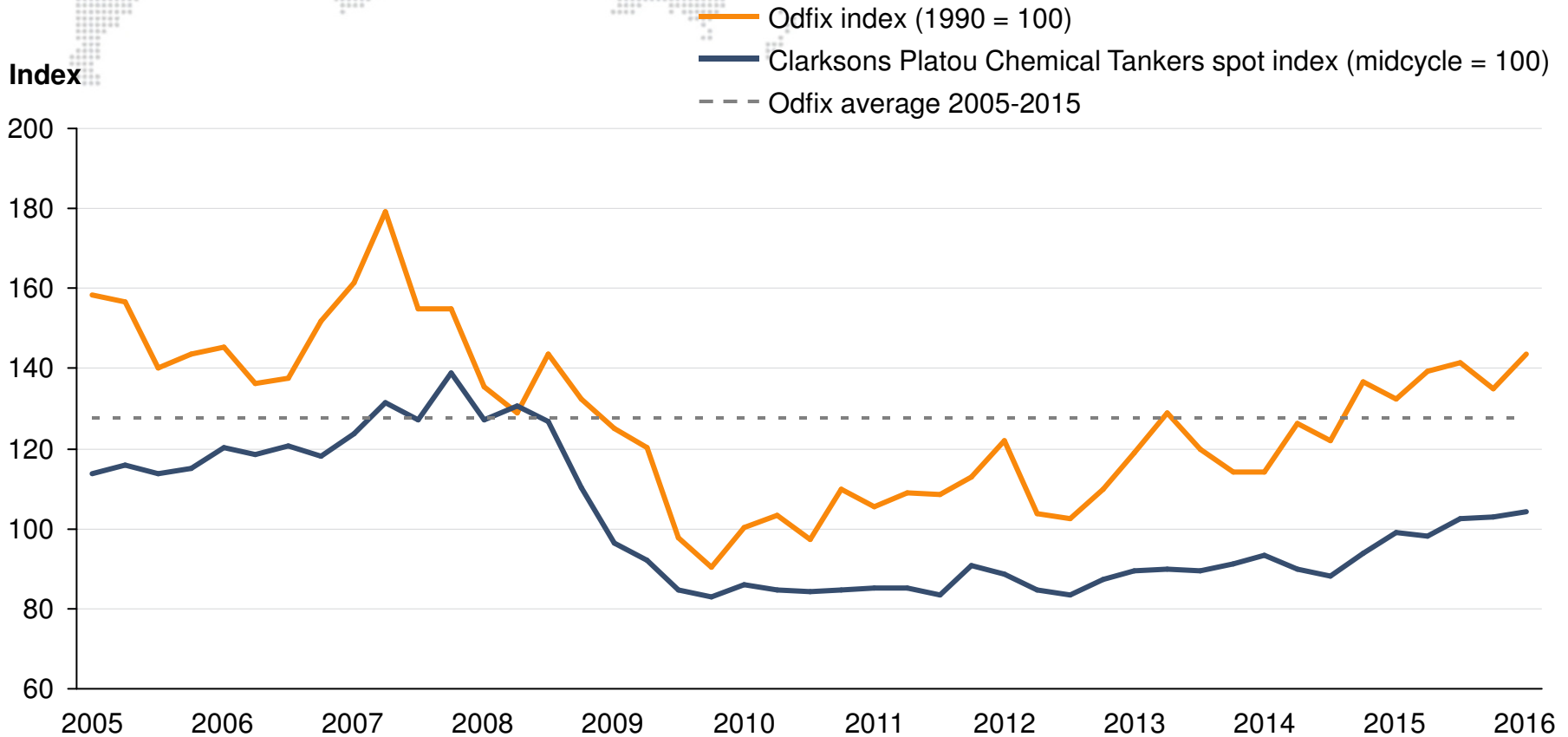


# Agenda

- Competitive landscape
- Market dynamics
- **Our view**

# Markets do what markets do - our delta to the market is increasing, indicating increased competitiveness

Odfix vs. Clarksons Platou Chemical Tankers spot index, 2005-2016YTD







## Our view

- Supply is growing by 4.9%
- Demand is growing by 5.3%
- Competitive landscape is changing, with consolidation bound to happen
- Cost competitiveness crucial combined with
  - Solid technical management
  - Solid operational platform
- Size matters
- Two or three tier markets are developing
- Many of the new “big movers” bound for MR’s or even LR’s (e.g. methanol)

**We feel that the chemical tanker markets are fairly well balanced going forward,  
but we can not count on the markets firming**

# Odfjell Tankers – Port operations and challenges



Port Operations – Torger Trige

Rotterdam, May 10<sup>th</sup>, 2015

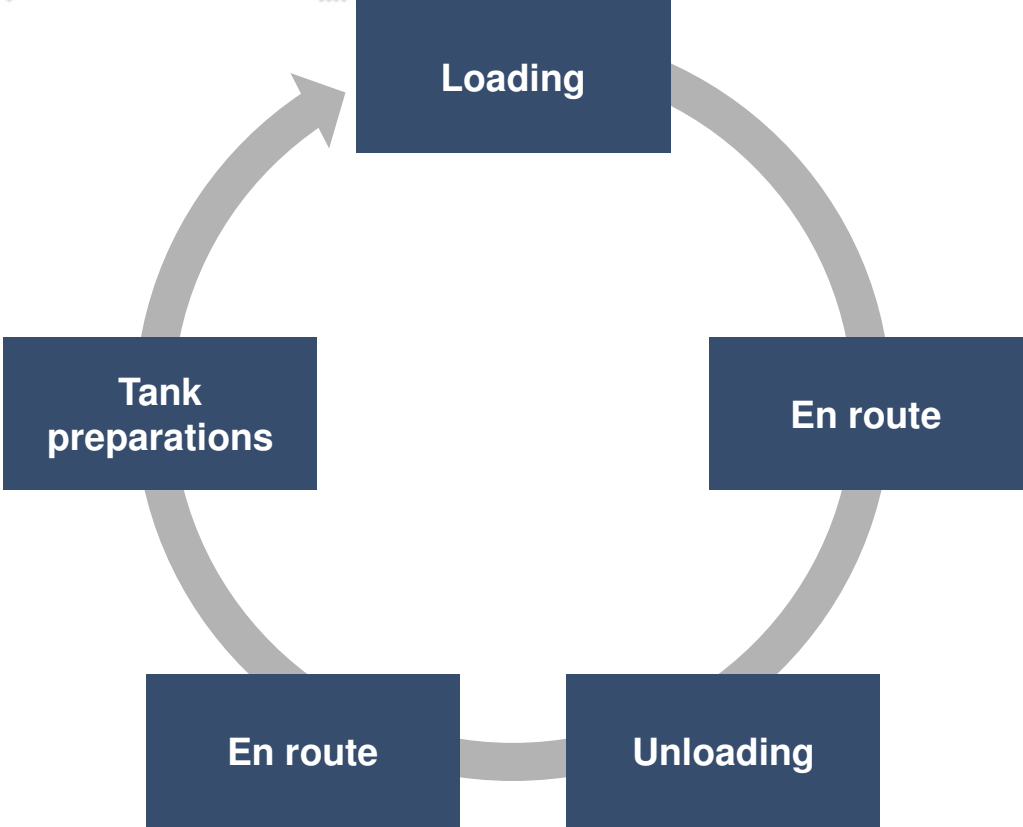


# Chemical Tankers – Challenges

- Chemical tankers are very expensive assets to build/purchase
- Time spent for our tankers is very expensive
- The nature of chemical tankers implies simultaneous unloading – tank cleaning – back loading in many ports
- Infrastructure is developing at a slower pace than the world fleet of chemical tankers creating challenges concerning efficiency and increased congestion in ports
- Utilization of chemical tankers as assets seem ineffective
- Time in port is a particular issue due to complexity of cargo programs



# Typical cycle – Tanker trade

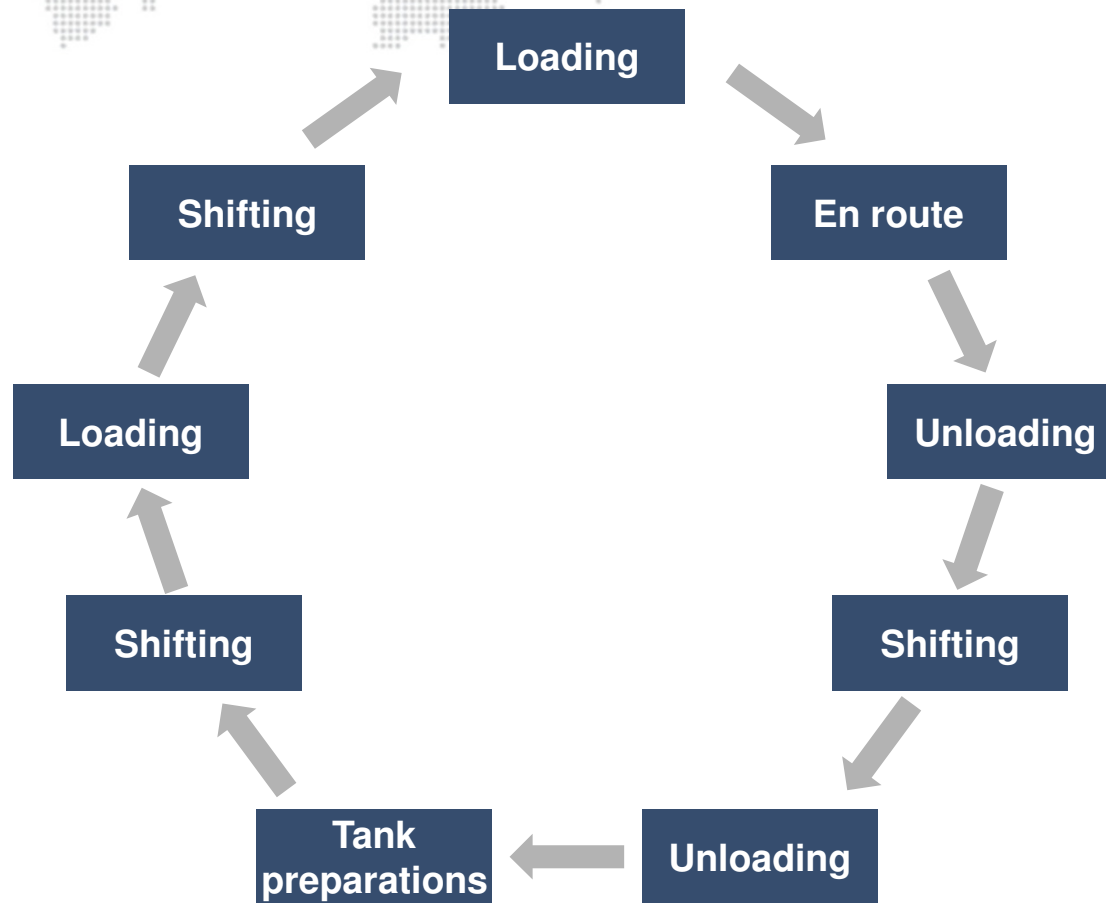




## Typical cycle – Tanker trade

- One port for loading – one berth
- One port for unloading – one berth
- One customer being served
- Efficiency and utilization of assets – high
- Complexity and flexibility – low
- Customer driven 3rd party inspections frequency is lower than in parcel trade

# Typical cycle – Parcel tanker trade





## Typical cycle – Parcel tanker trade

- One or several ports for loading – several berths
- One or several ports for unloading – several berths
- Several customers being served
- Efficiency and utilization of assets – challenging
- Complexity and flexibility – extreme
- Customer driven 3rd party inspections frequency is very high
- Utilization of our ships is directly linked to these factors

# Port rotations in large ports can involve a large number of berth calls – Houston area example



- X Stop at anchorage
- X Stop at berth

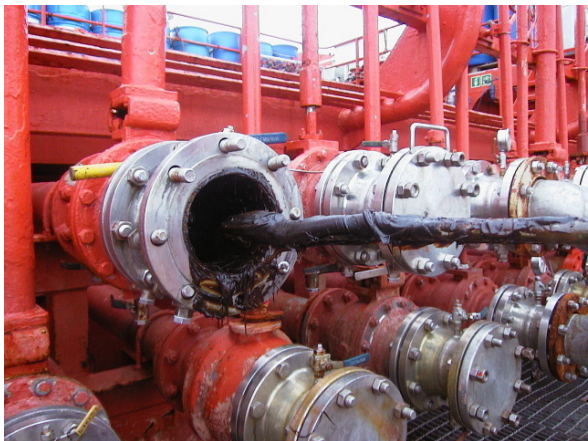




# Chemical Tankers – Loading/unloading



# Chemical Tankers – Tank cleaning





# Chemical Tankers – Cleanliness verification





# Chemical Tankers – Interaction with terminals



# Chemical Tankers – Transshipments



# Odfjell Tankers – Odfjell Terminals



# Chemical Tankers – Congested ports





## Odfjell – Short summary

- Odfjell shipping activities are fully integrated, ensuring robust value proposition to customers
- Accumulated in-house knowledge of cargo handling, tank cleaning and all aspects of ship operation is unparalleled in the industry
- Can offer logistical solutions to our customers that very few competitors can
- Combination of Tankers and Terminals gives Odfjell a unique market position



# Odfjell Ship Management



Odfjell Ship Management – Helge Olsen

Rotterdam, May 10<sup>th</sup>, 2016



# Agenda

- **Ship Management at a glance**
- Performance
- Key priorities



# Ship Management at a glance

- Ship management is a **key strategic competence** for Odfjell
- We employ more than **130 office staff** and **2 000 seafarers**
- We manage and supervise **45 chemical tankers**
- To ensure that all ships are handled by people who fully understands the complexity of chemical tankers we are structured around **centrally managed centers of competency**
  - Bergen (Norway)
  - Singapore
  - Sao Paulo (Brazil)
- Our **global presence** ensures that our ships are followed up **wherever they may be operating**
- We operate crewing offices in Bergen, Manila (Philippines) and Rio de Janeiro (Brazil)
- Certified to operate ships to the ISM Code ISO 14001:2004 standards of Quality and Environmental Assurance and Tanker Management Self-Assessment program



## **We offer a complete range of services**

**Manning**

**Superintendency and purchasing**

**Project management**

**Ship inspection and audit**

**Insurance claims handling**

**New building feasibility studies,  
specifications and supervision**

# Education and training to remain at the forefront of Ship Management

- Ship Management is **pro-actively involved in training** seafarers
- Long standing **commitment to investing in training facilities** from cadet level upwards
- We operate training centers in the Philippines specially designed to professionalize **chemical tankers competence**
- Training program include **world class safety culture program** recognized as **best practice** by many oil majors

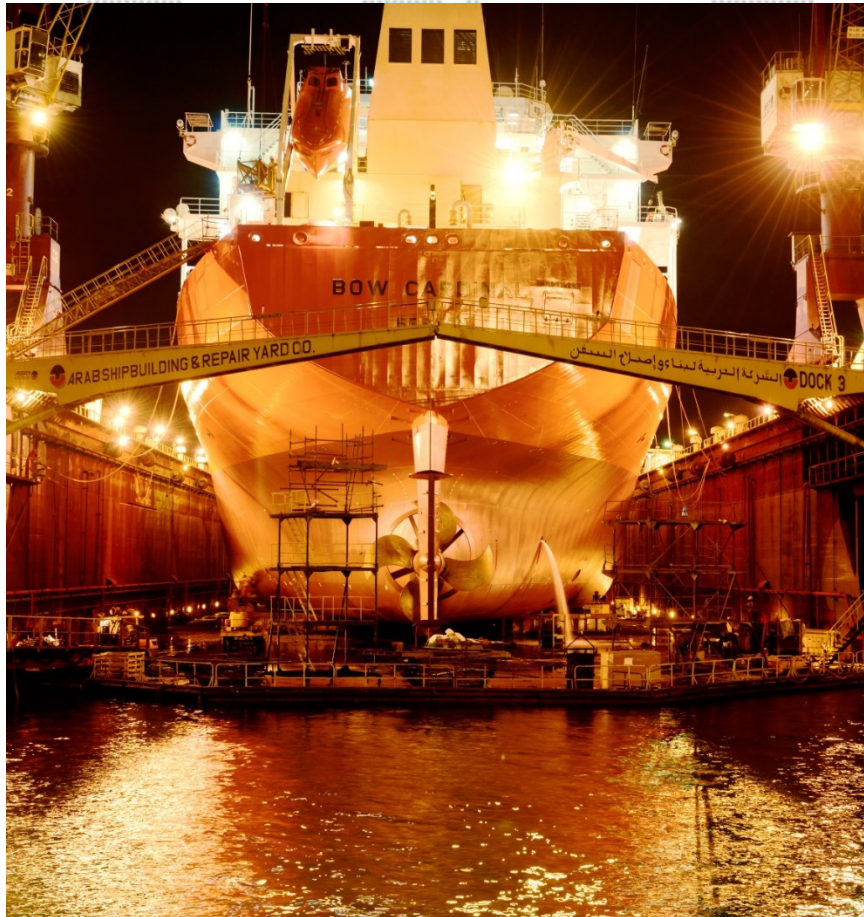
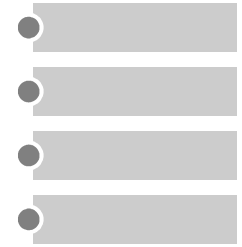




# Agenda

- Ship Management at a glance
- **Performance**
- Key priorities

# Update on our performance

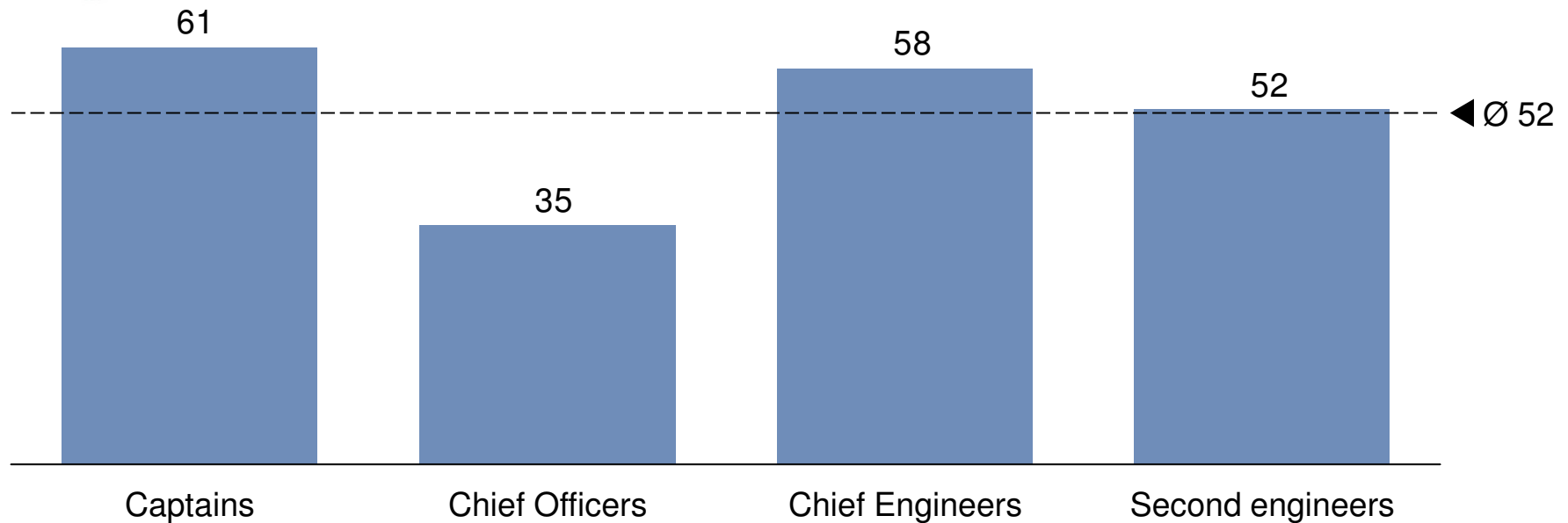


- 1 Ship Management operational tasks**  
Cargo operations, navigation, galley, mooring, port clearance, etc.
- 2 Zero incidents**  
Safety culture
- 3 Acceptance**  
PSC, vetting and audits
- 4 Competitiveness**  
Fuel, OPEX, dry docking and administrative cost

# Experienced crew is necessary to execute operational tasks



Average duration of service in current position for Odfjell Officers  
# of months

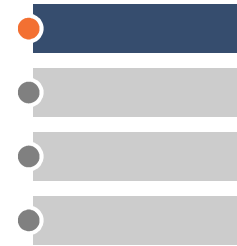


We are closely monitoring retention rates to ensure excellent execution of ship management operational tasks

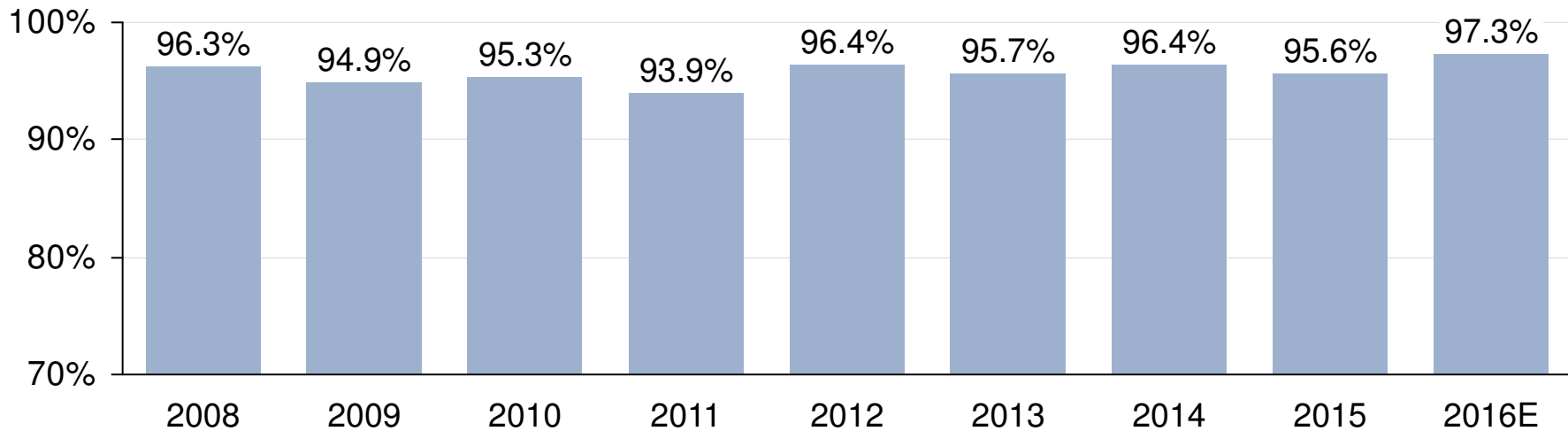




# Our crew pool retention rates are among the best in the industry



**Annual retention rate for crew pool<sup>1</sup>**  
% retention

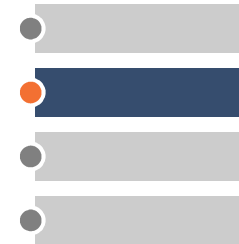


- Crew pool retention rate remains in the high 90s, despite Felix-related changes for the North West European crew pool
- Retention rate is among the best in the industry
- Positive prognosis for 2016 with estimated retention rate of 97.3%

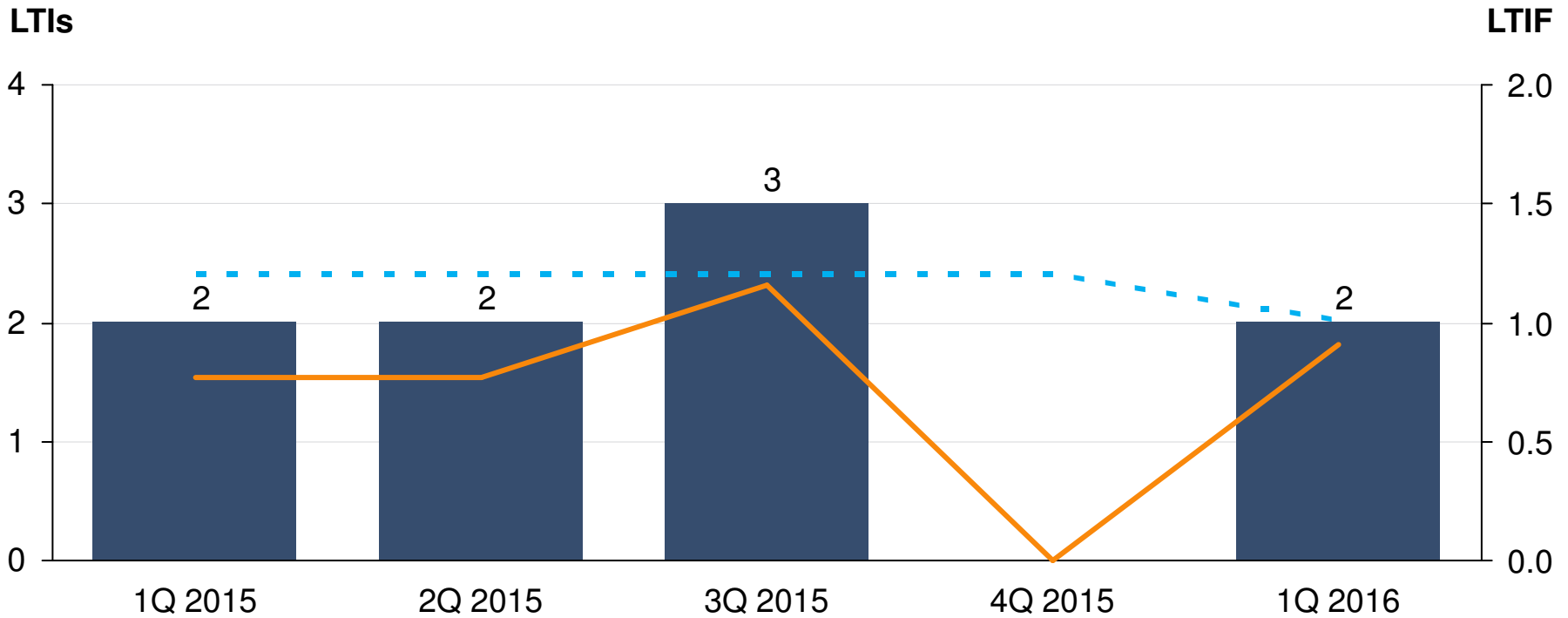
1. Figures exclude Brazil managed fleet

# We are proud to say that we have a strong safety culture on board our vessels

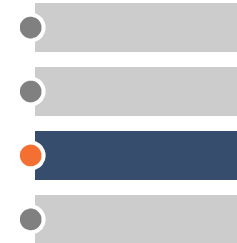
Lost time injuries (LTI) and LTI frequency  
Quarterly observations



- LTIs (left axis)
- LTIF (right axis)
- LTIF target (right axis)

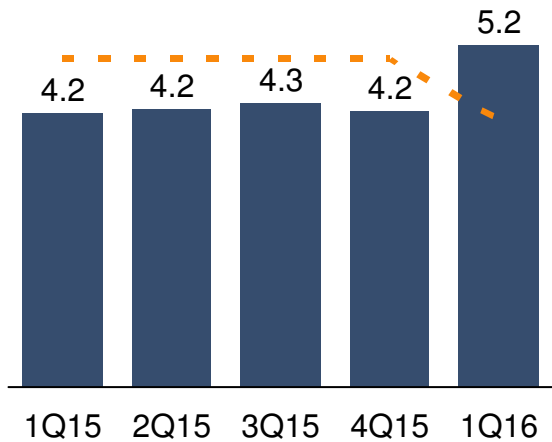


# We maintain a strong performance on all acceptance parameters



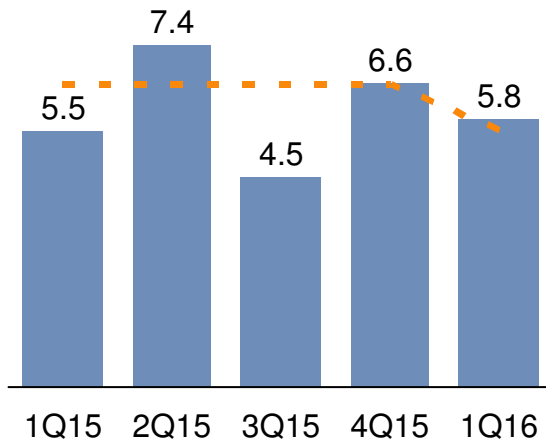
**SIRE**

■ SIRE — SIRE target



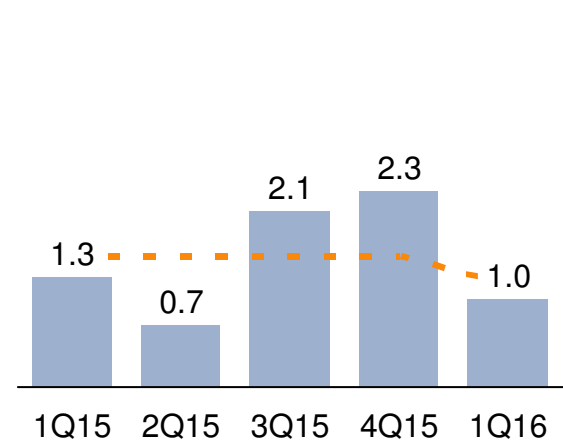
**CDI**

■ CDI — CDI target



**Port State Control**

■ PSC — PSC target



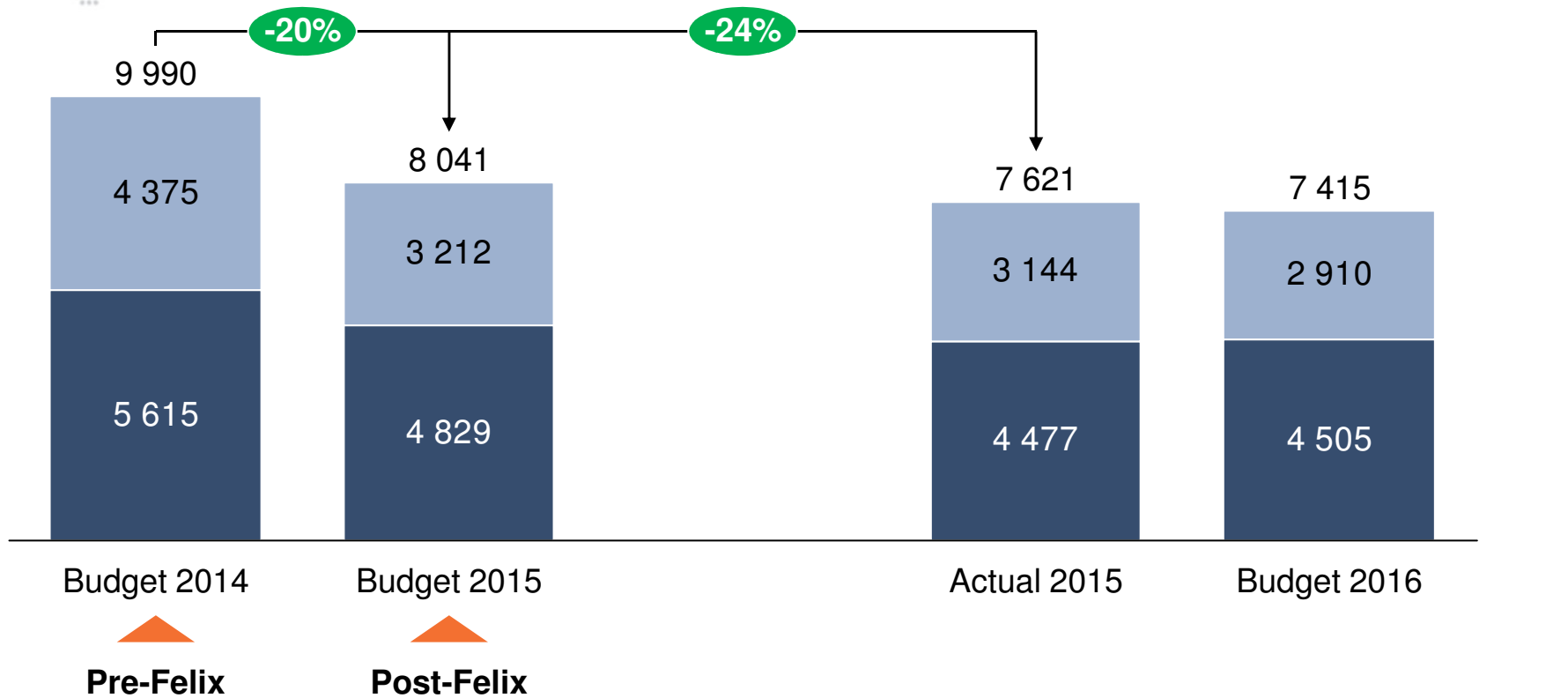
**Acceptance of our vessels ensures required flexibility for Odfjell Tankers**

*The figures represent the number of observations after an on-board inspection either by an oil major (Sire), the Chemical Distribution Institute (CDI) or by a Port State Control (PSC)*

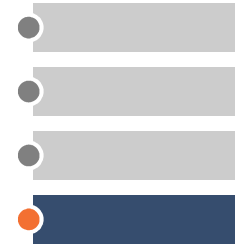


# Opex has been declining recent years and during Project Felix we further increased our cost competitiveness by more than 20%

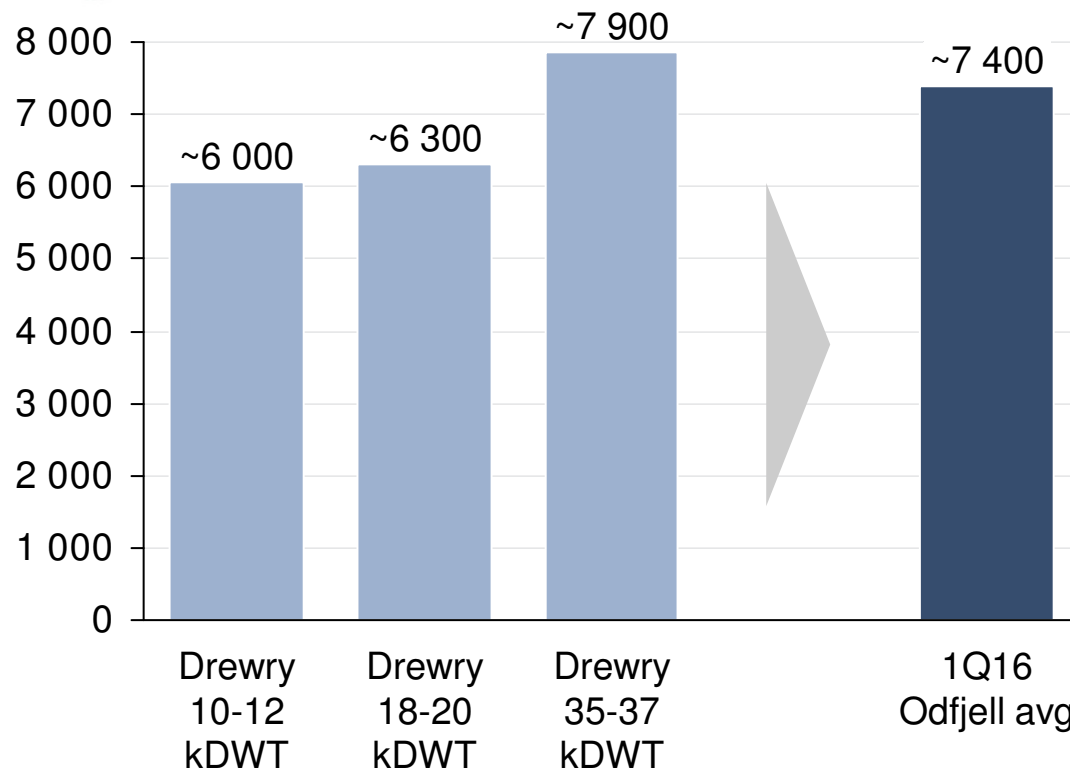
Development in Odfjell OPEX  
USD per day



# We are continuously benchmarking ourselves to ensure cost competitiveness



**OPEX<sup>1</sup> per vessel category**  
USD per day



- OPEX in 1Q 2016 is in line with benchmark figures
- Benchmark against comparable chemical tankers
- Average age of vessels in benchmark sample is 10 years
- Odfjell vessels are on average more complex

1. OPEX excluding management fee, insurance claims and projects  
Source: Drewry and Odfjell internal data



# Agenda

- Ship Management at a glance
- Performance
- **Key priorities**

## Key priorities going forward

- **Further develop the safety culture program**, also by active involvement in customers Partner for Safety Program
- **Continue to improve performance** through R&D project “Managing Operational Performance in Ship Management”
- **Professionalize condition based maintenance plan**
- Maintain a **competitive OPEX** level
- Contribute to **improve energy efficiency** and environmental rating for Odfjell ships



# We will combine a life cycle approach to ship management, and cost competitiveness, going forward

## Our main goals are to

- Centralize and standardize maintenance
- Reduce number of scheduled maintenance jobs
- Convert to condition based approach

## We will reach our goals by

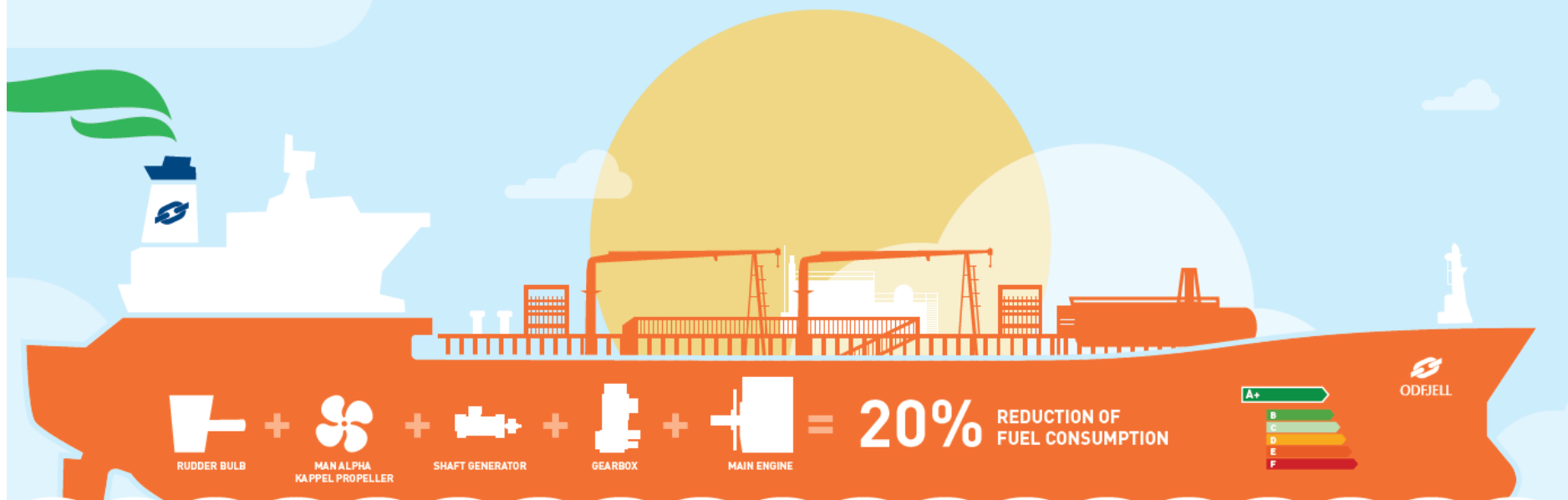
- Professionalizing condition based maintenance plan
  - Document technical condition
  - Define acceptance criteria for equipment
  - Job triggering based on reported condition
- Overhaul of vessels based on condition
  - Overhaul jobs will have interval corrective
  - Overhaul jobs can be triggered by crew, semi-automatic or fully automatic from shore





# 19 Odfjell Tankers to cut in excess of 20% in fuel consumption and emission within 2017

CO<sub>2</sub> NO<sub>x</sub> SO<sub>x</sub>  
reduction in excess of 20%



**49%**  
of the Odfjell owned  
fleet will be energy  
rated A+

Odfjell will operate one of the most energy efficient fleets of stainless steel chemical tankers above 35,000 DWT, and more than 30 segregated tanks.

Project developed by Odfjell and MAN  
Results verified by Marintek and RightShip



# Odfjell Terminals Group (OTBV)



**Frank Erkelens, CEO / Koert Schouten, CFO**

**Rotterdam, May 10<sup>th</sup>, 2015**

# Odfjell Terminals is a leading global player in the storage industry, jointly owned with Lindsay Goldberg

- Odfjell Terminals is a Joint Venture between Odfjell SE (51%) and Lindsay Goldberg LLC (49%)
- Odfjell SE is a leading company in the global market for transportation and storage of bulk liquid chemicals, acids, edible oils and other special products.
- Lindsay Goldberg LLC is a US-based private investment firm with USD 10 billion of capital under management that focuses on partnering with well-managed, closely-held/family-owned businesses and entrepreneurial-led enterprises to help facilitate growth and value creation





## **In addition to storage services, we offer distillation services in Rotterdam. Focus also on synergies with shipping**

- Odfjell Terminals is a global provider of tank storage services
- Odfjell Terminals' strategy is to grow along the major shipping lanes and at important locations for bulk liquid products around the world
- Odfjell Terminals offers in Rotterdam a toll distillation service for the petrochemical and petroleum industry (PID)
- A key objective is to harvest synergies with Odfjell Tankers
- Odfjell Terminals employs ~1 000 staff and posted 2015 gross revenues of USD 213 million
- The group's current capacity is 4.8 million CBM of storage space with ~1 400 tanks



## Odfjell Terminals – a true global footprint

- Odfjell Terminal's nine operational tank terminals are located in key ports around the world: the Netherlands (Rotterdam), USA (Houston, Charleston), Korea (Ulsan), China (Dalian, Jianguin), Singapore, Oman (Sohar), and Belgium (Antwerp)
  - Focus on key hubs for petroleum and chemicals.
  - Each site differentiated based on the needs of the local market.
- The company expects to expand with one tank terminal in 2016: Tianjin, China. The construction was mechanically complete in 2015, and is now undergoing permitting
- The company has 2 terminal projects under development in China at Changxing Island (Dalian) and Quanzhou (Fujian province)
- The terminal network also includes a cooperation agreement with a group of tank terminals in South America, partly owned by related parties

# Odfjell Terminals – Worldwide activities

Americas		
Terminal	Ownership	JV partner(s)
Houston (OTH)	100%	
Charleston (OTC)	100%	

Europe		
Terminal	Ownership	JV partner(s)
Antwerp (NNOT)	25%	NNH
Rotterdam (OTR)	100%	

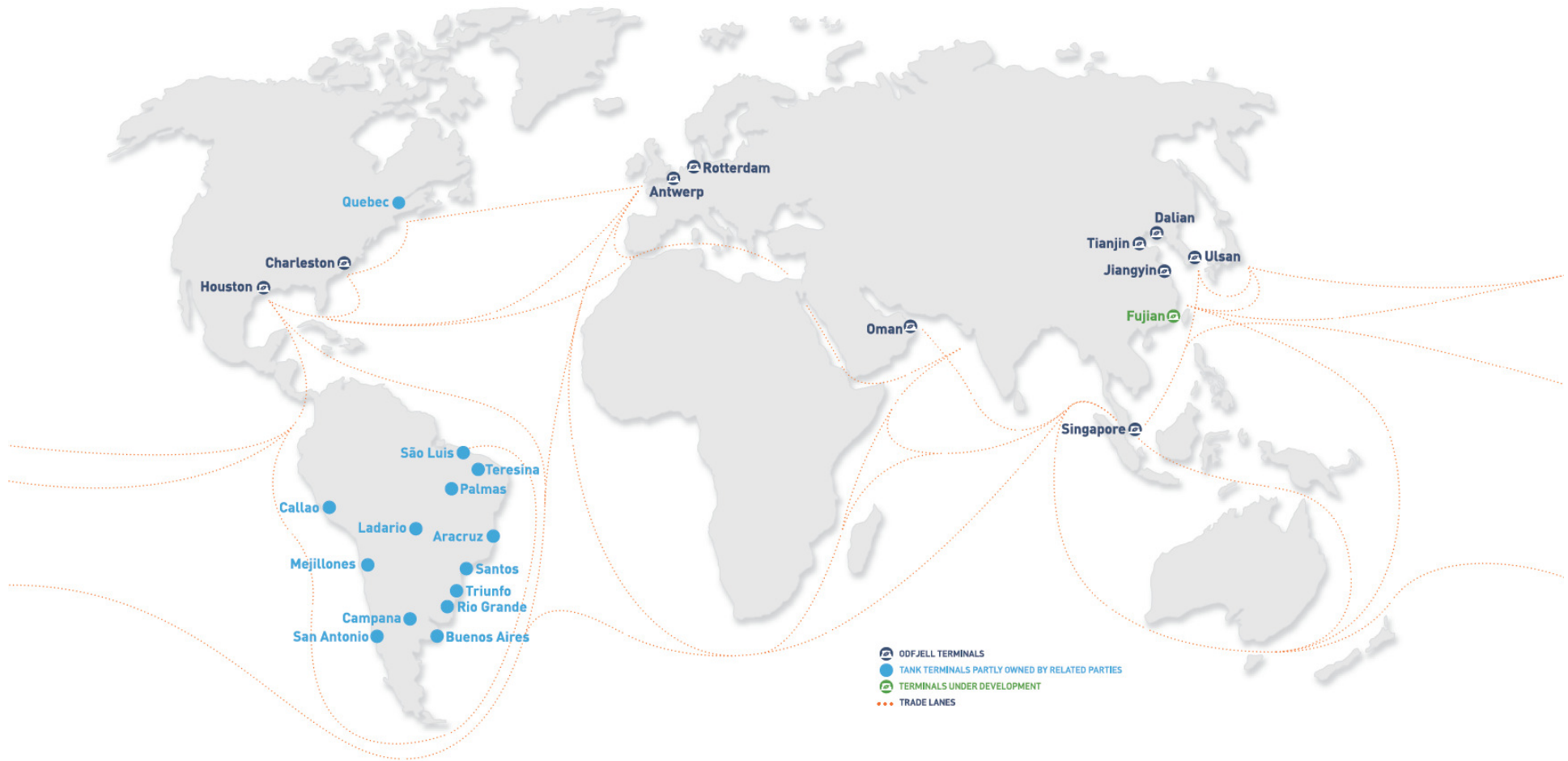
Middle East		
Terminal	Ownership	JV partner(s)
Sohar (OOTOCO)	29.75%	Oiltanking, Oman Oil, Star Energy, Seven Seas

Asia		
Terminal	Ownership	JV partner(s)
Dalian (OTD)	50%	Dalian Port Authority
Jiangyin (OTJ)	55%	Garson Group
Ulsan (OTK)	50%	KPIC
Singapore (OOTS)	50%	Oiltanking
Tianjin (ONTT) <sup>1</sup>	49%	Tianjin NIZ Ports
Quanzhou (OTQ)	50%	Founder Group
Changxing (OTCX)	50%	PDA, Dalian Xizhong Island Development

**Note: Terminals under development are marked in red**

1. Mechanically completed

# The Terminal Network

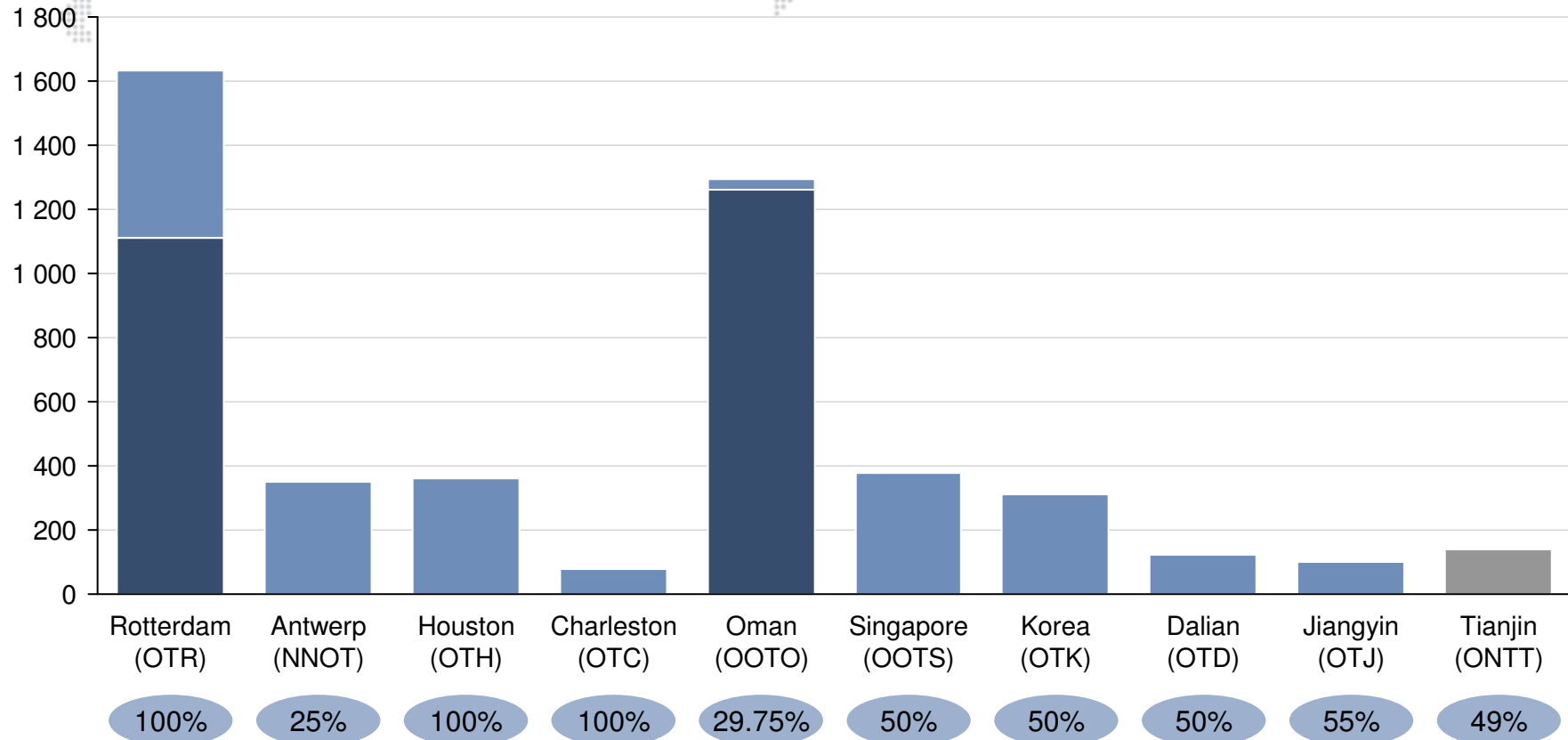


# Tank terminal capacity

<b>Total current capacity (cbm)</b>	4,811,280 <sup>1</sup>
<b>Ongoing expansions (cbm)</b>	137,800

**Tank terminal capacities**  
Thousand cubic meters

Ongoing expansions
  Mineral oil storage
  Chemical storage
  Ownership share

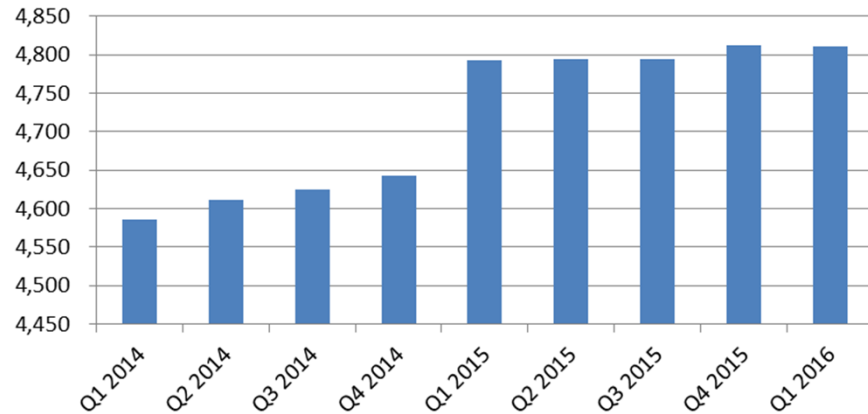


1. Ongoing expansion mechanically completed at ONTT included.

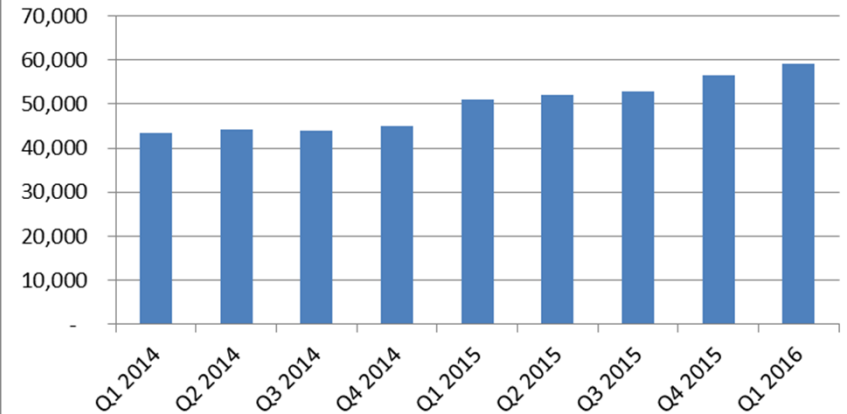


# Actual Results 2014 – Q1 2016

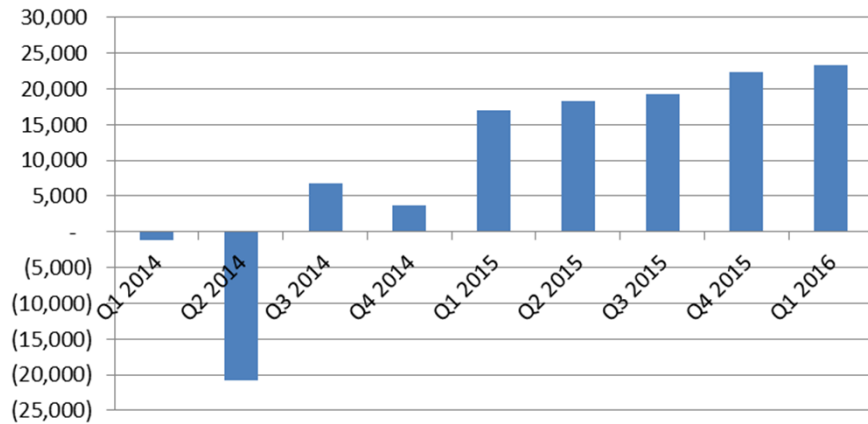
### Gross Capacity (1,000 CBM)



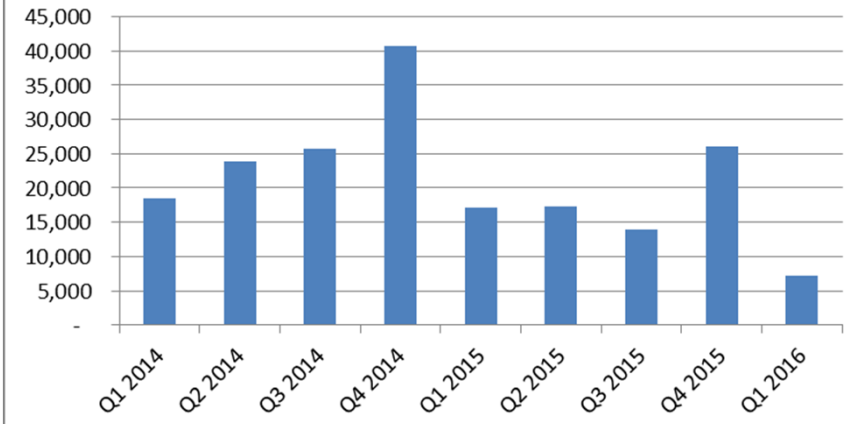
### Revenues (\$1,000 USD)



### EBITDA (\$1,000 USD)



### Capex (\$1,000 USD)





## Odfjell Terminals – Key Developments

- The 2016 results are expected to improve as the PID distillation activity ramps up, better storage results at Odfjell Terminals Rotterdam and stable result for the other terminals. The new terminal in Tianjin, China is expected to start up in 2016
- The company has benefited from the contango in the petroleum market and occupancy rates are expected to remain high throughout 2016.
- Odfjell Terminals Rotterdam has expanded its annual PID distillation capacity from 700k tonnes to 1 800k tonnes during 2015. The utilization of the increased distillation capacity will gradually ramp up during 2016.



## Odfjell Terminals – Key Developments, continued

- Odfjell Terminals Houston 17,142 cbm tank pit (Bay 10) was successfully completed in Q4 2015 against long-term contracts with an oil major and major chemical manufacturer
- Charleston: The terminal is fully occupied. Phase II Expansion, on existing land, is currently being explored to take advantage of economy of scale
- Korea, Ulsan: Slow economy continues decreasing cargo volume, short period contracts are being preferred by customers due to their concerns about the logistic costs. OTK's efforts to keep existing customers and secure new business in collaboration with Odfjell's global network are ongoing
- Dalian, China: The business outlook is stable



## Odfjell Terminals – Key Developments, continued

- Jiangyin, China: The business is stable. Expansion of land, as well as, other activities to increase the jetty utilization are currently being explored
- The explosion in the Tianjin old harbor in August 2015 resulted in a temporary suspension of permitting for all hazardous material operations in Tianjin. The Incident Investigation report was released in February 2016, and relevant authorities are starting up again. Chinese authorities have announced that all new hazardous material projects must be located in the new port, being the area near ONTT. ONTT's operations are expected to commence by the end of Q2 2016
- Changxing Island (Dalian), China: Together with PDA (Dalian Port Authority) are working on a new terminal. Currently in FEL03 phase
- Quanzhou, China: Interest was acquired in plot of land and jetty in 2013



# Odfjell Terminals (Rotterdam)



**Theo Olijve, managing Director**

**Rotterdam, May 10th, 2015**



# Agenda

- **OTR Background**
- Operational Capabilities
- Business Outlook
- Path forward

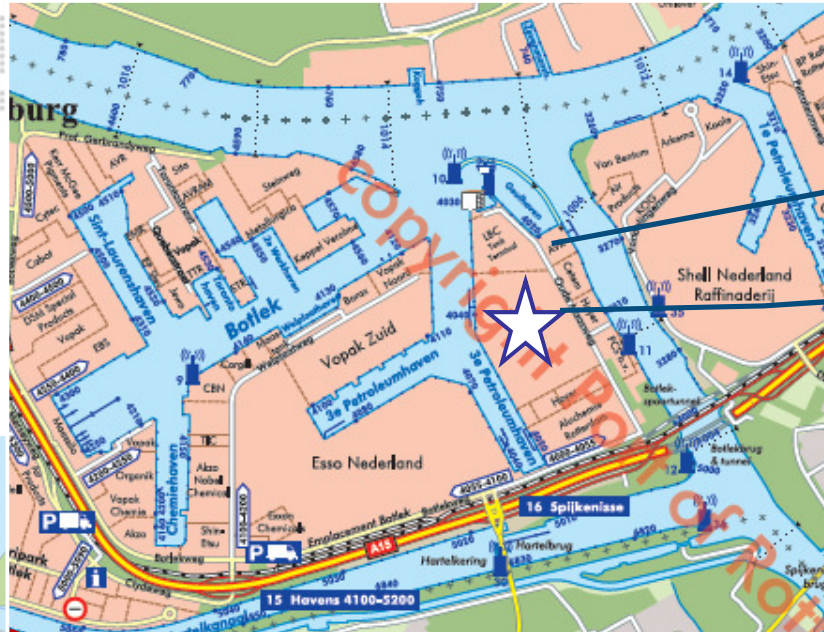
# Odfjell Terminals (Rotterdam) B.V.

Odfjell Terminals  
Rotterdam  
(1,636,000 cbm)

Odfjell Terminals  
Maritiem  
(400,000 cbm)

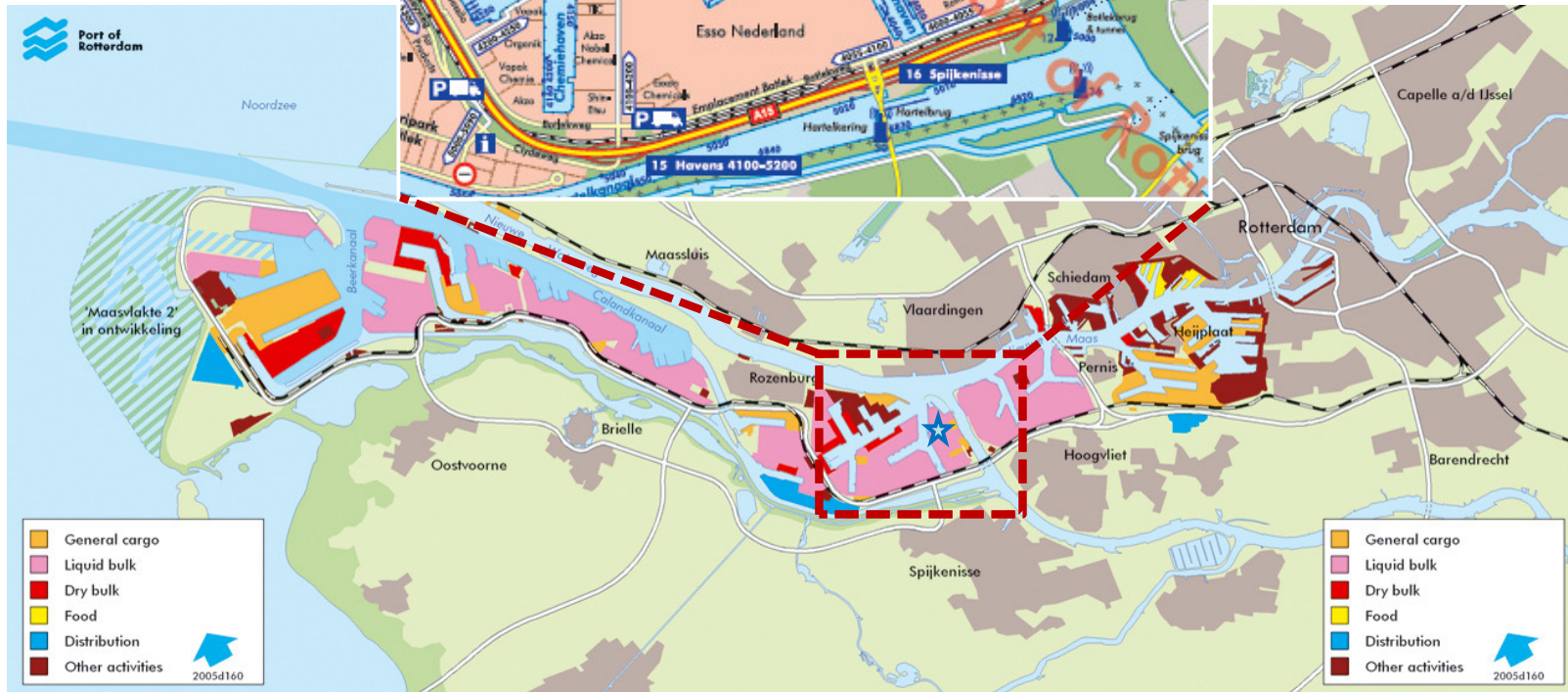


# OTR Location Detail



OTM

Odfjell Terminals Rotterdam

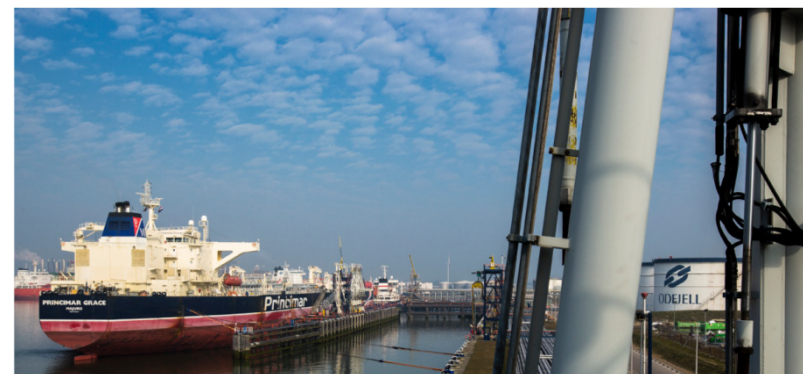




# Odfjell Terminals (Rotterdam) B.V.

## Key statistics

- Started operations: 1957
- Ownership Odfjell in 2000
- Name Plate Capacity: 1 636 000 cbm
- Number of tanks: 284
  - K1 tanks : 214 ; K3 tanks : 70
  - Current area: 66 hectares
- Number of employees: 163 FTE
  - Number of jetties: 5 sea-going berths; 4 coaster jetties; 7 barge spots; 12 rail loading; 13 truck loading stations
  - Product range: chemicals, minerals, acids and bases



# Odfjell Maritiem (Rotterdam) B.V.

## Key statistics

- Odfjell started operations: 2008
- Green field location
- Name Plate Capacity: 0 cbm
- Number of tanks: 0
- Number of employees: none
- Current area: 5 hectares
- Number of jetties: 1 ship jetty; 4 barge docks
- Firewater systems





## OTR Location Highlights

- OTR is strategically located in the Botlek region of the Port of Rotterdam, which can serve as a central hub serving traders and industrial customers
- The Port of Rotterdam is the world's largest port measured in volumes of mineral oils and chemicals
  - The region includes 5 oil refineries, 45 chemical locations, 6 biofuels plants and 5 vegetable oil refineries
  - The port's hinterland includes the Netherlands, Germany, Belgium and France
    - Meuse and Rhine rivers provide barge access
    - The A15 highway and rail network connects Rotterdam to in-land Europe
- OTR's site is located next to Shell and Exxon's flagship refineries and offers close connectivity to other current and potential customers
  - Direct pipeline connections to major production facilities

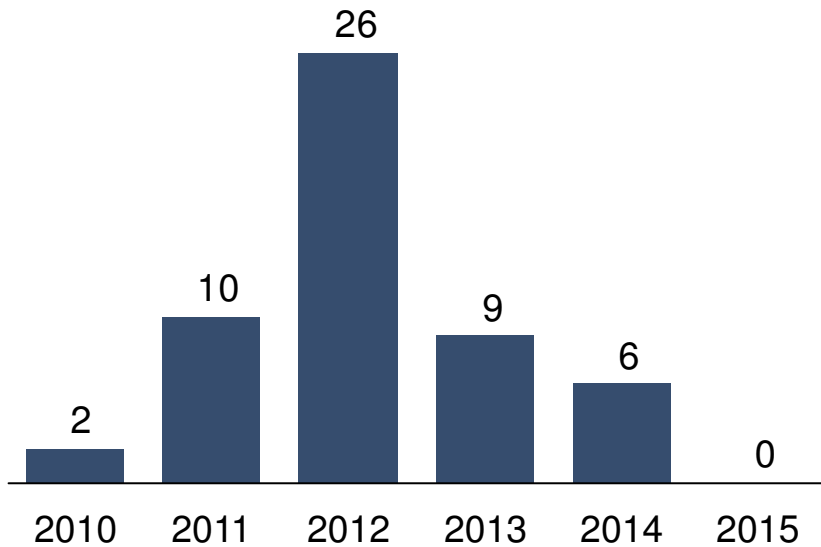


## Safety Shutdown – July 2012

- In July 2012, Odfjell Management elected to voluntarily shut down the facility to address safety points in the terminal
- Shutdown is triggered by incidents and hydrocarbon releases leading to:
  - Regulatory Authorities demand additional supervision and live testing of firewater systems
  - Significant Media Attention leading to Public Concerns on Safety
- Integrity of tanks ascertained after full inspection and live tests
- Implementation of new management system and safety cultural program
- New management team and 1st line supervision appointed
- Operational Excellence as new culture for continuous improvement
- Transparent communication and leadership intervention

# Turnaround to Operational Excellence

Regulatory Enforcements OTE BRZO  
2010 -2015



## Comments

- Implement new management systems OTIMS
- Management system drives to be in compliance with ISO standards 9001, 14001, 22000 and OHSAS 18001
- Benchmark within branch indicates OTR is top performer
- Excellence performance on regulatory compliance

# Operational Performance

## Benchmark Safety Maturity Tool - VOTOB 2013-2015

- OTR significant progress: mindware, hardware and software
- VOTOB Improvement plan will be executed as planned
- OTR shows good results compared to the average of branch

Odfjell Terminals (Rotterdam)	2013	2014	2015
Mindware	3.3	3.7	3.8
Software	3.7	4.0	4.2
Hardware	3.9	4.2	4.4

Branche Organization	2013	2014	2015
Mindware	3.5	3.9	3.8
Software	3.5	3.7	3.9
Hardware	3.9	4.0	4.1

### Scoring system

- 1: poor
- 2: insufficient
- 3: in compliance
- 4: at target
- 5: best practice



# Agenda

- OTR Background
- **Operational Capabilities**
- Business Outlook
- Path forward



# Odfjell Terminals (Rotterdam) Business

- Odfjell Terminals (Rotterdam) or OTR has three distinct businesses
  - The liquid bulk storage business (Minerals & Chemicals) that constitutes most of the assets in the consolidated business
  - The distillation business or PID, that is currently operated as a toll processor
  - Odfjell Terminals (Maritiem) B.V. or OTM, a piece of land with considerable marine infrastructure located adjacent to the storage and PID businesses
- Reflecting management's initiatives and OTR's strategic position in the Port of Rotterdam, the terminal is expected to exceed historical profitability levels next year
  - In addition, management continues to develop a robust pipeline to bring capacity online and develop its land bank to significantly grow earnings
- The facility's available capacity is currently fully utilized and all four distillation columns are in operation



# OTR Services

- Distillation and physical treatment of products including waste products
- Storage and transfer of oils, bulk chemicals, specialty chemicals and waste products
- Transfer of products board to board, board to tank and tank to board
- In-, through- and output of products by sea -, coastal-, inland water-, railway -, road - and pipeline transport
- Treatment of waste water



# Tanks in operation



# Chemicals



# Minerals (Middle distillates)



# Distillation Capabilities and Opportunities

- OTR's connectivity and strategic location is complemented by its distillation services ("PID")
- There are very few (if any) medium-sized companies offering tolling distillation that can provide similar flexibility and dedicated storage capacity in the ARA region
- PID serves both the mineral oil products and chemical industry, including oil majors, refineries, (petro) chemical products companies and traders, by offering the following services:
  - Serving seasonal or peak demands
  - Quick market entry with a new product
  - Co-production of specialty chemicals
  - Upgrading feedstock for the (petro) chemical industry
  - Processing of "by-products"
  - Reconditioning of contaminated products
  - Recovery of valuables from "waste streams"



## Distillation Capabilities and Opportunities (Cont'd)

- Examples of previous and current distillation streams
  - Gas condensate into naphtha and low Sulphur gasoil
  - High gum pygas into gasoline and low viscosity fuel oil
  - Off spec low flash petroleum products into gasoline and gasoil
  - Process dark gasoil to improve color
- Two large opportunities undertaken include:
  - Crude topping to meet low Sulphur requirements
  - Gas condensate processing into naphtha and gasoil





# Agenda

- Background OTR
- Operational Capabilities
- **Business Outlook**
- Path forward

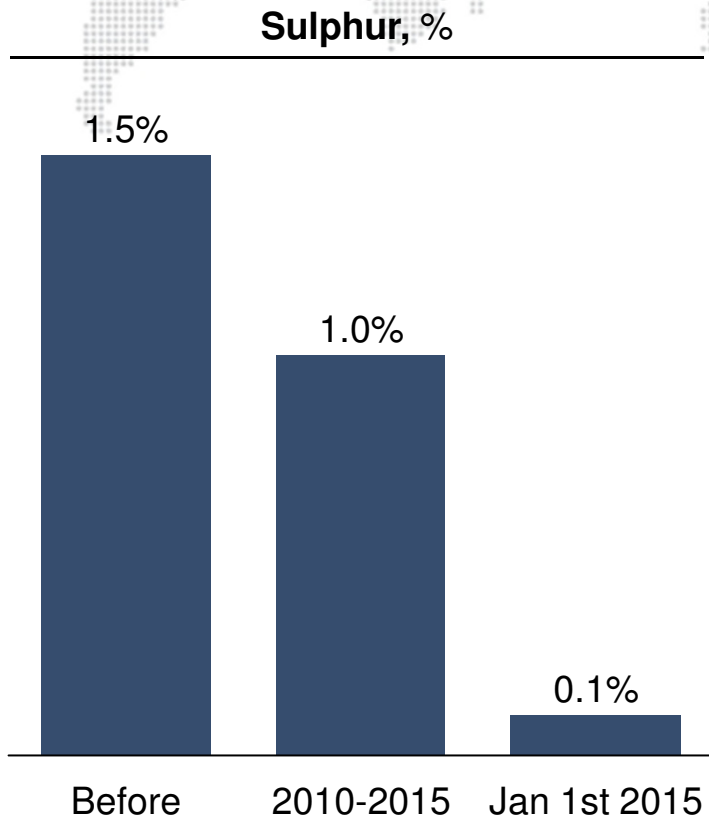


# Business Outlook

- Significant progress has been made in restoring the terminal's capacity, management is beginning to focus on optimizing the contract portfolio in terms of:
  - Contract diversification (Higher rates & Portfolio spread)
  - Client optimisation (Gross capacity is invoiced capacity)
  - PID utilization (Continuous production & Large batch parcels)
  - Lock in of customers (Combination PID & Storage, Pipeline connection)
- The strategy will involve shifting to longer term contracts (>1 year long)
- Part of area's C and D are more trader oriented and so a portion of these tanks will remain under short term contracts ( $\leq 1$  year), taking advantage of contango market
  - Traders are restricted from entering into long term contracts >1 year
  - Methanol and Jet A1 are based on mid term contracts (1-3 years)
  - Comfort that OTR's geographic position, connectivity and assets make it a desirable storage location in the long term



# Crude Topping Opportunity – Low Sulphur Fuel Requirements in ECA



- **Emission Control Areas (“ECA”)** requirements became significantly more stringent on January 1, 2015
- Estimated market for low Sulphur fuel<sup>1</sup>
  - Global: 20 million ton/year
  - Europe: 13 million ton/year
  - ARA: 6 million ton/year
  - USA: 7 million ton/year

1. Forecast for 2013 by Platts

# Locations Regulated by ECA Requirements

- The prevalence of Intra-Europe trade by ship makes the change in regulation particularly impactful to shippers in the region
- Also, an EU-wide limit to 0.5% Sulphur in 2020 would further increase demand in the region

## Emission Control Areas (IMO)



# Jet A1 Fuel Market



- Increasing import volumes
- Uniquely located for CEPS
- Using existing infrastructure
- Short time to market
- Customer MOU's in place



# Agenda

- Background OTR
- Operational Capabilities
- Business Opportunities
- **Path forward**



## Path Forward 2016 - 2020

- Ramp up of PID capacity
- Commissioning additional storage capacity at OTR
- Develop brown field opportunity for OTM
- Increase revenues by storage rates
- Cost optimization program



## Closing remarks

- 
- 
- 
- Tank terminal tour
- Dinner venue
- Transportation

# Dinner venue - Capital Market Day

Welcome to dinner at the restaurant Grand Café Restaurant Biblio

- Time: 18:00
- 10 minutes walk from Mainport Hotel
- Address: Van Vollenhovenstraat 15c

