



TEEKAY

# TEEKAY CORPORATION

## 2018 Sustainability Report







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The background of the top section is a photograph of a white flag with a large red 'T' and a blue outline, flying against a blue sky. Overlaid on this is the word 'SPIRIT' in large, blue-outlined letters. Below it, the text 'TEEKAY VISION & VALUES' is written in white, bold, sans-serif capital letters.

# TEEKAY VISION & VALUES

## Our Vision

BRINGING ENERGY TO THE WORLD WITH TEEKAY SPIRIT

## Our Values

TOGETHER WITH TEEKAY SPIRIT

### Safety & Sustainability

#### **We put safety first**

No compromises. We look after each other and make sure everyone gets home safely. We consider people, planet and profit in all of our decisions and actions. We contribute to a sustainable business, environment and community.

### Passion

#### **We live our spirit**

We bring energy and enthusiasm to our work. We balance hard work and fun and we take pride in doing a job well. We strive to make a difference every day with our colleagues and customers. We care!

### Integrity

#### **We do what is right**

We are open and honest, and lead by example. We build trust with others and are trustworthy. We admit our mistakes and use them as an opportunity to improve our skills and processes.

### Reliability

#### **We deliver**

We do what we say we will do. We have high standards and deliver quality results. We build enduring customer relationships and solutions. We hold each other accountable and follow through on our commitments. We are operational leaders!

### Innovation

#### **We embrace change**

We seek and promote new thinking and ideas. We support change and encourage others to do the same. We look for ways to be ahead of the curve and to create value added results. We strive to constantly learn and improve.

### Teamwork

#### **We are team players**

We value and respect each other. We work together and promote a spirit of cooperation. We encourage diverse perspectives, and value the opportunity to listen and be listened to. We help others be successful. We celebrate success!

# PRESIDENT'S INTRODUCTION



KENNETH HVID  
President and Chief Executive Officer

**Welcome to the 2018 Teekay Sustainability Report. We always begin this introduction to our annual report with some repetition. We remind everyone that Safety & Sustainability is the first – and foremost – of our SPIRIT values. Then we define that core value:**

WE PUT SAFETY FIRST.  
NO COMPROMISES.  
WE LOOK AFTER EACH  
OTHER AND MAKE SURE  
EVERYONE GETS HOME  
SAFELY. WE CONSIDER  
PEOPLE, PLANET AND  
PROFIT IN ALL OUR  
DECISIONS AND ACTIONS.

You will see how we promote and execute on that safety commitment throughout this report, and I want to commend every colleague across the world for their continued passion and integrity in ensuring they and their colleagues get home safely, and that our cargoes are transported safely.

Last year, I mentioned that we had embarked on a new front in our sustainability work, namely around ship recycling planning – and always in strict compliance with the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009.

Traditionally, Teekay has been a buyer of steel, and the ship management teams on shore and at sea work incredibly hard to maintain our vessels in exemplary condition. The Teekay funnel of our ships is the premier indicator of our brand worldwide. Whether a newbuilding straight from the shipyard or a 20 year old ship, we expect our ships to represent the brand in the best possible way.

We keep our vessels in pristine condition and trading for the longest possible time. Consequently, it is only in 2018 that we have had to deal with that last part of the operational and commercial lifecycle, as a couple of our shuttle vessels went for recycling.

This gave us an opportunity to set a new bar for our sustainability focus, working alongside ship recycling partners in Alang, India. Teekay has never been

content with minimum standards. We want to push ourselves and our partners to set new standards, leading the industry.

You will see in this report how we set about that task – inspecting and auditing the facilities, providing safety training to partners that raises the bar across the entire ship recycling industry, working collaboratively and with transparency in mind.

Although it is sad to see the old ships of our fleet retire, we can be proud of how we respond to circumstances. At Teekay, we do not wash our hands of our responsibilities. We seek to set – and achieve – aspirational operational standards. This is core to our Operational Leadership mindset and ‘zero harm’ HSSE & QA philosophy.

I hope you will find data and stories in the 2018 Report that reflect that commitment and I look forward to sharing more about our sustainability journey over the coming years.

# FACTS & HISTORY



Offices in  
countries **14**

**7,741** employees



**\$8B**  
assets

**206**   
liquefied gas, offshore, and  
conventional tanker assets

## About Teekay Corporation

Teekay is an operational leader and project developer in the marine energy space. Established in 1973, Teekay has developed from a regional shipping company into one of the world's largest marine energy transportation, storage and production companies.

With offices in 14 countries and approximately 7,700 seagoing and shore-based employees, Teekay provides a comprehensive set of marine services to the world's leading oil and gas companies.

Our reputation for safety, quality and innovation has earned us a position as a trusted partner. Over the past decade, we have undergone a major transformation from being primarily an owner of ships in the cyclical spot tanker

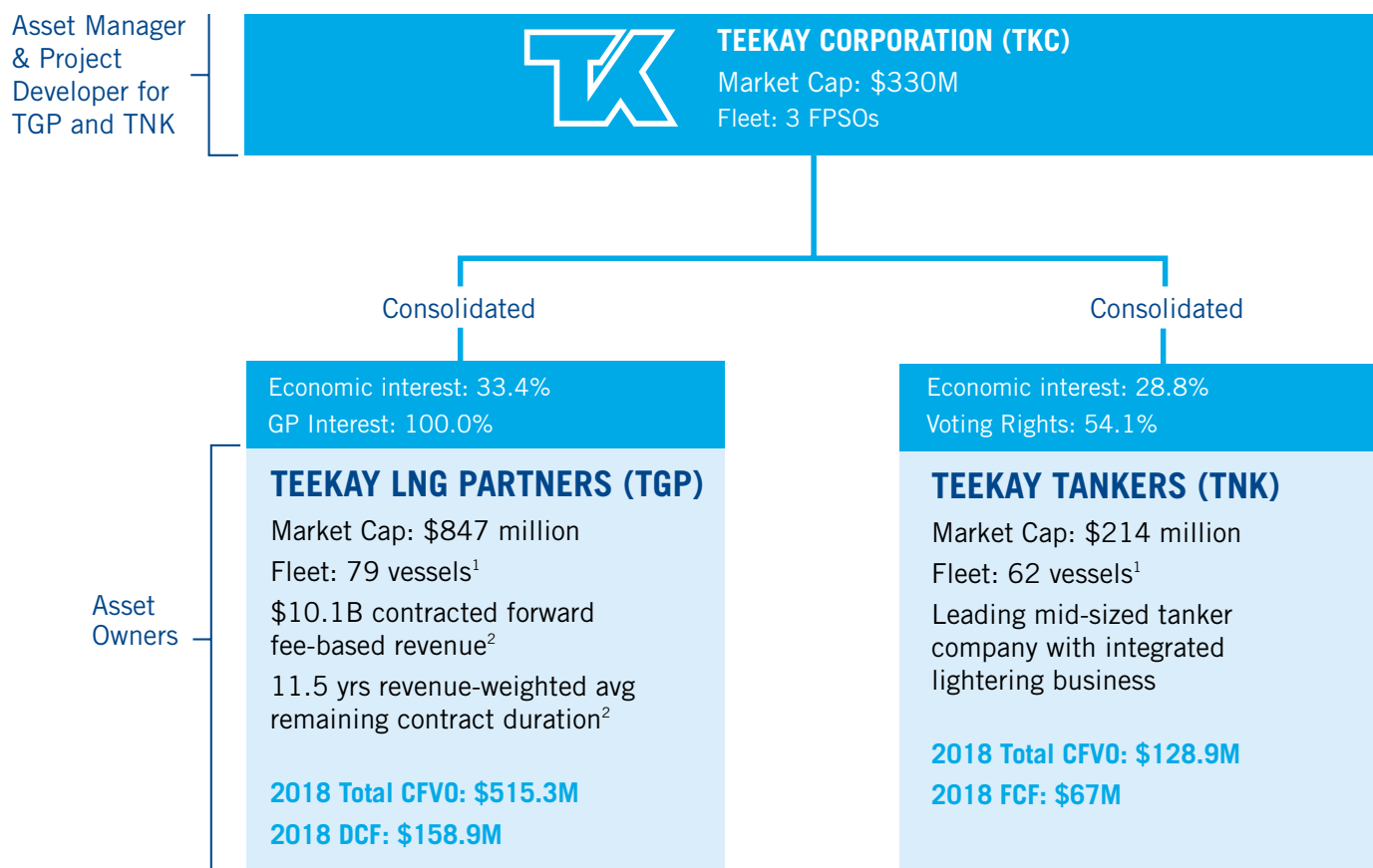
business to being a diversified service provider in the marine midstream sector.

To fund growth, we developed a corporate structure of publicly traded entities including Teekay Corporation (NYSE: TK) and its three daughter subsidiaries: Teekay LNG Partners L.P. (NYSE: TGP), Teekay Offshore Partners L.P. (NYSE: TOO) and Teekay Tankers Ltd. (NYSE: TNK).

The combined Teekay entities manage and operate assets of approximately \$8 billion, comprised of over 200 vessels.

		2003		2005		2007	
1973 - 2000							
<b>1973</b>	Torben Karlshoej founded Teekay as a regional charter	<b>2001</b>	Acquired Ugland Nordic Shipping	<b>2004</b>	Entered LNG sector	<b>2006</b>	Listed NYSE: TOO
<b>1976</b>	Chartered first vessel for \$3,800/day		Strategic Charter deal with ConocoPhillips				Acquired majority stake in Petrojarl (FPSO)
<b>1985</b>	Purchased first Aframax tanker, Golden Gate Sun		First long-term shuttle charter with Brazil				
<b>1992</b>	Founder Torben Karlshoej passed away						
<b>1995</b>	Listed NYSE: TK						
<b>1998</b>	Bjorn Moller named CEO						
	Entered FSO market						
	Secured first FSO contract						
<b>1999</b>	Expanded tanker trade to Atlantic Aframax market						
	Acquired Bona Shipholding						

# Teekay Group Corporate Structure



Note: Ownership figures as of December 31, 2018.

<sup>1</sup> As of January 1, 2019, includes newbuilds. Teekay Tankers excludes six ship-to-ship transfer support vessels.

<sup>2</sup> As of January 1, 2019. Excludes extension options; includes existing vessels and growth projects.

		Peter Evensen named CEO		Announced JV with Exmar Established Teekay Marine Ltd. JV with AngloEastern		Launched Tanker Investments Ltd. Acquired ALP Acquired Logitel ( <b>Logitel ALP</b> )		Announced new shuttle tanker CoA with BP plc, Royal Dutch Shell and OMV Group First MEGI LNG carrier newbuild commenced 5-year contact with Cheniere Energy	
		<b>2010</b>		<b>2012</b>		<b>2014</b>		<b>2016</b>	
<b>2009</b>		<b>2011</b>		<b>2013</b>		<b>2015</b>		<b>2017</b>	
Launched Taurus Tankers		Acquired equity interest in Sevan Marine ASA ( <b>Sevan FPSO</b> ) Acquired Maersk LNG vessels		Purchased new HiLoad DP technology and interest in <b>Remora</b>		Announced new shuttle tanker services contract for East Coast Canada Acquired 12 modern Suezmax Tankers		Kenneth Hvid named CEO Teekay Tankers announces merger agreement with Tanker Investments Ltd. First oil and contract start-up for the Libra FPSO Contract start-up for the Rangrid FSO on the Gina Krog Field Teekay and Brookfield announce strategic partnership Announced four DP2 shuttle tankers newbuildings Established new Teekay Multigas Pool	
								E-Shuttle project wins Environmental Award at the 2018 Tanker Shipping and Trade Awards. Petrojarl 1 FPSO achieves first oil on Atlanta field, Brazil Three Heritage Class shuttle tankers delivered to east coast, Canada Completion of 5 "M" Class LNG sister ships for Shell on long term charter Floating Storage Unit (FSU) Bahrain Spirit successfully delivered to charterer Bahrain LNG.	

## 2018 – Key Figures

PEOPLE	2015	2016	2017	2018
Total Staff <sup>1</sup>	Sea Staff – 5,711 Shore Staff – 831	Sea Staff – 6,700 Shore Staff – 1,156	Sea Staff – 7,215 Shore Staff – 1,200	Sea Staff – 6,591 Shore Staff – 1,150
Total Recordable Case Frequency <sup>2</sup>	1.94	1.33	0.86	1.24
Total Recordable Injury Frequency <sup>3</sup>	0.19	0.31	0.14	0.34
Fatalities <sup>4</sup>	0	0	0	0
Lost Time Injuries	5	9	4	9
PLANET <sup>5</sup>				
Greenhouse Gas Emission (Metric Tonnes)	4,315,787	4,758,734	5,054,714	5,279,233
Sulphur Oxides Emissions (Metric Tonnes)	311.37	351.66	340.67	302.24
Nitrogen Oxides (NOx) and Nitrous Oxide (N <sub>2</sub> O) Emissions (Metric Tonnes) <sup>6</sup>	697.57	755.08	800.84	879.54
Number of Oil Spills Overboard (over 1 barrel)	0	0	0	1 <sup>8</sup>
Total Vessel Waste Generated (Cubic Meters)	13,286	13,357	14,395	15,406
- Disposed to shore facilities	9,473	9,803	10,181	9,403
- Incinerated onboard	3,169	2,309	2,665	3,323
PROFIT (USD Thousands)				
Revenues	2,450,382	2,328,569	1,880,332	1,707,758
Cash Flow from Vessel Operations <sup>7</sup>	1,415,794	1,287,003	951,118	775,633
Adjusted Net Income (Loss)	68,077	(43,562)	(118,954)	(53,271)
Assets	13,061,248	12,814,752	8,092,437	8,391,670
Net Debt (net of cash and restricted cash)	6,588,384	6,227,143	4,025,988	4,487,729
Total Equity	3,701,074	4,089,293	2,879,656	2,867,028

<sup>1</sup> All active seafarers and shore employees, employed by Teekay, not including contractors and riding crew.

<sup>2</sup> Sum of lost time injuries, restricted work cases, and medical treatment cases per unit of exposure hours. This unit used is one million man hours.

<sup>3</sup> Sum of fatalities, permanent total disabilities, permanent partial disabilities and lost workday cases per unit of exposure hours. This unit used is one million man hours.

<sup>4</sup> Safety related fatality

<sup>5</sup> Figures exclude third party managed and time chartered vessels, which are not part of environmental reporting

<sup>6</sup> Figures mentioned are per vessel emissions

<sup>7</sup> Cash Flow from Vessel Operations (CFVO) represents income (loss) from vessel operations before depreciation and amortization expense, amortization of in-process revenue contracts, write-down and loss on sales of vessels and adjustments for direct financing leases to a cash basis, but includes realized gains or losses on the settlement of foreign currency forward contracts and a derivative charter contract. CFVO is a non-GAAP financial measure used by certain investors and management to measure the operational financial performance of companies. Please refer to the annual earnings releases for 2015, 2016, 2017 and 2018 available on our website at [www.teekay.com](http://www.teekay.com) for reconciliations of this non-GAAP financial measure to income (loss) from vessel operations the most directly comparable GAAP measure reflected in our consolidated financial statements.

<sup>8</sup> Tank leakage from cargo tank to adjacent ballast tank. Sheen observed while deballasting in progress.



# 2018 HIGHLIGHTS

**Sustainability is central to our SPIRIT values and means ensuring we are successful in all aspects of our business. This is our journey, our journey to bring energy to the world to power the global economy and improve people's lives. We give everything we have got to earn our badge and reputation for quality which have earned us respect with our customers.**

**Along the way, we have been capturing the essence of what makes us the best while committing to sustainable practices to achieve great things. This is a snapshot of our ongoing focus and commitment towards our vision and strategy.**

## **Liquefied Natural Gas Ship-to-Ship (LNGSTS)**

In mid-2018 LNGSTS began discussions with Yamal/Novatek to commence STS transhipments of LNG from Russian ice class ARC7 LNG vessels to conventional LNG vessels in Honningsvåg, Norway. The STS transhipments are required to optimise the use of the ARC7 vessels through the ice laden part of the Northern sea route and maximise the amount of LNG that can be exported from Sabetta where the ARC 7 vessels load. These are undertaken primarily for the winter months when conventional LNG vessels cannot transit the Northern sea routes to offtake cargo from the terminal. A contract was signed in November 2018, following which, 18 STS transhipments were successfully completed by LNG STS in 2018.

## **Teekay LNG's First Floating Storage Unit**

Teekay LNG's first Floating Storage Unit (FSU) has been successfully delivered to charterer Bahrain LNG. The vessel was delivered from the yard at the end of August, before going on hire on September 19, 2018. The FSU will form an integral part of BLNG's LNG receiving and regasification terminal



Teekay LNG's first Floating Storage Unit



Eduard Toll first STS Operation in Honningsvåg, Norway



LNG carrier Pan Europe



Dorset Spirit joins the fleet

in Bahrain. The new venture has been contracted to deliver an LNG import terminal in Bahrain to the National Oil and Gas Authority (NOGA), with a commercial start date in 2019, on a 20-year contract. The project is 30% owned by Teekay LNG Partners (TGP) and is expected to commence commercial operation in late 2019.

The Bahrain LNG Import Terminal will supply clean and reliable energy to the Kingdom of Bahrain, forming an integral part of the country's national energy infrastructure which will ensure the country has the required natural gas to fuel its growth demands.

### **Progress with the Yamal LNG Project – ARC 7 LNG Carriers**

Two new vessels were delivered in 2018 with a further four vessels scheduled for delivery in 2019. All of the vessels are being built by Daewoo Shipbuilding

& Marine Engineering Co., Ltd. of South Korea.

These LNG vessels represent a \$2.1 billion joint venture investment between TGP (50%) and China LNG, and will be on charter for the Yamal LNG Project, a strategic international energy project sponsored by Novatek, Total and China National Petroleum Corporation (CNPC). The project is expected to produce 16.5 million metric tons of LNG annually, which represents a big impact for future global LNG supply.

### **Pan Vessels – Delivery of Pan Europe**

The LNG carrier Pan Europe was delivered in charterer Shell in July, 2018. The vessel is the third of four “Pan” vessels joining the TGP fleet, alongside Pan Asia (2017) and Pan Americas (2018). The fourth and final sister ship, Pan Africa, will deliver in 2019. These

vessels with TGP ownership of between 20-30%, operate under 20-year time charters to a subsidiary of Shell.

### **Dorset Spirit**

The third and final Heritage Class Shuttle Tanker has officially joined the fleet!

Two years and nine months after the contract signing, the last Heritage Class newbuilding shuttle tanker is ready to sail to her home port of St. John's, Newfoundland and join her sister vessels, the Beothuk Spirit and Norse Spirit.

These vessels are purpose built to serve in the harsh environment on oilfields offshore East Coast of Canada where Teekay is the sole provider of shuttle tanker services to a group of nine oil companies.

The Heritage Class project has been completed without any lost time



ARC 7 LNG Carrier Rudolf Samoylovich





Teekay LNG newbuilding sister-ships Myrina and Magdala

incidents equating to an impressive total of approximately 2.6 million man hours.

### **Murex, Macoma, Myrina, Megara & Magdala**

The Five “M” Sibling Newbuilding Vessels are out at Sea. The Teekay LNG newbuilding sister-ship series is from the Daewoo yard in Korea and of five LNG carriers, all are on long-term time-charter to Shell.

The sister-ships all have names beginning with “M”: Murex and Macoma delivered in 2017; Myrina, Megara and Magdala delivered in 2018.

The naming of Murex has an interesting back story. Named after the shell of the Murex sea snail, it marked the 125-year anniversary of Shell’s first bulk oil tanker that first delivered kerosene to Asia.



The vessels are part of 12 LNG newbuildings delivered to the TGP fleet throughout 2017 - 2018.

### **Executing the Teekay Strategy – New Contract in Australia**

Teekay Australia is proud to announce a new contract with the Australian Government for the Australian Defence Vessel, Ocean Protector.

Ocean Protector is owned by the Royal Australian Navy and operates as a naval auxiliary vessel for Civil Maritime Border Operations, Humanitarian Assistance and Disaster Relief (HADR) and other secondary taskings as directed by the Government. Importantly, the vessel flies the Australian White Ensign (also known as the Royal Australian Navy Ensign), giving Teekay another vote of confidence from the Navy in our ability to manage and operate the vessels

for the Australian Defence and Border Force as a trusted partner.

The Department of Defence issued a tender for the provision of in-service support (full technical management) and a commercial crew for the Vessel. Teekay Australia was successful as the preferred tenderer and, following contractual negotiations with the Department, has signed the contract. The contract has an initial term of five years, with subsequent annual renewal terms for up to ten years in total.

### **Proud Moments – Valdez Terminal Liftings**

A great example of Teekay’s core value of “Operational Excellence”, which is recognized and trusted by our customers is that Teekay Tankers remains the only non-Jones Act international flag owner to be entrusted by the oil majors to load crude oil out of the highly sensitive area of Alaska.

Since 2016, Teekay Tanker vessels have completed four flawless liftings from the Valdez terminal. The last one being by Shenlong Spirit in May 2018.

It was the Teamwork, Motivation and the Teekay spirit of each and every crew member onboard and the shore team which ensured a professional and flawless operation and in turn made sure that the Teekay Flag was kept flying high as always.



New contract for the Australian Defence Vessel, Ocean Protector



Shenlong Spirit berthing at Valdez terminal



# SUSTAINABILITY IN TEEKAY



Sustainability in Teekay encompasses the consistent long-term health and success of our people, our business and the surroundings we work in.

**We recognize sustainability is fundamental to the success of our business. We have ambitious plans to provide cost efficient, innovative measures to increase the operational efficiency of our ships and reduce our environmental footprint. Taking care of our People, the Planet while being Profitable – the triple bottom line – is the foundation for long-term sustainability.**

## Triple Bottom Line – People, Planet and Profit

The report that follow provides a high level overview of how Teekay has focused on the “Triple Bottom Line” throughout 2018, both onboard our vessels and onshore (but not including our FPSO fleet). We hope, whether you are a current or future employee, existing or potential business partner, shareholder, regulator, or simply someone with a keen interest in what we do, that the stories can help you to understand how Teekay Corporation considers People, Planet and Profit in all of our decisions and actions to ensure our long-term sustainability of our business. More information about our business and our focus on long-term sustainability can be found at [www.teekay.com](http://www.teekay.com).

## Reporting Basis

This report contains standard disclosures from the Global Reporting Initiative (GRI) G4 ‘Core’ guideline. The GRI guidelines are highly recognized and the most commonly used guidelines for sustainability reporting.

## Contact Us

We appreciate your comments, feedback or queries on this publication. Please send them to [\\_QA&HSESingapore@teekay.com](mailto:_QA&HSESingapore@teekay.com). Remember to mark the email “Sustainability Report 2018”. You can visit our website and learn more about us at [www.teekay.com](http://www.teekay.com).

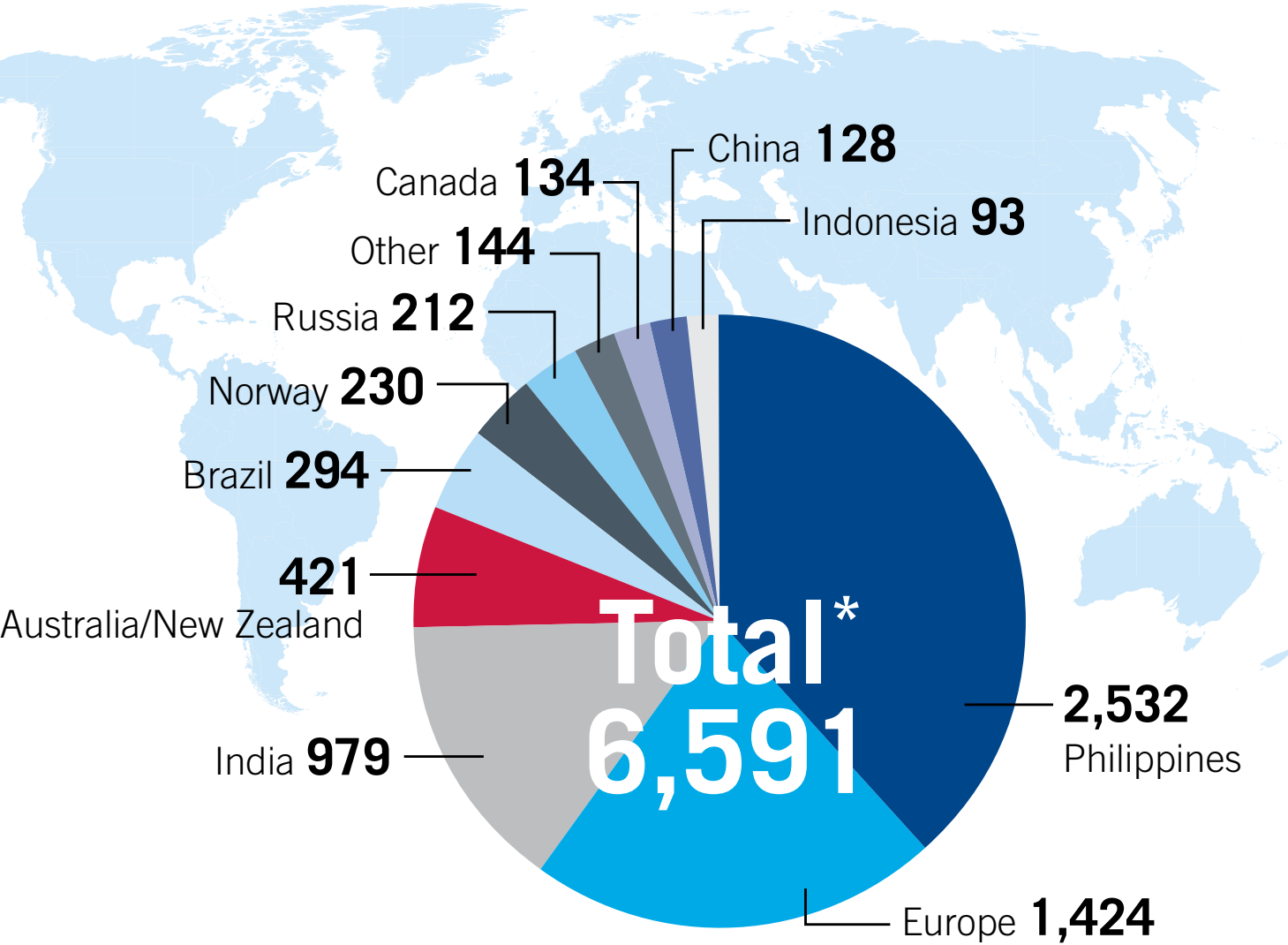




# PEOPLE



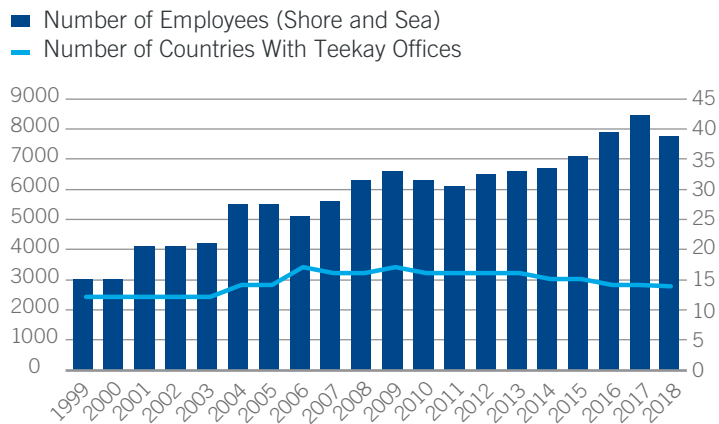
# Breakdown of Seafarers by Nationality



\* Sea Staff of Teekay, including all permanent, active offshore crew and seafarers, not including contractors or riding crew

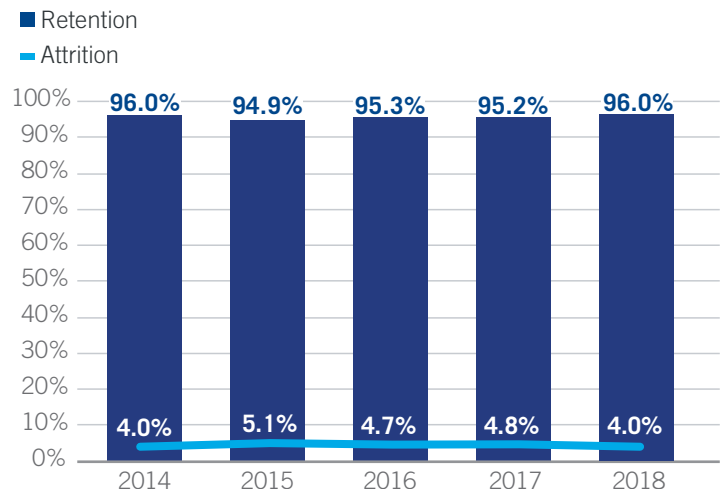


## Growth in Number of Employees and Teekay Offices



These figures are based on Combined Fleet Officer and Rating Voluntary Attrition. These do not include Teekay FPSO fleet figures from Teekay Offshore Production.

## 5-Year "All Fleet" Seafarer Attrition/Retention

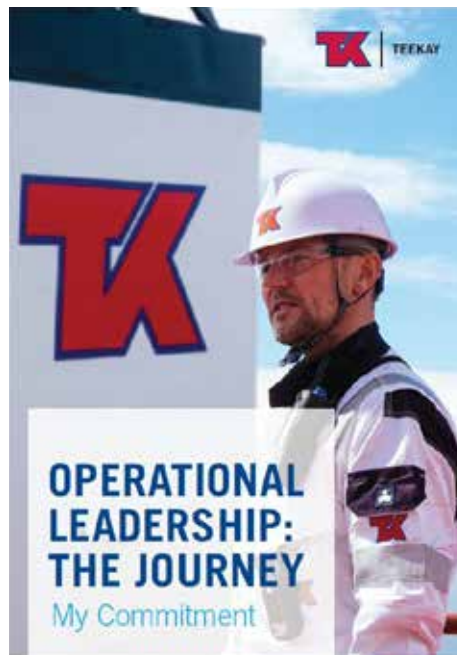


## Recruitment and Growth

Teekay considers human capital as one of the most important and vital parts of our sustainability. The commitment and contribution of our staff is pivotal for us to deliver flawless customer service. A clear career path and opportunities in various roles in the organization makes our retention high compared to industry.

## Operational Leadership: The Journey...

In 1987 our founder, Torben J. Karlshøj, set the company on a journey towards 'Absolute Excellence'. Operational Leadership was established to achieve this. Operational leadership is not just another campaign or program but is a coordinated journey by all people in the company. Our Operational Leadership Handbook was revised in 2018 in line with our value era strategy and the most recent ISO standards, setting a sustainable course for the future. It sets out the expectations for every



employee in the company to follow. The booklet contains Safety commitments, Leadership commitments, Environmental commitments, our HSSE & QA policy, vision and values. The last page of the booklet is required to be signed and witnessed. Making such a commitment to oneself and others helps to produce the safe and effective performance that our customers deserve. All existing employees have made the commitment and new incoming personnel do the same as part of the induction process, ensuring alignment.

## Training and Competence

### New Courses Being Delivered in Ireland

Teekay Gas are investing heavily in their officers' development. With technology in ships advancing rapidly, the training seafarers receive must reflect this. However, Teekay are also advancing their awareness of soft skills and human element training.

The chosen provider for this type of training is the National Maritime College of Ireland in Cork where since 2004, thousands of marine trainees have learnt new skills and advanced their seafaring careers.

The courses are:

- Safe Operations Course – applicable to all officers except Masters and Chief Engineers
- Continual Professional Development – applicable to Masters and Chief Engineers only
- Leadership – applicable to all Officers

Using scenario based practical exercises, these training courses are



Training courses at the National Maritime College of Ireland



designed to help all Officers develop the essential skills to influence and motivate their staff to achieve exceptional performance. Upon completion they should be able to create and maintain an efficient, effective, and motivated team as well as improve communication and decision-making skills.

So far, 54 officers in total have attended the courses, with many more booked to attend throughout 2019.

### TGS Cadet Program

Teekay Gas has always invested in running cadet programs. In previous years, the focus of this program has been mainly in the far east. Due to LNG operations becoming more diversified (Yamal), so must our cadet program.

In 2017, Teekay Gas established a relationship with the National Maritime College of Ireland (NMCI) in Cork and recruited nine Irish cadets – five engine and four deck cadets. These cadets are currently in their final stages of sea time and will be sailing as Junior Officers in 2021.

More recently, Teekay Gas has launched a UK Cadet program in collaboration with Trinity House, a UK charity dedicated to safeguarding shipping and

seafarers, to recruit cadets from across the UK.

Cadets will undertake a three or four year training program which, on successful completion, could lead to a permanent role with Teekay.

The collaboration will be administered by Chiltern Maritime, a cadet management company. Chiltern Maritime will help to administer while cadets gain hands-on experience with Teekay onboard our vessels.

As well as these new cadet programs, Teekay Gas continue to maintain and develop a strong relationship with the Admiral Makarov University in St Petersburg. Within the Teekay Russian cadet program, there are currently thirteen cadets scheduled to complete sea time in 2019.

## Health, Safety, Environment

Teekay strives for zero harm to personnel and to minimize the impact of our operations on the environment. In 2018, detailed reviews of internal processes and procedures where undertaken to simplify, yet strengthen the management system. Improvements made have enabled certification to the updated 9001 (Quality Management Systems), and 14001 (Environmental Management Systems) standards. In addition, the proactive approaches to the management system have led to Teekay being one of the first shipping companies to be certified to the newly released ISO 45001 standard (Occupational Health and Safety

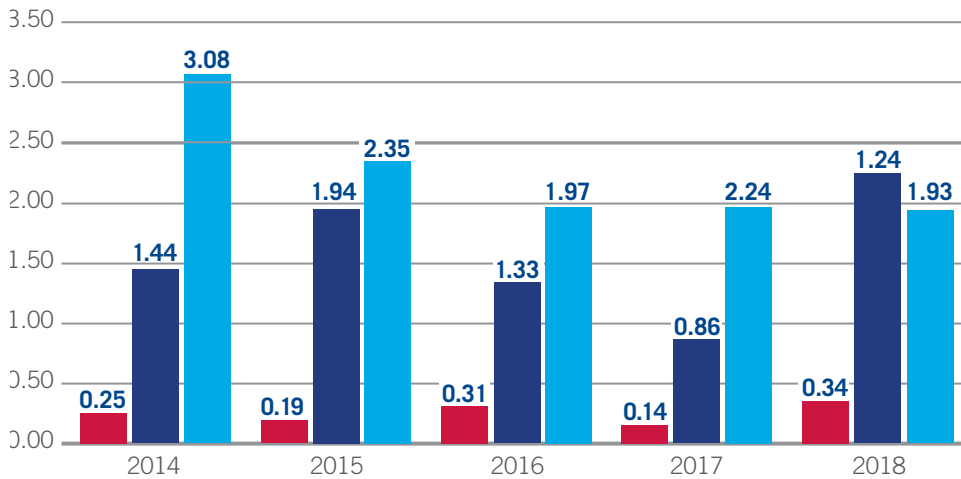


Irish cadets at the National Maritime College of Ireland



## All Fleet LTIF/TRCF/HRCF

■ TRCF = Total Recordable Case Frequency  
 ■ LTIF = Lost Time Injury Frequency  
 ■ HRCF = Health Repatriation Case Frequency



Systems). This standard is important as it encourages worker participation, improved welfare and wellbeing.

Improvements continue to be made across the HSE spectrum as a result of focused programs, campaigns and close interaction internally while participating in industry forums and sharing best practices. While there has been a slight increase in Total Recordable Case Frequency (TRCF) and Lost Time Injury Frequency (LTIF) between 2017 and 2018, the total number of personnel incidents in the fleet has reduced by 5%. The fleet Health Repatriation Case Frequency (HRCF) has reduced from 2.24 to 1.93 and is the lowest figure achieved in Teekay's history. Likewise, from an environmental perspective there has also been a decrease in the total number of Loss of Containment incidents in the year.

## Risk Management Approach

Risk is managed in the organization using a three-tiered approach which accounts for the corporate level, senior management level and operational level. This approach ensures alignment and knowledge sharing throughout the organization. Risk tools are in

place to effectively manage risk at an operational level and the proactive use of leading indicators are used along with statistical historical data to ensure focus is maintained and monitored accordingly with our "plan, do, check, act" philosophy. There is a healthy safety culture in Teekay which is not only related to event reporting. Employees frequently contribute to internal company magazines and industry competitions showcasing their commitment to safety and the talent which exists within the organization.

## Proactive Rest Hour Compliance Using Real Time Face Recognition Technology by Rest Manager

It is a common practice today to document the rest hours once work tasks are completed; meaning that violations are only realized after the fact. Fatigue management is a high priority. To address this, in a collaborative and innovative setting, Teekay Tankers and SeaSolutions have co-created a next generation rest/work management solution "Rest Manager" consisting of four components:

1. A significantly enhanced version of the existing 'Seamanager' solution

2. A new onboard app (e.g. photos, check in/check out) deployed on dedicated Android tablets
3. A new onboard dashboard / decision support tool made visible on Smart TV/ computers
4. A new shore side dashboard consolidating detailed data from all vessels, allowing vessel managers and 3rd parties to monitor the overall fleet situation

Rest Manager gives a holistic view of the rest hour status in real time on board at any given point in time – two hours back to fourteen hours ahead. As well, advanced time adjustment features allow vessel management to plan adjustments to the best possible circadian rhythm.

The overall objectives for the joint endeavors were to:

1. Support proactive compliance with due consideration to operational efficiency, while improving safety of life at sea and minimize losses to property and business
2. Make it easier for seafarers onboard to register their work and rest hour as it happens (instead of waiting to summarise daily activities at the end of each working day or the following days)
3. Allow all onboard to share the most updated status regarding rest/work, as well as supporting and visualizing/ highlighting any needs for potential re-planning of the rest and work schedules

Rest Manager continually and systematically updates live work and rest hour data and checks constantly for compliance in a 5-minute real time cycle (other solutions offer 30-minute intervals). This enables the system to proactively warn of potential non-conformances well in advance for optimal planning for all crew members

onboard. Along with the visual warnings on the Smart TV/computers, email alerts can also be configured.

Rest Manager enables unprecedented decision support for optimal planning of work and rest as well as 'safe call out' time for resting crew members without them violating the rest hour rules. 'Maximum stretch of work' markers are also visible on the onboard dashboard.

Automated features for sending detailed rest/work data registrations from each vessel to the shore side dashboard

allows vessel managers and 3rd party stakeholders to leverage the insights and transparency provided across the fleet, highlighting any crew resource issues.

Personal flexibility is supported for the individual seafarers via 15 minute adjustment features (available on the app) during check in and check out actions; e.g. catering for coffee breaks etc.

After extensive testing on our vessels in 2018, the Rest Manager is being installed on all TNK Vessels in 2019.



2018 Tanker Shipping and Trade Awards

## Awards

We are very proud to have received the following award for the Teekay E-Shuttle in 2018.

### Environmental Award for the E-Shuttle Tanker Concept at the 2018 Tanker Shipping and Trade Awards

The new and innovative shuttle tanker design will significantly reduce emissions and fuel consumption. The 130,000 dwt vessels will operate on both liquefied natural gas (LNG) as the primary fuel, and a mixture of LNG and recovered volatile organic compounds (VOCs) as secondary fuel.

The power distribution system is part of Wärtsilä's Low Loss Hybrid (LLH) system, using batteries to leverage more fuel savings, peak load shaving and added overall system redundancy. In fact, the annual emission reduction potential is estimated at up to 42%, with fuel consumption reduced by up to 22% compared to traditional shuttle tankers.

### Best Employer for Indian Seafarers in LNG segment

Teekay has been awarded as the Best Employer for Indian Seafarers in the LNG segment at the Seajob Anchor Award Ceremony on 16th November 2018.

**sea SOLUTIONS**

**TEEKAY**

Ensure  
you are registered  
with  
Rest Hour Manager  
Application.

**THINGS YOU NEED TO KNOW ABOUT FACE RECOGNITION CHECK IN - CHECK OUT**

Step by Step Instructions for using FACE RECOGNITION - Check IN - Check OUT

- 1 **Open Rest Hour Manager, If not already opened.**
- 2 **Tap on 'Touch here to start' to open the Face Recognition screen.**
- 3 **Keep your face in front of the device.**

Face fits in the focus box ✓  
Ears are visible ✓

Face is far away ✗  
Ears are visible ✓

Face is too close ✗  
Ears are not visible ✗

**The Recommended Distance** to the device is **1 Feet**.
- 4 **Close and Open your Eyes** when the Application prompts you to.
- 5-a **Face Match Found** ✓  
 Do your **Check IN** or **Check OUT**
- 5-b **Face Match Not Found** ✗  
 Retry ← or Login manually using with the **Login ID** and **Password**.  
 And then **Check IN** or **Check OUT**



Seajob Anchor Award Ceremony



It was indeed a proud moment for Teekay. We thank to all the Indian seafarer's who have made this possible and voted for us as the Best Employer for the year 2018.

## Australian Shipping and Maritime Industry Awards 2018

Teekay Australia's Lada Bukharina received a Highly Commended award for Women in Shipping and Maritime Logistics at the 2018 Australian Shipping and Maritime Industry awards, held in Sydney on November 22, 2018.



Lada Bukharina (centre) at 2018 Australian Shipping and Maritime Industry awards

Lada's award was recognition of her exceptional contribution demonstrating outstanding leadership leading to the implementation of sustained improvements in workplace culture, behaviour, outcomes, profitability or productivity.

## Jones F. Devlin Award

Chamber of Shipping of America (CSA) has presented the Jones F. Devlin Award to 108 of our vessels.

The award publicly recognizes the skills and dedication of the men and women who are responsible for safe vessel operations. Devlin Award Certificates are awarded to all manned merchant vessels that have operated for two full years or more without a crew member losing a full turn at watch because of an occupational injury.

We are pleased to see that ongoing efforts to uphold our operational excellence standards are recognized. However, what's more important for us is ensuring our seafarers are going home to their families safely.

As stated in the certificate, "These one hundred and eight vessels operated a total of seven hundred and one years with no lost-time-injuries".

## Diversity

As an international company, Teekay Corporation puts emphasis on a diverse workforce and inclusion in the global workplace. Diversity is a key driver of innovation and success on a global scale. We recognize a varied set of experiences, perspectives, cultural backgrounds and are proactive in promoting equal career advancement opportunity for all our employees. Teekay has no tolerance for discrimination and unfair acts in either shore or offshore workplaces.

## Corporate Social Responsibility

Our customers, employees, partners, the environment and local communities are all affected by our operations and activities. We believe that the hallmark of a truly sustainable company is the way we interact with its stakeholders and the communities in which we operate.

It's no secret that Teekay employees spend many hours volunteering with charities and raising funds for great causes. We do this with one goal in mind – to give back to the community and make a difference. Some of our favorite moments this year include:





Teekay Singapore's Family Kayak Clean Up in the marine reservoirs

## CSR Teekay Singapore

Teekay Singapore's Corporate Social Responsibility for 2018 continued to gain traction with our traditional activities.

We welcomed 2018 with our crowd-favourite Breakfast Fund Raiser with the chefs not limited to management nor specific departments only. Everyone in the Social Committee, regardless of designation was able to whip up delicious breakfast treats shared by the entire Singapore office. Sharing a meal for a good cause has, and will always be a TK staple.

Another familiar donation drive, Soles4Souls Shoe Drive was initiated, garnering more shoe donations than we normally anticipated. And

if material and monetary donations may be the conventional expectation, in TK Singapore, we equally and sometimes even prefer donating one's time. For a second year in a row, our Family Kayak Clean Up in the Marine Reservoir created awareness, fostered camaraderie, and built strong family relations while making a dent in the local community.

2018 may not be a year of firsts for TK Singapore's CSR activities, but we sure kept the fire of giving burning all year round.

## CSR Teekay Glasgow

During 2018, Teekay Glasgow helped a number of local and larger organizations with donations and gifts.

These included:

- 2018 Christmas Gift Appeal for the Glasgow Social Work Department – staff purchased 60 gifts for deprived children in the Glasgow area
- The annual Christmas raffle raised £400 for Save the Children
- Trussell Trust Foodbank collection
- Four employees (Ashley Lynn, Jenna Hardie, Wendy Clark and Charlotte Moon) successfully completed a 10k race in aid of Cancer Research
- CPR training for 15 employees
- Royal Navy Officers used our training center to carry out a training session put together and administered by our Training Center Manager John Williams

In addition, donations have been made to:

- St Andrews Primary School
- Addaction Mental Health Awareness
- MND Scotland
- Nautical Welfare Society
- Ellen MacArthur Cancer Trust
- Marie Curie Cancer Care
- Multiple Sclerosis Society
- Powerhouse
- Celtic Foundation
- Scottish Shipping Benevolent Association



2018 Christmas Gift Appeal for the Glasgow Social Work Department



Teekay Glasgow's employees completed a 10k race in aid of Cancer Research



Teekay Manila's partnership with Caritas Manila

## Teekay Manila

The Manila office had a partnership with Caritas Manila, a non-profit organization that focuses on total human development, poverty alleviation and bringing communities together. In line with Caritas Manila's Rebuild Marawi project, we "adopted a community" in the provinces of Lanao Del Norte and Lanao Del Sur in Mindanao.

As a background, the province of Marawi was the center of armed conflict in Mindanao. Although the Marawi siege ended in November 2017, efforts are still ongoing to help families recover and to rehabilitate communities.

Our donations have aided six months of psychosocial intervention for adults to reintegrate them into society and alleviate the trauma of war. This has benefitted around 2,000 families. Part of the program also provided shelter to displaced families, organizing Youth Advocates for Peace, promoting a self-help group for women and building a Multi-purpose Learning & Peace Center.

Our cash donation was made possible by our employees who willingly participated and gave their highest bids for the purchase of old laptops. A portion of the donation was also from our company teambuilding budget.

## Tall Ships Races 2018

In 2018 Teekay once again participated in the Tall Ships Races with S/Y "Stina Mari", the gem and pride of the Teekay Stavanger Office. The "Stina Mari" is a beautiful Colin Archer designed sailing yacht.

The Tall Ships Races is an annual regatta organized by Sail Training International consisting of 130+ vessels and 7000+ trainees whom can sail onboard these. Part of the TSR idea is to introduce and educate young people to the sea-life. 50% of the crew onboard must be between the age 15 and 25 giving them an exciting sea breeze experience for life.

In 2007, STI were even honored to be nominated for the Nobel Peace Prize for the exemplary work they are doing for bridging the gaps between old and young, cultures from afar and cultures from near, all in the spirit of promoting camaraderie and teamwork onboard these old sail ships.

"Stina Mari" took home 3rd place in our class in the race leg from Sunderland



Teekay's participant in the Tall Ships Races, S/Y "Stina Mari"





Megellan Spirit

(UK) to Esbjerg (DK). This year's Stina Mari Crew consisted of office staff from Norway and UK, cadettes from our vessels, children of our coworkers and a few other youths whom were lucky enough to partake in this adventure.

## Teekay SPIRIT in Action

### Surfers in Distress

Upon receiving the request from the Canadian Coast Guard to rescue two surfers in distress off the coast of St. Vincent's in Newfoundland & Labrador, Canada, the Fast Rescue Craft (FRC)

of the Beothuk Spirit was immediately deployed from St. Mary's Bay with three crew onboard, two hours before sunset.

The weather was fierce, in the aftermath of Hurricane Michael, with winds gusting up to 100 km/h.

After a 15 NM transit, the FRC crew was able to rescue one of the surfers. The other surfer had managed to get to land unaided. The crew then landed at Admiral's Beach, where an ambulance was waiting to support the stricken surfer.

All Teekay seafarers abide by the code of the sea, to help those in need. The quick deployment of the FRC and the

brave, strong seafaring skills of the crew drew praise from onlookers.

### Emergency Bunkering in The Atlantic

On November 12, 2018, Magellan Spirit received a message on SAT-C from MRCC Delgada, Azores Portugal asking to assist a sailing vessel in distress. The mast and VHS antenna were broken, and the vessel needed 150 litres of diesel to reach the Canary Islands in a safe condition.

Following a meeting with the seniors onboard, contact was made with the sailing vessel and was informed that there was only one man onboard who was taking part in a race between Saint Malo, Brittany, France and Pointe-à-Pitre, Guadeloupe. This race occurs once every 4 years. After verifying the sailing vessel's information and assessing the risk to transfer diesel to the sailing vessel, Megallen Spirit received approval to altered course to rendezvous with the distressed vessel.

Upon reaching the distressed vessel, the diesel was successfully transferred to the sailor and he made his way to Canary Islands safely.



Beothuk Spirit



# PLANET

We are committed to minimizing our environmental impact by implementing environmentally sound initiatives in our vessels and offices. Our Environmental Leadership Program ensures the correct focus is maintained by all employees. Part of the program is an environmental Leadership commitment to protect the environment and comply with environmental regulations.

All vessels operated under our Integrated Management System comply with the International Safety management code, ISO 9001 (Quality Management), ISO 14001 (Environmental Management), ISO 45001 (Occupational Health and Safety Management) and the Maritime Labour Convention. Close monitoring of upcoming legislation, participation in industry forums and proactive environmental

initiatives has ensured compliance with Environmental Regulations such as EU MRV and IMO DCS.

Today, our commitment to environmental responsibility is well integrated into our management systems and operational leadership commitments.



# Climate Change

Over the last decade we have witnessed changes to our weather conditions with patterns becoming more unpredictable. The polar ice caps are melting, resulting in accelerating rises in sea levels and water temperature, while there has also been an escalation in the number of superstorms, and other extreme weather phenomena leading to human fatalities and the degradation of ecosystems. Climatic change is undoubtedly one of the most daunting challenges facing society at this time.

The shipping industry has come a long way in combating climate change. New regulations have come into force to monitor and reduce carbon footprints from vessels and from January 1, 2020, global sulphur limits for fuel used on board will be reduced to 0.50%. Industry bodies are looking further ahead with targets put in place through

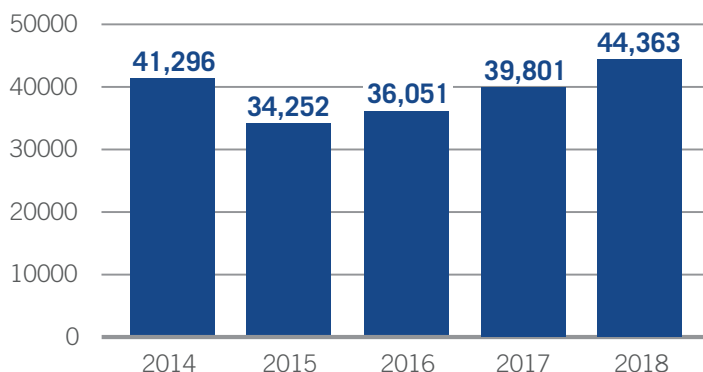
to the year 2050. Teekay has developed its own Environmental Strategy to ensure our ecological footprint remains low compared to other shipping companies. Our Safety Management System also has various procedures in place to ensure our environmental aspects are identified and potential impacts are assessed and mitigated.

On July 2, 2018 the steel cutting ceremony for Teekay Offshore's first of four E-Shuttle Tankers took place. The vessels are intended for operations in the North Sea and the new and innovative design will significantly reduce emissions and fuel consumption. These 130,000 DWT vessels will operate on both liquified natural gas (LNG) as the primary fuel and a mixture of LNG and recovered volatile organic compounds (VOC's) as secondary fuel.

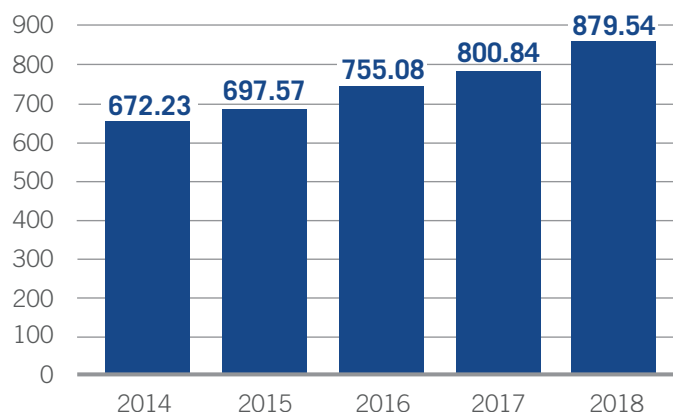
While efforts to reduce environmental impacts have been made, there have

been significant changes to Teekay's fleet composition in 2018 which has led to a relative increase in CO<sub>2</sub>, EEOI and NO<sub>x</sub> emissions over the past year. In 2018 the last of our bulk carrier vessels left the fleet resulting in a significant reduction in ton miles, as these vessels typically carried high tonnage cargo over long distances and were able to back load other bulk cargoes for a return voyage resulting in short ballast legs. While the bulk vessels were phased out, Teekay also brought in a number of new gas vessels into the fleet which typically have larger EEOIs. New build vessels also have significant initial ballast voyages on fuel oil prior to trading and there was an increase in time charters during 2018 which can also have an impact on the length of ballast voyages. This combination of factors has resulted in an increase in EEOI from 12.44 to 17.14 and in CO<sub>2</sub>, from 5,054,713.90 MT to 5,279,232.86 MT, between 2017 and 2018.

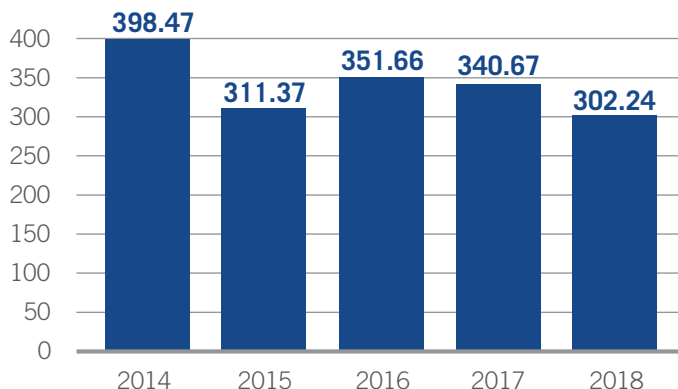
**Greenhouse Gases (metric tonnes CO<sub>2</sub> - eq.) Average Per Vessel**



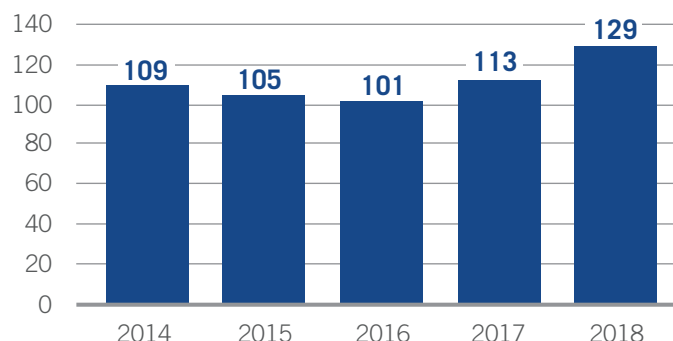
**Nitrogen Oxides NO<sub>x</sub> & Nitrous Oxides N<sub>2</sub>O (metric tonnes) Average Per Vessel**



**Sulphur Oxides (metric tonnes) Average Per Vessel**



**Total Vessel Waste Generated (m<sup>3</sup>) Average Per Vessel**





Engine design is one of the main factors affecting the quantity of NOx being produced. While regulations have seen improvements to engine design, factors such as temperature and higher combustion pressures can increase NOx. LNG vessel engines often have higher combustion pressures than other vessel types or those which use propulsion mediums such as steam. The change in fleet composition has therefore also been a factor in the increase of NOx over the past 4 years, a trend which continued between 2017 and 2018, with our NOx emissions increasing from 101,706.25 MT to 104,665.07 MT.

SOx emissions closely corresponds to the quantity of sulphur in the fuel and with a focus on utilizing low sulphur fuels, our SOx emissions have reduced to 35,966.93 MT in 2018 as compared to 43,264.61 MT in 2017, a reduction of 17%.

## Supporting Sustainable Ship Recycling

### Living Our Core Value of Safety and Sustainability Through All Stages of Our Vessels' Lifecycles

After decades of sailing the seas, at the end of their life, ships are recycled – the vessel is dismantled, and steel and other valuable materials are recycled. It is the most responsible way of disposing of a vessel, since almost every part of the ship is reused.

However, if not done responsibly, the process can be dangerous for people and damaging to the environment. Therefore, in 2009, the IMO adopted the “Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships”, which ensures that health, safety, and environmental risks



Teekay employee providing HSE skills training

are minimized as much as possible throughout every part of the recycling process. Not only do we support the Hong Kong Convention – but we believe more can be done.

We have developed and adopted a stringent process for ship recycling that goes above and beyond the Hong Kong Convention and by being directly involved on-the-ground we ensure this standard is met when recycling our vessels.

Since 2017, Teekay has recycled four vessels in India, all at recycling facilities that have been verified to be in compliance with the Hong Kong Convention. Before selecting these facilities, we audited the yards to ensure they could meet our strict standards. In addition, throughout the recycling process, which typically takes



Routine inspection conducted at the recycling yard

The safety and sustainability of the ship recycling process deserves the attention of the marine industry. As an industry we must drive and support the raising of standards globally by raising the safety and sustainability bar to the same level we have achieved in the other stages of a ship's lifecycle – shipbuilding and ship operations, which many of us have focused on intensely as responsible shipowners over the past decades. Teekay is committed to be a part of the solution, and we support the SRTI work underway.

— Kenneth Hvid, CEO  
Teekay Corporation

about 6-8 months, our staff continually monitor HSEQ performance and visit regularly to perform inspections and provide skills training to increase the safety and sustainability performance of the yard. The next step is to increase transparency and elevate standards throughout the industry.

More than 70% of the world's ship recycling occurs in three countries – India, Bangladesh, and Pakistan – and conditions can vary widely from yard to yard.

To drive change, we are now joining with other major maritime players in supporting the Ship Recycling Transparency Initiative (SRTI). The vision of the SRTI is of a world where ships are recycled responsibly – socially, environmentally and economically – going beyond international conventions and setting a new norm for responsible ship recycling.

We are the eighth leading ship owner to join the SRTI. We are committed to be a part of the solution, and we encourage participation from all members of the maritime industry. With proper commitment and engagement, we believe responsible ship recycling is achievable.

## Innovation, Technology and Projects

### Variable Frequency Drive

A Variable Frequency Drive (VFD) is a type of motor controller that drives an electric motor by varying the frequency and voltage supplied. Other names for a VFD are variable speed drive, adjustable speed drive, adjustable frequency drive, AC drive, microdrive, and inverter.



ER fans frequency controllers

As per class rules, system/equipment onboard (eg: engine room ventilation fan/cooling water system) are designed to be able to operate at 100% load condition. Based on these criteria, the capacity of motors installed onboard are of the 100% capacity. However, due to the operating mode and trade of the vessel, its equipment & system hardly operate above 50% load most of the time.

Frequency (hertz) is directly related to the motor's speed (RPM). The higher the frequency, the faster the RPM go. If the system is not operating at full load, the VFD can regulate down the motor's speed to meet the required demand load. As the system requirements change depending on the vessel activities (anchor, slow steaming, loading, discharge, etc.), the VFD can simply turn up or down the motor speed to meet the system requirement.

By having VFD installed, the motors can operate at a lower capacity which equate to less energy required. This directly translates to lower power requirement and, as a result, achieves fuel saving. Based on the trial data, an average of 0.5MT/vessel of fuel savings per day (equivalent to 1,557,000 grams of CO<sub>2</sub> emission reduced/ day/ vessel) can be achieved by installing the VFD

on 04 Nos. of Engine Room Ventilation Fan & 02 Nos. of Main Cooling Sea Water Pump.

Following the successful trial results in 2018, Teekay Tankers fleet will be rolling out the VFD installation on 29 more vessels in 2019, as part of the initiatives to reduce the carbon footprint (estimated 16,480,845 Kg of CO<sub>2</sub> emissions per year).

### High Performance Paint (Reduction on Hull Resistance)

Teekay is on a journey to reduce their carbon impact and care for the marine environment. In 2014, the fleet embarked on the upgrade of the hull coating system to a high-performance silicone paint. The product is an advanced fouling control coating with high solids content based on silicone technology. It provides a smooth, low surface energy, repellent surface. A hydro gel micro layer prevents fouling organisms firmly adhering while the silicone polymers facilitate self-cleaning. It therefore possesses a high fuel saving potential and is especially suitable for vessels operating with long service intervals and/or very long idle periods or in warm waters.





High performance coating applied during drydock

The high-performance paint systems are able to reduce the fuel consumption by 5% which positively reduce the carbon emissions.

As of 2018, we have 88% of the tanker fleet and 67% of the gas fleet coated with high performance paint systems.

## Reducing Underwater Noise

The smooth silicone polymers reduces the resistance of the hull that cuts through the water. This indirectly reduces the underwater noise created, which reduces the adverse impacts on marine life. Much, if not most, of the underwater noise is caused by propeller cavitation (the formation and implosion

of water vapor cavities caused by the decrease and increase in pressure as water moves across a propeller blade. Cavitation causes broadband noise and discrete peaks at harmonics of the blade passage frequency in the underwater noise spectrum.

Further to the silicone paint smoothness, we embarked on the initiative to install the Mewis Duct and Propeller Boss Cap Fin (PBCF) to reduce the underwater noise as well as fuel consumption.

The PBCF is an energy-saving device attached to the propeller of a vessel. It breaks up the hub vortex generated behind the rotating propeller, resulting in a decrease of more than 9,000 tons

of CO<sub>2</sub> emissions per year because of a 3-5% reduction in fuel consumption as well as 5 decibel (dB) underwater noise.

The Mewis Duct straightens and accelerates the hull wake into the propeller and also produces a net forward thrust. The fin system provides a pre-swirl to the ship wake which reduces losses in the propeller slipstream, resulting in an increase in propeller thrust at a given propulsive power. The power savings attainable from the Mewis Duct are strongly dependent on propeller thrust loading, from 3 to 8% depending on individual hull/propeller interaction. The power savings are virtually independent of ship speed.

The enhancements reduce the fuel consumption and carbon emissions. As of 2018, the Teekay fleet have 21 vessels fitted with Mewis ducts & 26 vessels fitted with propeller boss cap fins (PBCF).

## E-Shuttle Tankers

When Teekay Offshore embarked on a fleet renewal program back in 2016, we saw the importance of building vessels which will maintain their relevance throughout their 20+ year lifespan. The technological advances seen today are progressing at a rate many times faster than what we have seen over the last 20 years. Therefore, to safeguard the substantial investments newbuild shuttle tankers represent, we decided to turn every stone in coming up with the most future-proof design available.

Shuttle tankers are transporting crude oil from oil fields which are not connected to land via pipelines. Therefore, they have state of the art bow loading systems and dynamic positioning (IMO DP 2 type) allowing for safe loading of the vessel offshore in harsh weather in close proximity to the offshore installations. The crude is then





Teekay's E-Shuttle Tanker

transported and offloaded to crude oil terminals in the market.

Crude oil vapors or Volatile Organic Compound (VOC) reduction is required by the Norwegian Environmental Agency from the offshore loaded oil fields. This means that shuttle tankers trading on the Norwegian Continental Shelf will have VOC reduction technologies installed. This was also part of the design parameters for these vessels.

The large electrical power demand required during DP, the varied operational profile (DP, short transits, frequent loading/discharging, etc.) and

availability of condensed VOC were the key drivers in landing on a design with the following key features:

- Gas/diesel electric propulsion and power generation – flexibility in all operational modes
- LNG as main fuel with MGO as backup – future proof fuel, and fuel flexibility
- Gas turbines for burning uncondensed VOC – energy efficient utilization of surplus gas during loading
- Possibility to mix LNG and VOC as fuel – turning emissions into fuel

- Battery hybrid installation – peakshaving, storage of surplus energy, DP enhancement

This innovative design is what we call a revolution rather than the conventional design evolution we have seen with shuttle tanker design in recent history, and this has led to a design with CO<sub>2</sub> reduction of up to 42% compared to conventional newbuild technology, and even 50% when compared to the last series we built for the North Sea in 2010/2011.



# Overview of Targets and Progress – 4 Key Focus Areas

## PEOPLE

### Ambition

- We have a global leadership standard that is understood and demonstrated across the organization. We believe “Everyone is a Leader”. We’re all responsible for Doing the Right Thing, Creating Connections, and Delivering Results. In doing this, we’re in a better position to amplify our collective success because we know results happen through people.
- Improve the social climate interaction and well-being onboard our vessels

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### 2018 Target

- All shore employees have awareness about the Everyone is a Leader Value Era Program and set an individual leadership goal
- KPI: Year-end poll to employees will be conducted to determine results
- SLT complete a leadership 360 assessment and develop an action plan
- KPI: 360 assessments completed, and action plans developed
- Pilot the Everyone is a Leader program at a seafarer’s conference
- KPI: Pilot delivered at one Seafarers Conference, at minimum
- Assess social climate interaction and well-being in the fleets
- KPI: Establish social climate interaction and well-being onboard vessels
- Establish new Employee Assistance Programme for fleets

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### Progress in 2018 – All targets are met

- Organized several campaigns throughout the year to drive program awareness (culture survey, leadership, videos, yammer discussions, open house events, team building activities, town halls, leadership pilot workshops)
- Developed a new set of Teekay Leadership Commitments based on employee feedback
- Year-end poll positively determined campaign efforts drove employee awareness and employees set a leadership goal.
- All SLT completed a 360 assessment, received their results and created individual development plans
- SLT share insights and learning with their respective teams
- Pilot delivered at Australia conference in September 2018 (Sydney)
- New Employee Assistance Programme in place with ISWAN and communicated to fleets.

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### 2019 Target / Actions

- All shore employees are introduced to Teekay’s Leadership Commitments by attending an “Everyone is a Leader” foundational workshop
  - KPI: At least 80% of employees attend a workshop
  - Employees utilize the Mindmarker digital reinforcement tool to support understanding of the Teekay Leadership Commitments
  - KPI: All employees who attend the EIAL foundational workshop, complete all self-guided exercises
  - All employees select at least one of the Teekay Leadership Commitments as a developmental goal on their 2019 performance development plans
  - KPI: Poll employees to determine which leadership commitment they selected
  - Continue to introduce the Teekay Leadership Commitments at Seafarers Conferences
  - KPI: Delivered at one Seafarers conference, at minimum
  - Increase awareness on Mental Health and well-being onboard our vessels focusing on 6 key areas.
-

## SAFETY (PERSONAL & PROCESS)

**Ambition** – Achieve our HSSE & Q Policy

- Prevent injury, ill health and harm to people by eliminating hazards, reducing HSSE and QA risks and holding Health and Safety as our first priority
- Strive for zero spills and minimize emissions that impact the environment

**2018 Target** – TRCF Target 0.85

- ISO 45001/2018 Review procedures for preparation to achieve certification.
- Operational Leadership: Analysis and review of handbook and statistics to release reinvigorated handbook to employees.

**Progress in 2018** – Targets 2 & 3 achieved, Target 1 not met, TRCF 0.85 achieved 1.24

- Increased number of Onboard Safety Officers Course, Safety Management Courses and Leadership courses
- Establish and amend procedures/policies to meet the ISO 45001/2018 requirements, offices were trained and audited to achieve certification
- Operational Leadership Handbook reviewed, photograph competition held to ensure worker participation in the look and feel

### 2019 Target / Actions

- Aim for TRCF 0.85 or less
- Action: Roll out of Operational Leadership to fleets
- Upgrade Cause Analysis Tools and Management System including event recording and trending

## EMISSIONS

**Ambition** – Decarbonize our operations. Meet IMO long-term ambition

- 40% reduction per transport work by 2030 (compared to 2008)
- 70% per transport work by 2050 (compared 2008)

**2018 Target** – Compliance towards the environmental legislations; EU MRV & IMO DCS

**Progress in 2018** – All targets are met

- IMO 2020 strategy
- E-shuttle orders
- Meeting IMO and EU MRV targets
- Mental health awareness programme introduced in quarterly *The Standard* edition
- Fuel optimization by introducing high performance paint

### 2019 Target / Actions

- Prepare fleet for IMO 2020
- Fuel optimization: fit vessels with Propeller Boss Cap Fin (PBCF) and High Performance Coating
- Develop long-term scenario / plan to reach 2030 target
- Project Acer

## SHIP RECYCLING

**Ambition** – Demonstrate leadership and promote responsible ship recycling practices in the industry. Work to achieve a level of safety and sustainability on the same level as in the other stages of a ship's lifecycle – shipbuilding and ship operations

**2018 Target** – Implement and communicate new groupwide recycling policy

**Progress in 2018** – All targets are met

- Policy done
- Joined SRTI
- Implemented 3rd party inspection – LR. Maintaining Name, Flag, Class

### 2019 Target / Actions

- Work with industry partners to assess and address gaps in Alang noted in EU / DNV inspections
- Work towards Alang yards being accepted





# SUPPLY CHAIN MANAGEMENT

Teekay recognizes the importance of logistics activities in the maritime transport sector. With the support from the transportation of materials such as fuel, spare parts and chemicals, it drives the logistics activities and boost the entire maritime supply chain. Our key suppliers and service providers were located around the world, transporting parts and finished goods on a global scale, boosting interconnectivity of supply chain and enhancing Teekay's network connectivity.

Teekay's vendors and suppliers were selected with an appropriate level of scrutiny based on our management system and procedures. We aim for continuous improvement and ensure evaluation of existing vendors comply with procedures of company's Safety and Quality Management System.



# ETHICAL BUSINESS CONDUCT

At Teekay we are committed to the highest standards of professional conduct. Our Standards of Business Conduct Policy is a valuable tool helping us to meet this commitment.

All onshore employees are required to complete an online anti-corruption e-learning course to ensure that they are familiar with the policy and anti-corruption laws. We also conduct regular Doing Business with Integrity training.

In recent years, we have observed that many companies face serious challenges from illegal, unethical and dishonest behavior – behavior that can damage a company's reputation and put its future at risk. At Teekay we ensure that all employees are committed to ethical business practices and preserving our culture of honesty, integrity and trust. We also want our third-party suppliers and service providers to act ethically. We conduct risk-based integrity due diligence before engaging key suppliers/service providers.





**Torben Karlshøj**

Teekay Founder





TEEKAY

[www.teekay.com](http://www.teekay.com)

BRINGING ENERGY TO THE WORLD WITH TEEKAY SPIRIT

