Solvang ASA

CUTTING EDGE SUSTAINABLE SHIPPING

ANNUAL REPORT 2023

Contents

Letter from CEO Edvin Endresen

Dear reader

Our position is strong, and all our shipping segments show significant growth potential.

I am pleased to present our annual report for 2023, including a comprehensive ESG report. We hope it makes for interesting and informative reading.

Another strong and busy year has passed by for Solvang. A year with good earnings and active market in all segments. We had numerous retrofits and modifications to ensure compliance with future regulations, we finally received funding for our CCS pilot project, and last but not least, we did a significant investment in newbuilds.

Although net earnings are somewhat down from 2022, the underlying operational results in 2023 are even stronger than for the record year 2022, which had exceptional financial gains. Our position is strong, and all our shipping segments show significant growth potential.

2023 was a busy year in terms of dry-docking, where all vessels in scheduled dry-dock were significantly upgraded to comply with existing and future regulations. In the ESG report, you will read about some of Solvang's older vessels now performing better than when they were new.

Another win in 2023 was the award of funding from Norwegian government's Climate and Energy Fund for the CCS pilot project. This will enable us to install the first carbon capture system onboard a vessel. The retrofit is scheduled for Q3 2024. Very exciting, and this could certainly be a game-changer for the industry.
We are also very proud of the new long-term contracts won during 2023, where an order of no less than seven VLGC newbuilds has been placed. The newbuilds are 88.000 cbm panamax VLGCs, all equipped with complete exhaust cleaning system, water cleaning, EGR for NOx removal and ready for CCS. Truly the potential to be the next-generation VLGCs. Read more about the newbuilds in the annual report.

I would also like to express my gratitude towards our employees, who have persevered through challenging times and remained committed to our company's success. The dedication and hard work we see every day, is what allows us to continue to drive for outstanding performance and aim for our vision to be the leading provider of LPG and petrochemical tonnage.

Looking ahead, we stand on firm ground and are very excited about the opportunities that lie before us. We trust that our company's operational model will drive us towards continued success in the years to come, and we stay committed to creating long-term value for all our stakeholders.

Highlights Solvang 2023

Year of ECO upgrades and dry-dockings
Read more on pages 38-39

According to scheduled classing and certification, 11 vessels were dry-docked in 2023.

All vessels achieved EEXI certification.
- Full drivetrain optimization (4 vessels)
- Sandblasting + anti-fouling hull (11 vessels)
- Mewis Ducts (9 vessels)
- All vessels have installed EPL (engine power limitation)

78 MNOK granted to OCCS
Read more on page 35

Solvang was awarded 78 million NOK from the Norwegian government body Enova, to install the world's first onboard carbon capture and storage system onboard gas carrier Clipper Eris. Wärtsilä Moss provides technology, which is set to capture over 70 % of carbon emissions from the main engine outlets.

Newbuilds ordered
Read more on page 36

In 2023, Solvang ordered 5+2 new 88,000cbm LPG Panamax carriers, from Hyundai Heavy Industries. Five orders were placed by a newly formed joint venture with Gunvor Group Ltd, on long-time charters, while two newbuilds were ordered from Solvang, on long-time charter with another customer. The vessels are scheduled for delivery between July 2026 and June 2027.

OUR MISSION STATEMENT

Solvang aims to be an industry-leading provider of LPG and petrochemical tonnage to our clients in the safest, cleanest and most cost-effective manner.

Expands supply chain management

Read more on page 62

In 2023, Solvang's main office in Stavanger hired two new supply chain officers, substantially expanding the company's capacity to safeguard and optimize purchases throughout the operation. Supply chain manager Tanja Hunshamar Øvrebø continues to head the purchases division.

SIRE 2.0: Upgrading the vetting framework

Read more on page 63

At the turn of the year, Solvang carried out test inspections under the Ship Inspection Report Programme 2.0. Solvang expects the features of dynamic questionnaires and cloud-stored observations to enhance transparency and accessibility of inspections.

Stop punishing the ship for port failures

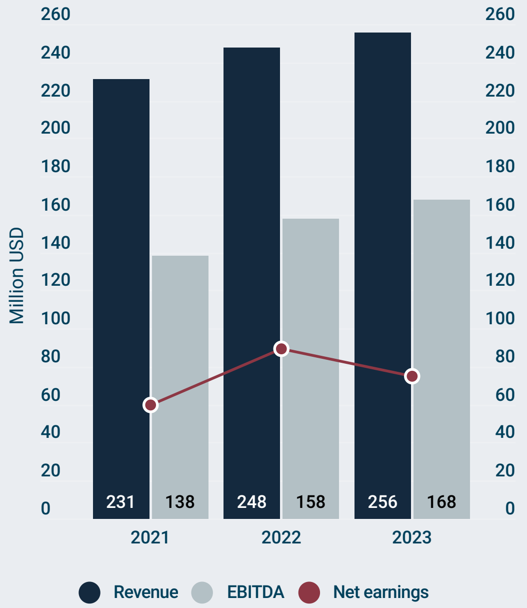
Read more on page 33

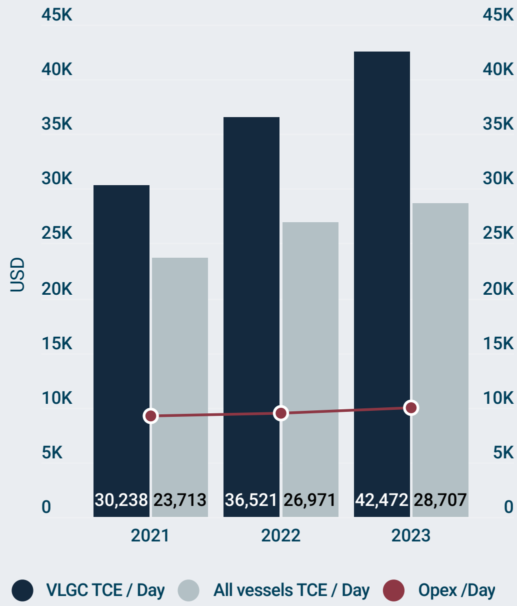
IMO's Annual Efficiency Ratio (AER) indexes a ship's carbon rating based on voyage-specific emissions. But if the vessel idles at port due to handling inefficiencies, emissions should stop counting - or be reassigned into port's emissions responsibility.

Financial key figures 2023

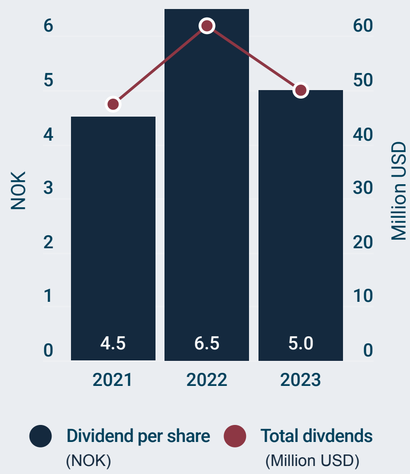
Revenue	256 million USD
EBITDA	168 million USD
Net earnings	75 million USD

VLGC TCE / Day	42 472 USD
All vessels TCE / Day	28 707 USD
Opex / Day	9 959 USD

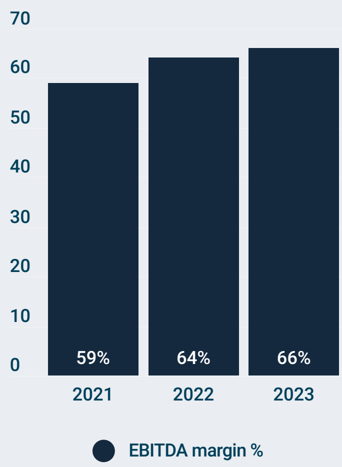




Dividends

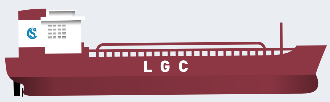


EBITDA margin %

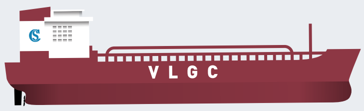


23 vessels

8 Semi-refrigerated Ethylene Carriers



9 Large Gas Carriers

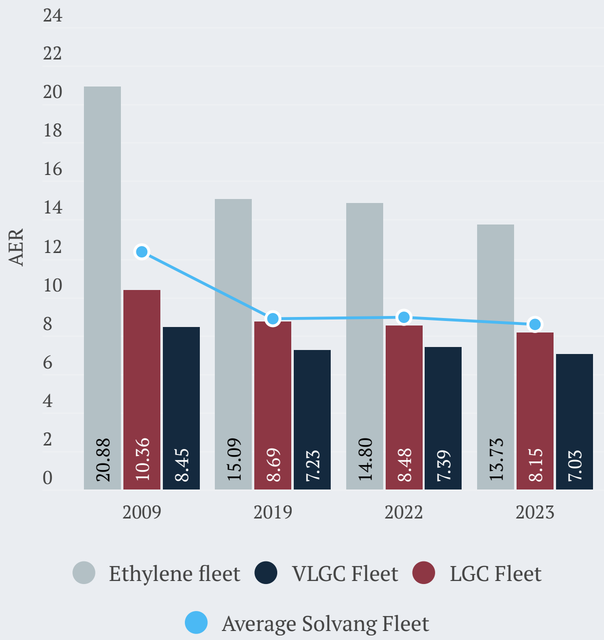


6 Very Large Gas Carriers

ESG key figures 2023

Environment

The Annual Efficiency Ratio (AER)



The average AER for the Solvang fleet and for the vessel groups has been recalculated in 2023. By using weighted average for transport work (dead weight * sailed distance), we get a better picture of the actual AER for the fleet.

AER reduction 2009 - 2023:

Ethylene Fleet	34 %
VLGC Fleet	17 %
LGC Fleet	21 %
Total Fleet	30 %

Fuel consumed

Bunker fuel	202,450 tonnes
Lube oil	1.43 million litres

Emissions

CO_2	633,475 tonnes
SO_X	895 tonnes
NO_X	12,978 tonnes

89 %

SO_X reduction since 2019

Governance

Operating hours

Main engines	131,622 hours
Auxiliary engines	293,024 hours
Boilers	24,946 hours

1 oilspill since 2009

128,871 maintenance tasks

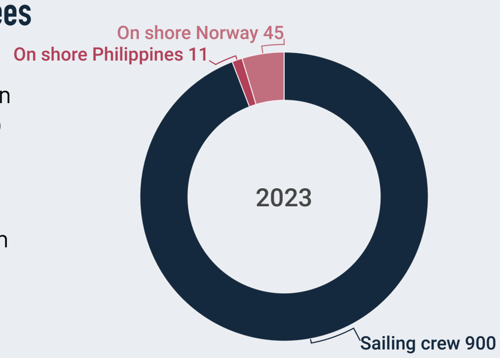
0.605 % of which were overdue. The best score in TMSA is less than 1 %

693.6 days of operation in Particularly Sensitive Sea Areas (PSSA) in 2023

Social

Employees

Norwegian
Philippino
Latvian
Russian
Ukrainian
Belarusian
Spanish
Polish

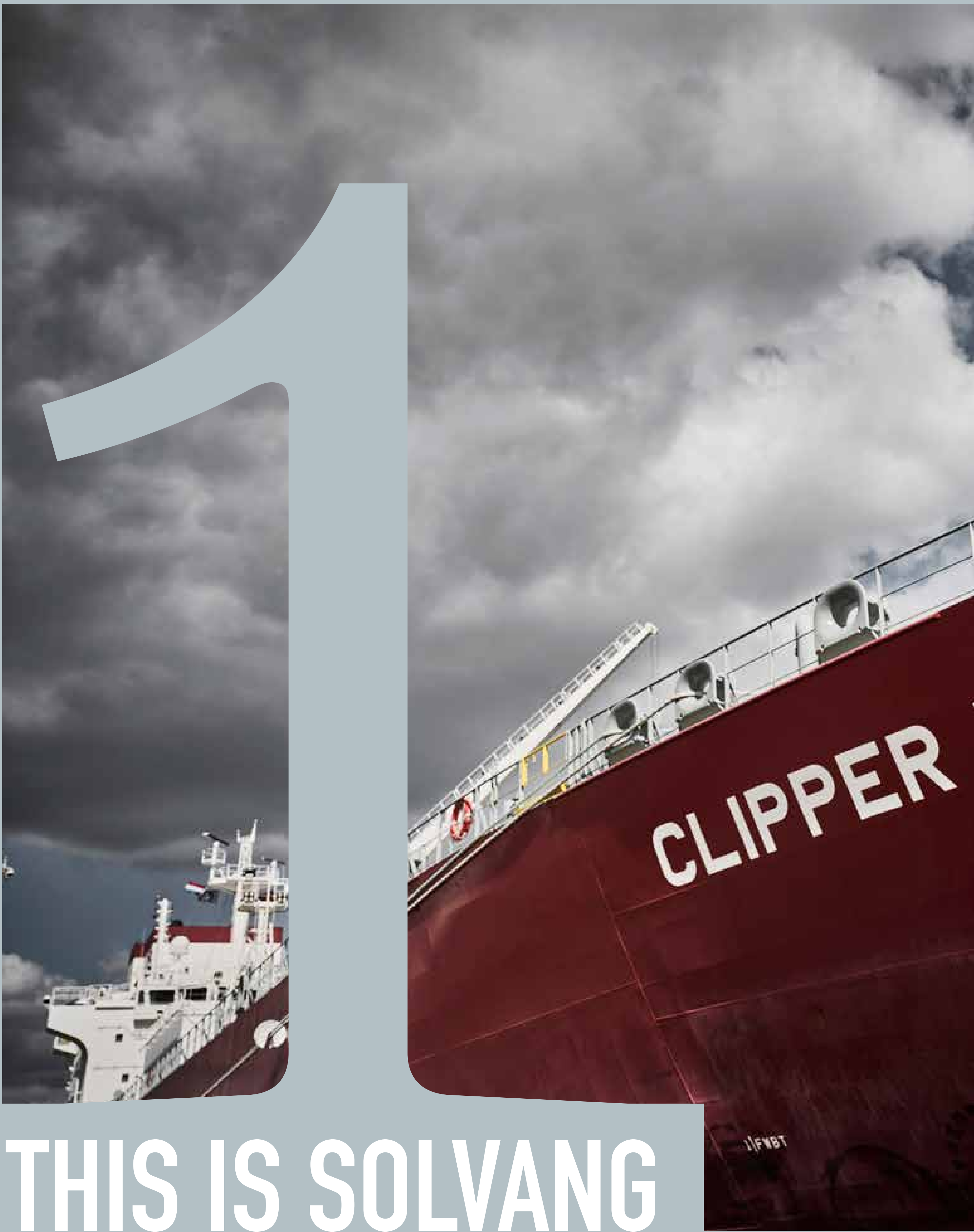


Lost Time Injuries	1
Total Recordable Case Frequency	0.683

Onshore (office)

59% Male

41 % Female



1 THIS IS SOLVANG


ENYO
FWBT|PPRM

From the past

1936 – 1989

Independent shipping and investment company.

1989 – 2004

Inge Steensland buys 64% of the company's share capital. From 1992 the transformation from a shipping investment platform, towards a fully integrated shipping company starts.

Continuing fleet growth by buying second-hand vessels and taking delivery of 5 newbuilds 1998-2004.

2006

A large-scale newbuild order placed in South Korea and Germany for 4 ethylene carriers 17,000 cbm, 3 LGCs and 2 Panamax VLGCs for delivery in 2007/2008. In total 9 vessels.

2007/2008

Received delivery of 10 newbuilds, 9 constructed and 1 VLGC resale ex-yard.

To the future

2050 – Clipper Future

We assume that energy efficiency "well-to-wake" will become even more crucial, and that all GHG emissions will have to be accounted for.

We will continue to be among the best in our business. All our newbuilds will be as fuel-efficient and green as possible. The vessels will run on GHG-neutral fuels and zero-carbon fuels.

2030

Continued focus on reducing emissions.

The carbon intensity (CI) factor is closely monitored to secure full compliance with the IMO carbon reduction target of 40 % by 2030.

2025

A modern fleet and highly trained and motivated employees, combined with financial, operational and technical ability, will allow Solvang to pursue this vision and create long-term growth and profitability.

2006–2011

Starting to transform the land organization from a small to a medium-size shipping company.

Establishing our vision, values and main goals. Establishing KPIs and development of Solvang vessel performance monitoring system.

2011

Opening "Make our Blue Logo Green" programme, setting targets for Solvang ECO LPG Carriers:

- Fuel-efficient design
- Compliance with emission regulations.
- Energy efficiency well-to-wake.
- The question is not which fuel you use, but how you use it.
- Operational excellence by continuous improvement.

2011

Ordering Clipper Quito and Clipper Posh, 84,000 cbm VLGCs with full-scale exhaust cleaning systems, delivery in 2013.

2013

Delivery of the world's first ECO VLGC LPG Carrier, first award of the title ECO LPG carrier, by The Royal Institute of Naval Architects.

2023

- **Ordering 5+2 VLGC newbuilds**
- **Fuel optimization of existing fleet.**
- **Mewis ducts installed on 10 vessels.**
- **Eco bulb, propellers and drivetrain optimization on 4 vessels.**
- **Awarding of MNOK 78 from Norwegian Authorities to implement OCCS onboard Clipper Eris.**

2019

5 newbuilds, 4 ECO Ethylene, and 1 ECO Panamax VLGC. The greenest and most efficient oil-fuelled gas carrier in the world.
Retrofitting 4 vessels with scrubbers.

2021

Launch of vessel-scale carbon capture project with Wärtsilä. The system captures CO_2 from main engine combustion before it passes through the exhaust outlets.

2015

Delivery of 3 new ECO LGC (60,000) gas carriers, Bosphorus-Max.

Retrofit of EGC on Clipper Harald - combination of scrubber and LP EGR for emission control (SOx and NOx).

2017

Delivery of 2 Panamax ECO LPG carriers.

WE WANT YOU, WE NEED YOU

From the cadet to the chairman, Solvang is people propelled by mutual respect, team spirit and quality.

You cannot overstate the competitive advantage of having confident people driving the organization in unity. Solvang's staff, as diverse and world-wide our people might be spread out, hold one thing in common: Our values.

Through consistent endeavor, the company has created a body of empowered people in all functions – from the owner at the top to the cadets crossing high seas. The mutual respect between equal individuals creates a team spirit extending to all of Solvang's employees, operations and vessels.

"There is a clear ownership to be claimed by each and every man and woman at Solvang", states Kjetil Meling, HR Director.

All in-house

While human capital management is a key to any shipowner's success, most have outsourced their HR operation to external handlers. Not so at Solvang, which makes an example of keeping all hiring in-house. Not just the bridge and administration, but sailors, machine operators, cooks and cleaning personnel, to name but a few.

"The onshore administration extends respect to everyone on board our ships, to ascertain them of the top management's support", says Mr. Meling.

All onshore employees are hired through Solvang's Norwegian mother company, while European crew are hired through Solvang Maritime. The Philippine seafarers are hired through Solvang Philippes Ltd.

"Everything is arranged to clearly identify Solvang as the employer to serve and whose values to claim ownership to", Mr. Meling says.

A winning spirit

The pride of the fleet, whether pertaining to ethylene carriers, LGCs or the very large gas carriers, permeates the culture of Solvang.

People will carry their workwear with recognizable pride, securing a candid dialogue with customers, as well as maintaining a strong reputation among seafarers. "Blame us for being too generous granting Norwegian-policy pensions or insurance rights to offshore personnel. But we are not being kind. We exchange control-by-fear with a structure for quality. A fundament for Solvang's winning spirit, which is our foremost competitive advantage", Mr. Meling states.

From the cadet to the chairman, Solvang is people propelled by mutual respect, team spirit and quality.

Core values:

MUTUAL RESPECT TEAM SPIRIT QUALITY

MAIN GOALS

For our customers:
Be the preferred carrier of LPG and petrochemicals worldwide

For our employees:
Happy, motivated and proactive employees

For our owners:
Be profitable in a long perspective

For the society:
Be a CSR-leading company

CARGO

Carrying the cornerstones

The gasses carried by Solvang are cornerstones in creating our modern lives – from all plastic products, production of clothes to growing food. But also in changing the global energy system.

Solvang's transportation of LPG and petrochemical gasses like propane, butane, ethane, ethylene and ammonia helps to link hydrocarbon extraction to the manufacture of countless consumer and industrial products.

Propane is essential in heating and cooking globally but also a crucial feedstock for the petrochemical industry. Butane makes butadiene, used in synthetic rubber and various plastics, such as PVC. Propane makes propylene, a precursor for polypropylene plastics used in a range of products from auto parts to textiles.

Ethane makes up the primary feedstock for ethylene production, perhaps the most important synthetic building block. Ethylene is used to make polyethylene, which is used in packaging, containers, and insulating materials. Derivative products, such as PVC and polyester, are integral to construction materials, electronic components, and textiles.

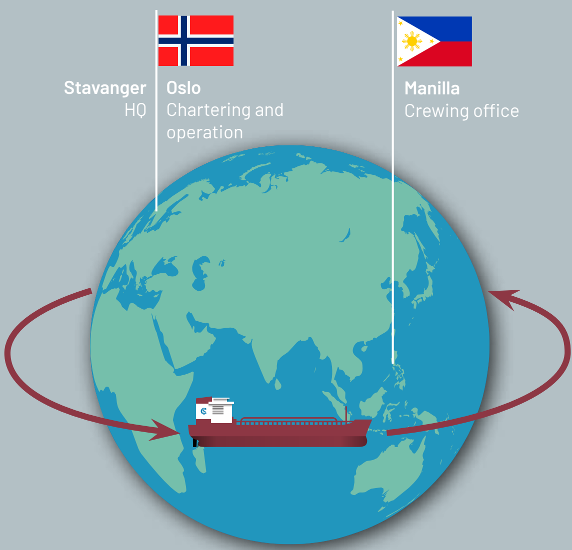
Fertilizer feedstock

Ammonia, a compound of nitrogen and hydrogen, is another cornerstone in global production chains. The agriculture industry being its primary beneficiary, ammonia enables the production of fertilizers that help feed billions of people by increasing crop yields. Beyond agriculture, ammonia is used in manufacturing urea, nitrogen and household cleaning products.
Due to its hydrogen component, ammonia is seen as a potential zero GHG energy source. As the world moves to counter climate change and seeks sustainable alternatives to fossil fuels, the importance of ammonia is expected to grow.

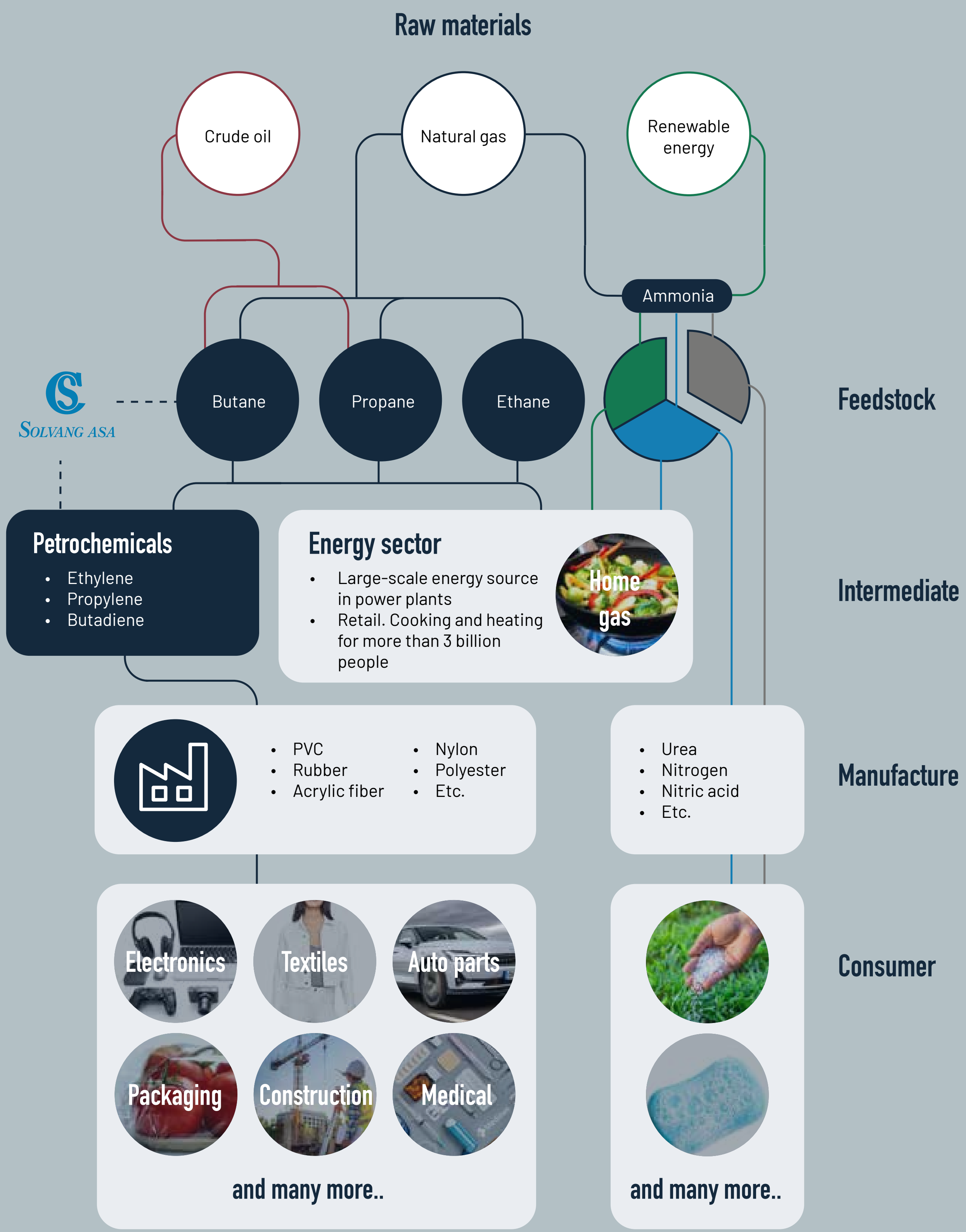
A sustainable future

By safely and cost-efficiently delivering LPG and petrochemical gasses to processing facilities, Solvang ASA supports the production of a vast range of goods and services that we rely on every day. The importance of these gasses in the transition to more sustainable production methods and energy sources becomes even more apparent. Innovations in bio-based feedstocks and the development of green ammonia for energy storage and hydrogen production are just hints of what the future might hold. Solvang's role in these supply chains not only highlights its contribution to today's economies but also its potential to support the sustainable technologies of tomorrow.

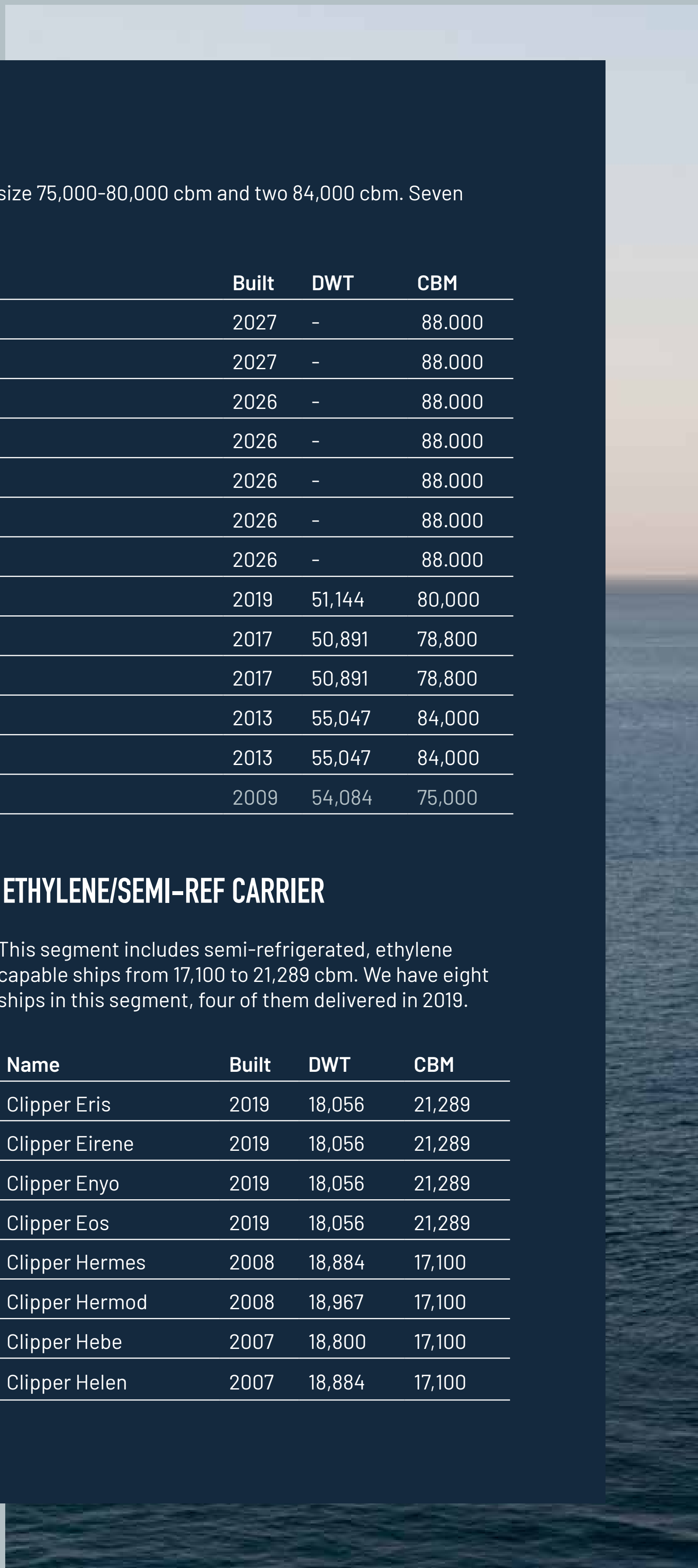
4.8 million tonnes cargo worth **2.9** billion USD



1.86 Million nautical miles = **86.1** times around the world


Raw materials
Crude oil
Natural gas
Renewable energy
Ammonia
Feedstock
Butane
Propane
Ethane
SOLVANG ASA
Intermediate
Petrochemicals
• Ethylene
• Propylene
• Butadiene
Energy sector
• Large-scale energy source in power plants
• Retail. Cooking and heating for more than 3 billion people
Home gas
Manufacture
• PVC
• Rubber
• Acrylic fiber
• Nylon
• Polyester
• Etc.
• Urea
• Nitrogen
• Nitric acid
• Etc.
Consumer
Electronics
Textiles
Auto parts
Packaging
Construction
Medical
and many more..
and many more..

FLEET



VERY LARGE GAS CARRIER

This segment consists of five VLGCs, three of them Panamax size 75,000-80,000 cbm and two 84,000 cbm. Seven newbuilds have been ordered.

Name	Built	DWT	CBM
NB Hull 3508	2027	-	88.000
NB Hull 3507	2027	-	88.000
NB Hull 3463	2026	-	88.000
NB Hull 3462	2026	-	88.000
NB Hull 3460	2026	-	88.000
NB Hull 3459	2026	-	88.000
NB Hull 3458	2026	-	88.000
Clipper Wilma	2019	51,144	80,000
Clipper Freeport	2017	50,891	78,800
Clipper Vanguard	2017	50,891	78,800
Clipper Posh	2013	55,047	84,000
Clipper Quito	2013	55,047	84,000
Clipper Victory (sold December 2023)	2009	54,084	75,000

LARGE GAS CARRIER

This segment is defined as fully refrigerated LPG ships of 60,000 cbm. We have a total of nine ships in this segment.

Name	Built	DWT	CBM
Clipper Venus	2015	42,543	60,000
Clipper Saturn	2015	42,543	60,000
Clipper Jupiter	2015	42,543	60,000
Clipper Mars	2008	43,544	60,200
Clipper Neptun	2008	43,508	60,200
Clipper Orion	2008	43,475	60,200
Clipper Sky	2004	44,617	59,300
Clipper Moon	2003	44,822	59,300
Clipper Star	2003	44,822	59,300

ETHYLENE/SEMI-REF CARRIER

This segment includes semi-refrigerated, ethylene capable ships from 17,100 to 21,289 cbm. We have eight ships in this segment, four of them delivered in 2019.

Name	Built	DWT	CBM
Clipper Eris	2019	18,056	21,289
Clipper Eirene	2019	18,056	21,289
Clipper Enyo	2019	18,056	21,289
Clipper Eos	2019	18,056	21,289
Clipper Hermes	2008	18,884	17,100
Clipper Hermod	2008	18,967	17,100
Clipper Hebe	2007	18,800	17,100
Clipper Helen	2007	18,884	17,100

Visit solvangship.no/our-fleet or scan the QR code for details about the vessels.

2 SUSTAINABILITY


ΙΘΑΚΗ ΓΟΥΟΡΙΟΡ

Sustainability in Solvang

Our priorities

Our priorities affect our decisions, both when it comes to investments, whom we cooperate with and how we plan and execute our work. It is important to show our stakeholders how we are influenced by these factors, how we think and how our actions impact our surroundings. We are proud of our work and aim to continue this process as a responsible business operator in the global market of shipping.

Our approach

Our sustainability report refers to the Global Reporting Initiative (GRI) reporting standards. As an operator in the global deep-sea shipping market, Solvang ASA acknowledges the importance of endorsing The United Nations' 17 Sustainable Development Goals (UN SDGs).

In this report we use these "big goals" UN SDGs to contextualize our role in improving sustainable business.

UN Sustainable Development Goals

The UN SDGs cover a wide spectrum of issues. In this report we aim to show how our operations relate to the goals, starting with a broad overview in tables and gradually presenting details in the articles sections.

Especially relevant goals are covered in articles for detailed insight.

Internal stakeholders

Shore staff
Crew
Owners
Board of Directors

External stakeholders

Customers
Financers
Suppliers and contractors
Government
Regulatory bodies
The general public

The table below shows the most important sustainability topics for Solvang. The topics are compared to the UN Sustainability Development Goals (UN SDGs). All SDGs are examined in-depth in this report.

	TOPIC	EXPLAINED	UN SDG
ENVIRONMENT	**Emissions to air**	Innovative technology for monitoring and reducing emissions. Contributing to a more sustainable future for the maritime industry.	9, 15, 13
	Energy consumption	Developing fuel-efficent vessels and low-energy operations. Providing affordable LPG and petrochemicals to customers.	9, 7, 13
	Spills to sea	Avoiding oil spills and managing waste.	14, 13
	Recycling	Maximizing vessel lifespan and treating the vessels in compliance with regulations and conventions when recycling.	12, 13
SOCIAL	**Community engagement**	Providing access to LPG as a clean source of energy and ammonia as a potent fertilizer. Supporting the communities where we operate.	2, 4, 7
	Health and safety	Working systematically to ensure the health, fitness and safety for all crew and employees, both at work and at home.	3
	Employee relations	Providing good working conditions and fair salaries that reflect individual qualifications, regardless of gender. Recruiting, educating and retaining a skilled workforce.	4, 5, 8
	Diversity and inclusion	Managing "happy ships" with happy, motivated and proactive employees. Encouraging diversity and inclusion at work and at home.	3, 8
GOVERNANCE	**Governance and compliance**	Complying with all relevant laws and regulations.	16, 17
	Anti-bribery and anti-corruption	Mitigating corruption and bribery in all forms. Upholding business integrity in the maritime industry.	16, 17
	Economic performance and benefits	Generating sustainable economic value for our stakeholders.	8

Reaching the Sustainability Development Goals

We enable efficient food production

About 90 % of ammonia produced is used in fertilizers, to help sustain food production for billions of people around the world. Several Solvang vessels transported ammonia worldwide in 2023.

Our ethylene fleet transports raw material for essential industrial processes, like the manufacturing of food packaging, which makes it possible to minimize food losses.

LEARN MORE ABOUT OUR CARGO ON PAGES 14-15

We care for our people

This statement is supported by our health policy and is one of the main focus areas in Solvang's "Living the Vision" programme.

Our officers and crew members must have the physical and mental strength to meet challenges that confront them every day. We know a healthy lifestyle contributes to well-being, and therefore it has a high priority at Solvang.

We want all employees aboard our vessels to take care of their bodies and minds. Appropriate ergonomics, sufficient exercise and healthy meals are important for the body's machinery. For us, health is an important component in ensuring satisfactory performance.

MEET OUR PEOPLE ON PAGES 46-52

We learn every day

The quality of our service is totally dependent on education and training of our seafarers. Solvang is actively supporting the NSA cadet programme in Manila and arranges in-house officer and crew conferences where courses and training are important parts of the programme.

Solvang's "Living the Vision" programme is an on-the job HSEQ training programme which comes in addition to the flag state's mandatory training.

READ MORE ON PAGE 53

We choose competence

International shipping is male dominated, but Solvang employs people according to knowledge, skills and attitude, not gender.

Women and men have equal opportunities to qualify for all types of jobs and positions, and they have equal opportunities for promotion. Working conditions are deemed to be good. Salaries reflect the individual qualifications, regardless of gender.

READ MORE ON PAGES 46-49

A trustworthy provider

7 AFFORDABLE AND CLEAN ENERGY

Solvang aims to be an industry-leading provider of LPG and petrochemical tonnage to our clients in the safest, cleanest and most cost-efficient manner.

LPG used in industry and households is one of the cheapest and most basic energy sources available. Propane can be used as cooking fuel or fuel for engines with the same after treatment as ordinary gasoline or diesel.

As part of our industry, Solvang makes a valuable contribution in transporting this energy source around the world.

READ MORE ON PAGES 14-15

Focus on «happy ships»

8 DECENT WORK AND ECONOMIC GROWTH

One of Solvang's main goals is to have happy, motivated and proactive employees who will stand up for our values with confidence. This is only possible with good working conditions.

One of our main goals is to provide profits for our owners. Our employees receive decent salaries. This provides further growth in the country of residence, through spending and taxation.
MLC is an integral part of our quality system, and all our vessels sail under the Norwegian flag (NIS) where the laws and regulations secure compliance with all legal standards.

READ MORE ON PAGE 46-55

Developing ECO-friendly vessels

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Solvang has a long story for cooperation with both industrial, academic and research organizations and started a programme for green shipping for the future back in 2010. In 2023, Solvang ordered 7 new VLGCs with the most extensive ECO equipment, ready for OCCS, onboard carbon capture systems.

READ MORE ON PAGES 34-39, 41

Life Cycle Analysis (LCA)

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Solvang follows a well-to-wake philosophy, which means we avoid exchanging fuel oil for a distillate bunker fuel when possible. Life cycle efficiency is our pledge. Such a transfer would lead SOx and other substances in fuel oil to be emitted into the atmosphere from other sectors, like coal and oil power plants burning the residuals for power generation.

If a Solvang owned vessel is to be recycled, the vessel will be recycled in compliance with:

- The Hong Kong Convention.
- The guidelines to the Hong Kong Convention to be issued by the International Maritime Organization; and
- The EU Ship Recycling regulation (1257/2013)

READ MORE ON PAGES 30-31

Our climate actions

13 CLIMATE ACTION

Solvang's full-scale shipboard carbon capture storage and utilization programme holds the potential to capture 70 % of the carbon emissions from fuel oil operation.

Performance monitoring is a critical tool when assessing the efficiency of Solvang's innovations. In 2008, Solvang initiated the in-house programme for vessel performance monitoring.
We have collected and reported environmental performance, systematically deploying our findings into continuous improvement of operations into environmental operations, and into newbuildings.
Competence, knowledge and Life Cycle Analysis (LCA) are key elements in Solvang's climate actions.

READ MORE ON PAGE 34-39

No harm to water life

As part of our sustainability work Solvang has identified and assessed all effluents to the sea. The effluents are rated as significant or non-significant, and programs for monitoring and controlling are in place. This is an important part of our ISO 14001 certificate and compliance.

Our obvious goals are to reduce operational discharges as much as possible and achieve zero spill caused by accidents.

All vessels have an approved ballast treatment plant and biofouling plan, all discharges from the EGC are measured 24/7, and the EGC has water treatment in open loop.

READ MORE ON PAGE 34

No harm to life on land

Exhaust emissions from our engines is the main source of influence on life on land. Our assessments have shown the following significant aspects:

- CO_2 (global warming)
- SO_X (cloud formation and acid rain)
- NO_X (cloud formation and acid rain, ground level ozone)
- Particles (visible smoke, health risk)
- THC (global warming, ground level ozone, health risk)
- CO (health risk)

Solvang has established programs for monitoring/ controlling and reducing emissions related to all these aspects.

READ MORE ON PAGES 34

Peace, justice and strong institutions

Substantially reduce corruption and bribery in all their forms.

Solvang has introduced "Ethical Guidelines" comprising our core values, responsibility for an ethical and conscientious relationship with stakeholders, and a "Supplier code of conduct" embracing the UN Global Compact.

Solvang is also a member of the Maritime Anti-Corruption Network (MACN) and will comply with the good corporate practices in the maritime industry described in their operating charter.

READ MORE ON PAGE 66, 68-69

International shipping

International shipping brings people together from all parts of the world. Solvang is a good example of this.

International shipping has a lot of positive effects that rarely make it to the media headlines. Solvang's goal is not only to be in compliance with rules and regulations, but to contribute to a high standard for quality shipping around the world. The world trade depends on shipping – and we strive to increase our positive impact on our surroundings.

READ MORE ON PAGES 12, 53, 54

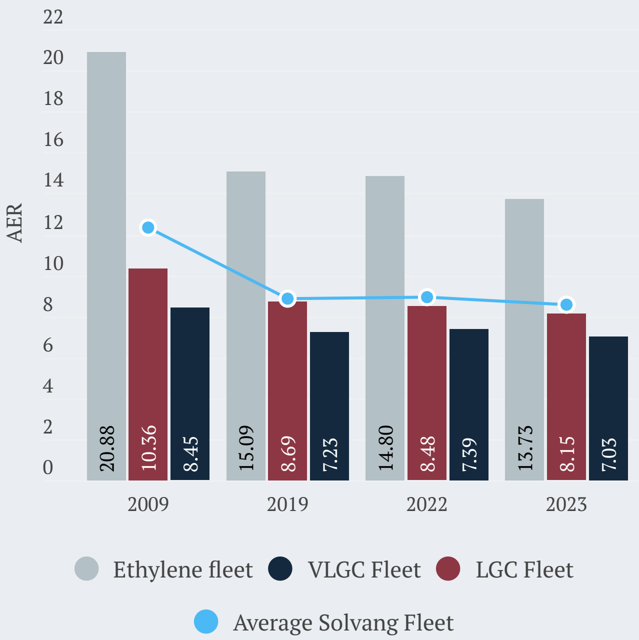
ENVIRONMENT

All human activity has an impact on life on land and in the sea. Our goal is to minimize operational and indirect emissions, and we strive for zero spills to the environment.

Scan to read the article "REDUCING OUR ENVIRONMENTAL IMPACT"

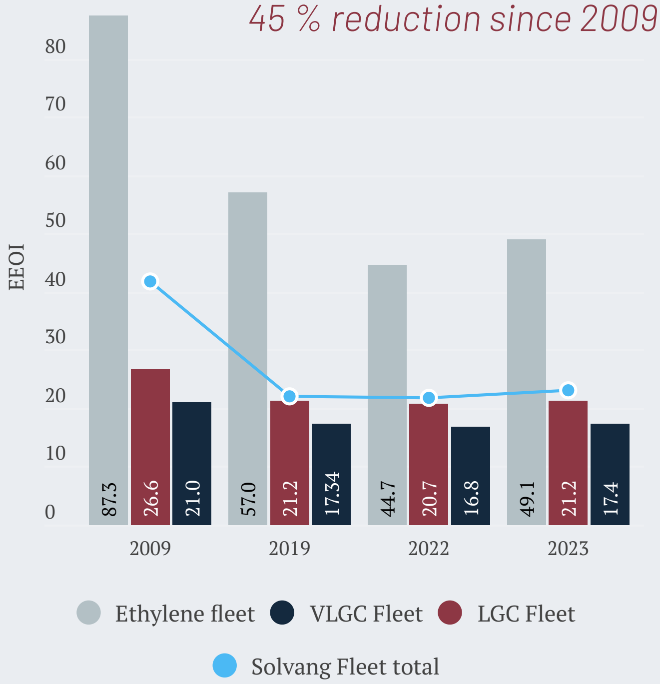
Annual Efficiency Ratio development (AER)

30 % reduction since 2009



Energy Efficiency Operational Indicator (EEOI)

45 % reduction since 2009



Effect of upgrade and EEXI modification
In 2022 Solvang had 8 vessels categorized as D.
In 2023 there were 3 D-vessels; one due to trade, the other two due to late dry-docking and modification at year-end, taking effect from 2024. In 2024, alle vessels will rate as C or better.

The average AER for the Solvang fleet and for the vessel groups has been recalculated in 2023. By using weighted average for transport work (dead weight * sailed distance), we get a better picture of the actual AER for the fleet.

AER reduction 2009 - 2023:

Ethylene Fleet	34 %
VLGC Fleet	17 %
LGC Fleet	21 %
Total Fleet	30 %

The average EEOI has been recalculated in a similar way as for AER, but weighing the average for transport work (cargo carried * sailed distance).

Changing of cargo from ammonia to LPG for several of the LGC vessels increased EEOI. Also higher consumption on some of the vessels due increased marine growth from waiting time in ports and canal inefficiencies.

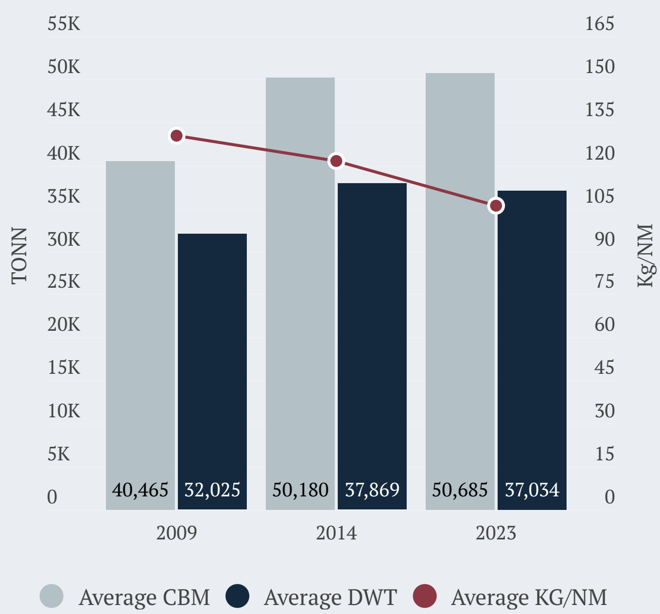
Five LGCs dry-docked in 2023, giving positive effect. Sale of three older VLGCs since 2021 with a relatively high dead weigth/cargo capacity ratio in CBM, contribute to improved AER for the VLGC class, but impacts the average for the fleet as a whole in a negative way.

Solvang energy consumption and GHG emissions

The total fleet emissions have increased due to the fleet expansion and more operations per vessel. In 2009 we operated 16 vessels and in December 2023 we had 22.

From 2009 to 2023:

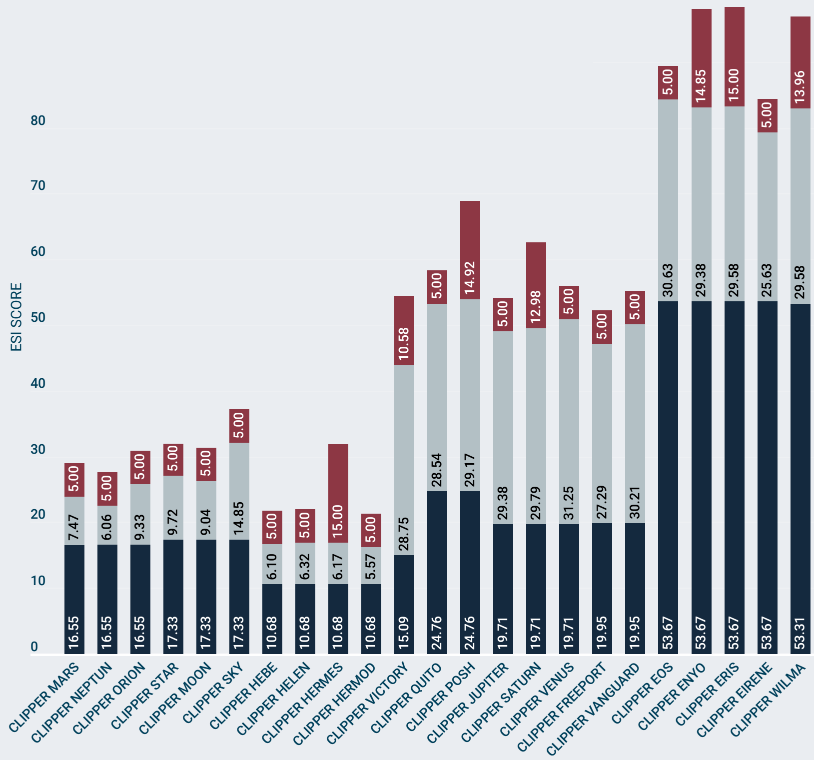
Average emission per vessel decreased by	18.7 %
Increase in cargo capacity	25.3 %
Increase in dead DWT	15.6 %



Sludge garbage

Fleet total 2023	cbm
Sludge produced	3,065
Sludge incinerated	1,082
Sludge water evaporated	1,327
Sludge disposed	747
Cbm	
Plastics	332
Food wastes	14
Domestic waste	234
Cooking oil	4
Incenerator ashes	39
Operational wastes	79
E-waste	20

Environmental Ship Index (ESI) score 2023



Rating of environmental performance. Best possible score is 100 points. This shows that the five newbuilds on the right side perform very good, around 90 points. All vessels with scrubber technology perform well.

ESI identifies seagoing ships that perform better in reducing air emissions than required by the current emission standards of the International Maritime Organization (IMO)

Our vessel's energy consumption 2023

Fuel type	Tonne fuel	Sulphur content	Energy per tonne fuel [MJ/kg]	Energy [MJ]
MGO	14,930	0.06 %	42.70	637,489,650
VLSFO	67,337	0.42 %	41.00	2,760,825,200
Fuel oil unscrubbed/ scrubbed	119,692	2.69 / 0.08 %	40.20	4,811,606,340
Total:	201,958	0.21 %	Total energy consumption:	8,209,921,190

Sulfur

The table shows how efficiently the scrubbers remove SO2 from exhaust.

	Scrubber	No scrubber
Total SOx emissions (tonnes)	239.80	655.50
Avg SOx emissions (ton per vessel)	18.40	65.60
Total SOx emissions per distance (g/nm*)	204.20	951.50
Average S content in fuel after scrubbing	0.084 %	0.416 %

DCS and SEEMP III + fuel GHG standard:

Tougher calls coming up

Consolidation of data collection and compliance rules will make every vessel a target for IMO emission reduction from 2024.

As from Jan 1, 2023, SEEMP Part III is a mandatory on-board document specific to each vessel, describing how to improve the CII over the next three years. A SEEMP III document is dynamic and must be updated in line with performance and reported measures from the ship. Beginning in 2024, it is mandatory to compute and submit the Carbon Intensity Indicator (CII) to the Data Collection System (DCS) verifier, along with the consolidated DCS data from the previous year. This submission should incorporate any applicable correction factors and voyage adjustments. The achieved CII and its corresponding environmental grade (ranging from A to E) will be documented on the DCS Statement of Compliance (SoC). This document must be retained on the vessel for a duration of five years.

In scenarios where a vessel receives a **D** environmental rating for three successive years or an **E** rating even once, an update to the Ship Energy Efficiency Management Plan (SEEMP) Part III is mandatory.

After 2030

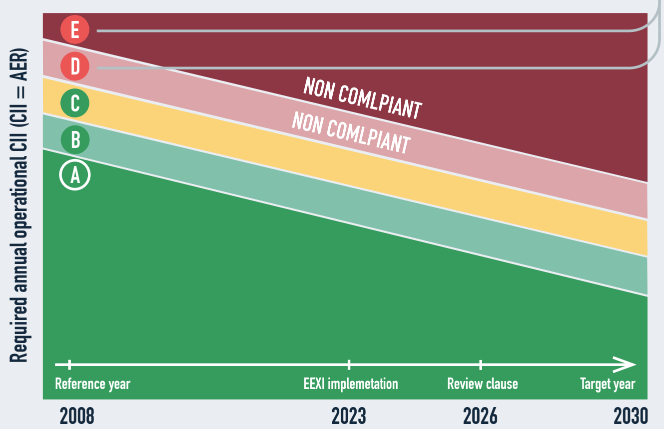
After the reporting year of 2030, the target specifies GHG intensity of fuel, and the values are defined as well-to-wake figures (not tank-to-wake). In addition all GHG gasses are included.

The EEXI and CII – ship carbon intensity and rating system

Under IMO, Marpol Annex VI, from Jan 1, 2023 all ships must calculate their attained **Energy Efficiency Existing Ship Index** (EEXI) and collect data to report annual operational carbon intensity indicator (CII) in order to attain CII rating A-C (compliant) to D-E (non-compliant).

The aim is to reduce specific carbon emissions in global waters by 40 % by 2030, based on 2008 projections. As for today, the vessel-specific CII is based on 2019 figures. The values from 2023-2026 have been pre-calculated, while calculations from 2026 to 2030 will depend on the planned IMO revision in 2026.

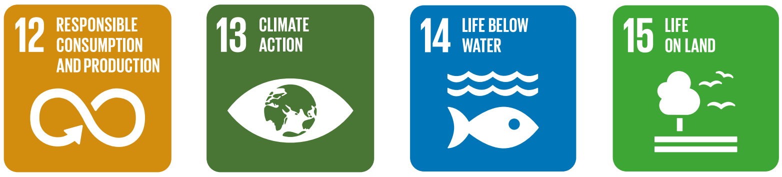
Amendments include EEDI, the Energy Efficiency Design Index, the Annual efficiency ratio (AER) deployable to ships over 50 tonnes, requiring a SEEMP (ship energy efficiency management plan) for each vessel.



A vessel rating will be based on reported fuel figures and get a score between A and E, where A is the best, C is in compliance and D and E are non-compliant scores.

The Great Energy Transition:

Balancing the world's energy sources



The global community is taking on an increasingly holistic view of fuels and emission cuts.

There is a growing realization among policymakers and the industry alike, that greenhouse gasses don't disappear from the climate account just by replacing traditional fuel with alternative fuels. According to Solvang´s strategic analysis, changing to alternative fuels may actually increase greenhouse gas emissions and not reduce them as expected.

The background is found in the approach to measure emission. Over three decades, regulators maintained a tank-to-wake (TTW) approach, counting emissions from the point where fuel is delivered to the vessel (tank), until transport has been made (wake). The refinement industry's response is to separate harmful substances from the fuel before it is sold to shipowners, hence opening new markets for alternative low-emission distillate fuels.

The side effects of such a policy is increasingly visible: Alternative fuels are generating CO2 while being processed, transferring emissions down the refinement chain. Instead of removing substances, they end up being emitted at the end of the consumption chain. HFO pluss low-sulphur fuel account for 90 % of global sea transport, ultimately calling for emission reductions at the end of the chain in our sector.

The well-to-wake approach

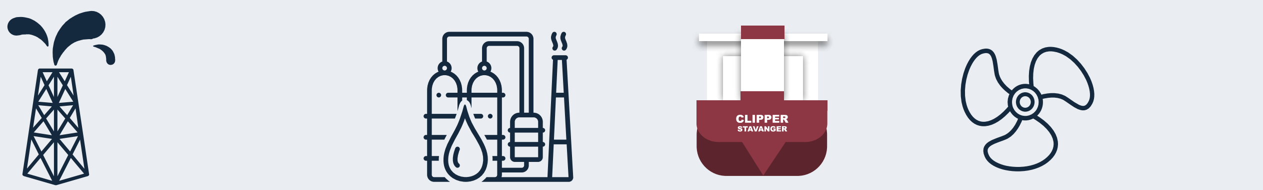
The holistic well-to-wake (WTW) approach encompasses the life cycle of fuel from extraction, throughout to generation of cargo transport. Solvang has adopted this approach. Provided that renewable energy is available, it should be deployed where the climate effect is highest. According to researchers at Norwegian School of Economics (NHH), Sintef Ocean in Trondheim and KEDGE Business School in France, renewables should firstly replace coal fired electricity production.

One of Solvang's climate mitigation measures is to reduce emissions at the HFO end of the cycle. We combine operational efficiency and vessel optimization. This includes fuel savings from hull, rudders and propellers, drivetrain and engine load optimization, exhaust recirculation and scrubbing. Add electrostatic filtering and an innovative carbon capture and storage project in partnership with Wärtsilä and the Norwegian government. Solvang aspires to publish all of our findings in order to scale up a smart energy system in our sector.

In the future, Solvang expects a multiple fuel source reality.

Scan to read the article "THE WELL-TO-WAKE REALITY"

What is the well-to-wake concept?



Well

2 - 5 % loss when producing oil

Transport

1 - 3 % loss when transporting oil

Fuel production

Fuel oil 0% loss
Diesel 8 % loss
Gasoline 12 % loss

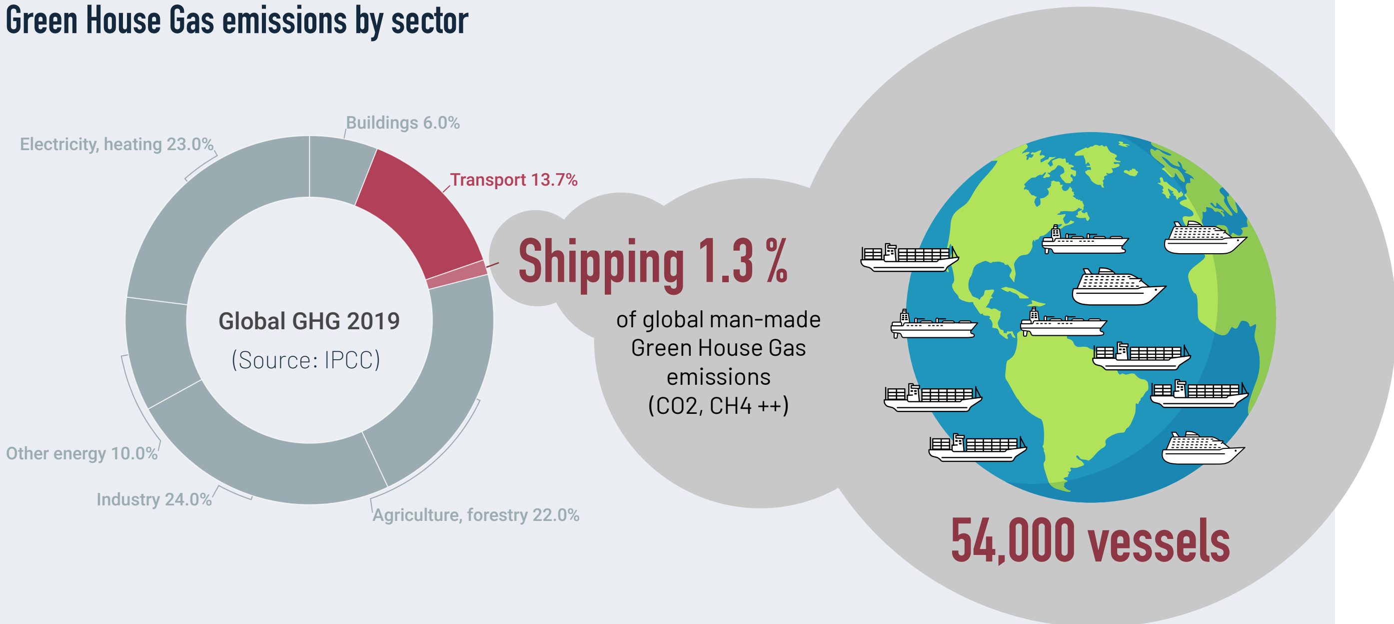
Tank

Fuel on board for engine

Wake

More than 50% efficiency to propeller. Loss from cooling and exhaust is utilized for operation.

Green House Gas emissions by sector



The timeline of emission regulations in shipping:

1997
IMO adopted MARPOL Annex VI, the International Convention for the Prevention of Pollution from Ships, aimed at reducing air pollution from ships.

2005
MARPOL Annex VI entry into force: Effective limits on sulfur oxides (SOx) and nitrogen oxides (NOx) emissions from ship exhausts.

2008
Revised MARPOL Annex VI: Stricter emissions standards, lower sulfur content limits for fuel oil, established Emission Control Areas (ECAs) with even stricter limits for SOx and NOx, new NOx limits for engines installed on ships constructed after 2011.

2013
Energy Efficiency Design Index (EEDI) and Ship Energy Efficiency Management Plan (SEEMP) mandatory. The EEDI for new ships and the SEEMP for all ships became mandatory under MARPOL Annex VI.

2018
Following the Paris agreement, IMO set reduction target of GHG emissions from ships to 50 % by 2050, compared to 2008.

2021
Carbon Intensity Indicators (CII) and Enhanced SEEMP, requiring ships to calculate their CII and meet annual reduction rates.

2023
IMO revised the GHG strategy: Net zero emissions by 2050. Checkpoints in 2030 (40%) and 2040 (70%). GHG intensity of fuel in stead of CO2.
Net zero emissions to be realized by 2050, in a well-to-wake perspective.

2050
Net zero emissions to be realized by or around 2050, in a well-to-wake perspective.

Energy sources vs. climate:

How to approach fuels

A fuel's environmental footprint can only be understood if you include the whole life-cycle of production and use of the energy source.

In the case of oil, only 10 % of the source energy is wasted in refining and transforming the energy, according to the International Energy Agency IEA.

Possible future fuels can be divided into the following groups:

- Conventional fossil fuels; HFO, VLSFO, MGO, LNG and LPG (with or without CCS)
- Biofuels
- Hydrogen and ammonia (conventional and e-fuels)
- Synthetic e-fuels (gaseous or liquid fuels produced from hydrogen and carbon captured by using renewable electricity)
- Electric power from batteries charged from the grid

Biofuels

Biofuel may replace conventional fossil fuels with only minor modifications to the engine and fuels systems.
When assessing the emissions from well-to-wake, fuel from a clean biological source may reduce greenhouse gas emissions by 75-80 % compared to marine gas oil (MGO). However, this requires correct use of engine technology and clean energy sourcing. The well-to-wake approach is crucial when assessing the total GHG emissions. For example, biofuel from palm oil may increase the overall GHG emissions with up 200-300 %.

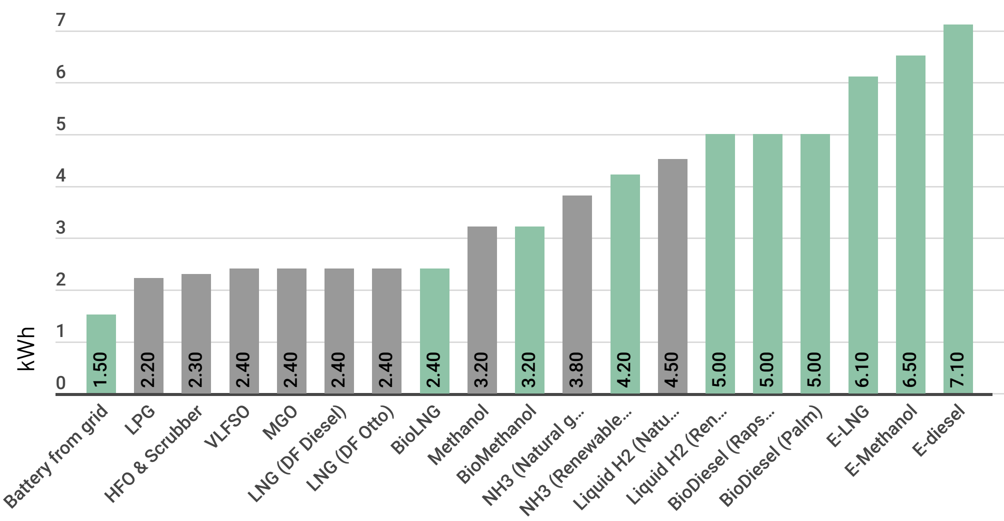
GHG-neutral e-fuels

GHG-neutral e-fuels represent an artificial fuel type processed from GHG-free electricity, water and air.
E-fuels may be e-diesel or e-LNG with the same properties as the standard fossil counterpart. Ammonia and hydrogen are other potential GHG-free e-fuels, assumed being processed by renewable electricity or fossil fuels with CCS.
Both IMO and EU now set a GHG intensity target for maritime fuels, well-to-wake. All important GHG compounds must be included in the measure. The target is to successively lower the GHG emissions from fuel used in the maritime industry. In practical terms, shipowners will need to use a mix of conventional bunker and alternative fuels such as e-fuel or sustainable biofuel. Output will be ensured by punitive taxes levied upon shipowners not able to comply. Mechanisms to ensure benefits of possible over-compliance are currently being discussed.
But the big challenge with all e-fuels is the large energy losses during production and the massive global lack of GHG-neutral electricity from renewable sources. See the figure below.

Total energy input Well-To-Wake / Delivered propulsion energy

WTW - energy required as a function of fuel per kWh delivered to the propeller.

For more details, see the article "THE WELL-TO-WAKE REALITY"



Grey fuels

Green fuels

IMO and EU environmental regulation:

The rules of carbon rating

Reallocating CO2 emission allowances from ships to ports keeping cargo idle, would make the CII rating a better tool.

The first full year of IMO's EEXI (Energy Efficiency Existing Ship Index) and the annual operational carbon intensity indicator (CII) has passed. Solvang has received carbon intensity rates for all vessels. The metric of the indicator is the **Annual Efficiency Ratio (AER)**, expressed in grams of CO2 emitted per cargo-carrying capacity and nautical mile. Effectively, each vessel's total CO2 emissions at sea is divided by the deadweight of the vessel and the total distance sailed.

Fully in line with the target

Aligned with the IMO's strategy to reduce greenhouse gas emissions from maritime transport, Solvang has recorded a significant year-over-year reduction in CO2 emissions across its fleet. From 2009 to 2023, Solvang's fleet improved the (AER) by close to 30 %, fully in line with IMO's 2030 deadline. The greater part of Solvang's achievement is made by the ethylene fleet. Due to recent replacements of the oldest ethylene vessels, an extra AER advancement of 34 % is recorded for 2023.

Interestingly, a significant efficiency gain made by the fleet has been ruled out from the official AER figure, due to the fact that CII is calculated for a voyage, including idle waiting time at port.

"Our control extends from the beginning of sea passage to the end of sea passage, during which we make substantial efforts to cut emissions. However, the emission metrics at port, which are factored into the overall calculation, dilute the impact of our efficiency efforts. This represents a systematic bias in assessing our ships' energy efficiency. The port should be responsible for emissions during the port stay, i.e. after end of sea passage until the vessel departs from the port," states Performance and HSEQ Manager Per-Øyvind Nedrebø in Solvang.

Regulatory refinement needed

Solvang stands by its environmental achievements recorded through GHG emission cuts on all vessels. Our environmental performance is scheduled in each ship's energy efficiency management plan (SEEMP).

Mr. Nedrebø advocates refined regulatory mechanisms under Marpol, such as CII correction factors for port idle time or the exclusion of certain voyages from the metrics.

"A reassignment of CO2 allowances needed from ships to ports would effectively address port inefficiencies and incentivize efficient cargo handling, particularly in the tank segment. Reduced emissions would be the effect, making the environment a winner", Mr. Nedrebø ascertains.

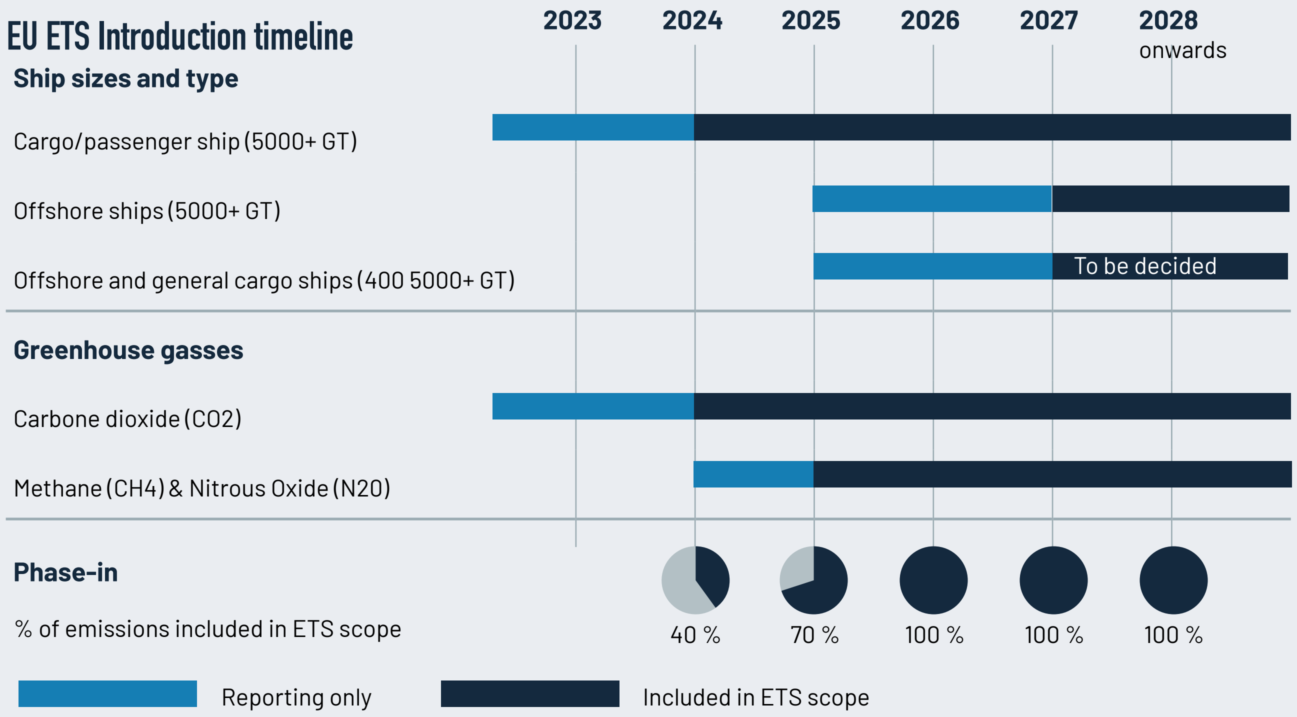
What is EU ETS?

An EU emissions cap-and-trade system building on EU MRV (Monitoring, Reporting, and Verification) Regulation. Aims to reduce GHG emissions by 55 % by 2030 relative to 1990, and net zero by 2050.

EU ETS issues a falling number of EU Allowances (1 EUA = 1 tonne CO2 eq.) annually, available for trading in the market.

Ships over 5000 GT must include 40 % of emissions in ETS scope in 2024, 70 % in 2025, and 100 % in 2026.

EU ETS Introduction timeline



Discharges to sea and land

Under normal operation, discharges to the sea are small and we have chosen to consider the following categories:

Ballast water: Solvang installed ballast water treatment systems on board all vessels.

Biofouling: Solvang uses high quality anti-foulings, we monitor hull resistance to marine growth,

Anti-fouling: All vessels have TBT-free coatings.

Bilge water: All bilge water runs through separator and each run registered in the oil register.

Sewage: All vessels have urinals and holding tanks.

Oil: Use of bio-oil in unlikely case of discharges from thrusters and propeller shaft casings.

Scrubber washwater: SOx from exhaust converts to sea salt, PH, PAH, turbidity monitored and recorded 24/7.

Garbage/waste handling: Garbage management plan stated for all vessels, segregation of waste to shore, waste to sea, waste incinerated on board.

Scan to read the article " OUR IMPACT ON LIFE BELOW SEA AND ON LAND"

Scan to read the article "DISCHARGES TO SEA AND LAND"

Onboard CCS:

The world's first onboard carbon capture

Clipper Eris makes a first launch of full-scale onboard CCS, highlighting Solvang's pathfinder mission in climate technology.

Post-combustion separation, capture, storage and offloading of CO_2 appears as a very promising solution for deep sea shipping. In 2021, Wärtsilä started full-scale testing of carbon capture to mitigate CO_2 emissions, which is our last major source of emissions.
The piloting took place onshore at Wärtsilä's facility in Moss, Norway. Results showed carbon capture rates steadily above 70 %, while producing extensive data to support applied testing.

Dramatic improvement

In 2023, Solvang received a grant of MNOK 78 from the Norwegian Climate and Energy Fund, in order to apply carbon capture and storage in deep sea operation. At the turn of the year, OCCS was being installed onboard the -class LPG carrier Clipper Eris. The OCCS system serves a 7 MW main engine, where it captures CO2 before it passes through the exhaust outlets. Inside the smokestack, carbon gas is being separated, then refrigerated into liquefaction and transferred to deck storage. The installation is set to capture 70-80 % of carbon dioxide from the main engine and auxiliary engines' outlet, dramatically improving the ship's environmental performance.

Saving e-fuel

Also outfitted with exhaust gas recirculation and a hybrid exhaust cleaning gas system, Clipper Eris' propulsion setup achieves compliance with IMO's decarbonization trajectory towards 2050. The net-zero target consequently requires only 20-30 % of very expensive e-fuel to be achieved.
On top of this, the carbon captured from OCCS can be utilized to process e-fuels for the market, in addition to other applications.

The ECO LPG programme

The OCCS installation is the culmination of efforts Solvang started in 2008, when IMO introduced its emission reduction plan towards 2050, and Solvang started planning the ECO LPG programme, which was initiated in 2011.
"The continuous efforts to reduce our climate footprint will continue unabated into the future", CEO Edvin Endresen states. Read more on www.solvangship.no/ccs

Scan to read the article "ENOVA SUPPORTS FULL-SCALE CARBON CAPTURE ONBOARD CLIPPER ERIS"

Scan to read the article "THE GREEN FUTURE OF CONVENTIONAL FUELS"

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

17 PARTNERSHIPS FOR THE GOALS

13 CLIMATE ACTION

15 LIFE ON LAND

14 LIFE BELOW WATER

Seven newbuilds in 2023:

Expanding Solvang's Panamax LPG fleet

Seven new VLGCs, all settled on long-term charters, will constitute Solvang's next competitive advantage in the LPG segment.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

13 CLIMATE ACTION

The Panama Canal locks, measuring 294.13 by 32.31 meters, set definitive size limitations for ships navigating the critical passage between the Atlantic and Pacific oceans. To assume an absolute load limit for Panamax is nevertheless wrong, which shipbuilders have proven several times.

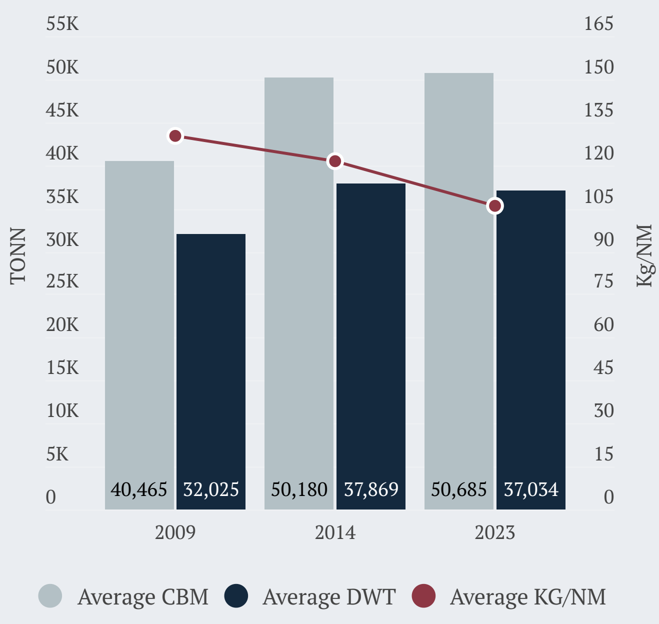
Through a joint venture with Gunvor Group Ltd. Solvang has ordered five new Panamax VLGCs, scheduled for delivery from July 2026. In addition we have ordered two more vessels fully owned, seven in total. These vessels will boast a capacity to transport 10 % more gas than their predecessors. Since 2008 the cargo capacity for Panamax VLGCs has been progressively increased from 75,000 cubic meters to 80,000 and now to 88,000 cubic meters.

"This is the largest LPG load currently able to transit through the old Panama Canal", states Tor Øyvind Ask, Fleet Director at Solvang.

EEOI revolution

A Panamax VLGC newbuild is a particular compromise between loading capacity, fuel consumption, operational speed and physical dimensions of the hull to pass through the canal locks. All these factors add up in the ship's environmental performance, which is often measured **EEOI, energy efficiency operating indicator.** This indicates the amount of CO2 emitted from the ship per ton-mile of transport.

Boosting capacity – lowering emissions



The total fleet emissions have increased due to the fleet expansion and more operations per vessel. In 2009 we operated 16 vessels and in December 2023 we had 22.

The Panama Canal locks, measuring 294.13 by 32.31 meters, set definitive size limitations for ships.

Underpinning an exceptional EEOI performance, we find environmental technology developed through 12 years of Solvang's ECO LPG Carrier program. The technology includes hull optimization, shaft and propeller improvements, exhaust gas recirculation, and an hybrid exhaust gas cleaning system.

«The VLGC newbuilds exemplify how ship design and drivetrain optimization have reduced the environmental footprint by up to 40 % since 2008

Tor Øyvind Ask, Fleet Director at Solvang.

«The newbuilds will be designed for onboard carbon capture, a solution we believe could be defining the next generation LPG vessels

Edvin Endresen, CEO at Solvang

Onboard carbon capture

In a well-to-wake perspective, environmental performance encompasses the total emissions generated from fuel processing, the efficiency of the engine and its cleaning technologies, to the eventual discharges into water and air. For Solvang's latest VLGCs, dual-fuel LPG was evaluated but did not emerge as the best option within a well-to-wake analysis. Rather, these vessels are equipped with a single-liquid fuel system compatible with heavy fuel oil (HFO), low-sulphur fuel oil, marine gas oil (MGO), biofuels, and e-fuels. The system is equipped with a single set of tanks, exhaust gas recirculation, and an hybrid exhaust gas cleaning system, which are all designed to be integrated with future onboard carbon capture and storage solutions.

Accordingly, the newbuilds will be ready for zero emission technology – the carbon capture system currently being installed for testing onboard Solvang's pilot ship Clipper Eris.

«The newbuilds will be designed for onboard carbon capture, a solution we believe could be defining the next generation LPG vessels», states Solvang CEO Edvin Endresen.

Innovation: Partnerships pay off

Live testing conditions makes Solvang an attractive technology development partner. In 2023, projects in and outside of dry docking demonstrated a high outcome.

All new regulations target fuel consumption, imposing stricter demands on vessel performance. This affects the commercial value of the vessel, posing a challenge to the shipowner to optimize operations and vessels.
Solvang's vessels built before 2013 don't have accurate sea trial data available for engine power limitation calculations. Hence, derating formulas are based on default values, which tend to be conservative.
An overarching target for Solvang's performance efforts is to reduce power and energy consumption without reducing the speed and commercial value. The engine setup plus vessel performance follow an iterative simulation strategy. Much like the yard during shipbuilding and first-time engine installation.The result has been even better than we expected.

Propulsion drive train

MAN Enery Solutions has delivered Solvang's propulsion drivetrain optimization programme for some vessels. This substantial procedure includes propeller blades, a propeller-hub fairing cone and rudder-bulb integration, all together meeting EEXI and CII regulations via main-engine power optimization and increase of propulsive efficiency. According to Michael Muff Jensen with MAN Energy Solutions, the Solvang collaboration project "is spot on in terms of performance, efficiency and reduced CO2 emissions. This is just Solvang's latest investment in its current fleet, confirming its position in the market as a committed front-runner in the efficient and environmentally-friendly transport of LPG and petrochemical gasses."

Part load optimization

The project "WPLO" (Wärtsilä 2-stroke Part Load Optimization) combines modifications of turbocharger components and tuning of the engine to shift the optimal load to a lower range. The test project was carried out onboard one of Solvang's H-class, jointly by turbocharger

Propulsion drivetrain optimization:
Fuel savings reached 3-4 % on the engine, while combined fuel savings were 25 %. As a result, the vessel's CII rating improved from D to A.

« It is an almost unbelievable result

Tor Øyvind Ask, Fleet Director at Solvang

Scan to read the article "Wise use of renewable energy in transport"

WESP: Cutting 95 % of particle mass

In 2023, Clipper Eos installed Solvang's first wet electrostatic precipitator, paving the way for further decarbonization.

The Wet Electrostatic Precipitator – or "WESP" – solution uses advanced particle filtration to cut particulate matter (PM) emissions from the exhaust. The WESP filter consists of a honeycomb structure, rigged with high voltage electrodes to create an electrical field inside each honeycomb tube. In 2023, the filter was installed on Clipper Eos. It is scheduled to be installed on four more vessels.

The strong electrical field charges and pulls particles and entrained droplets from the gas flow, attaching them to the inner surfaces of the tubes. These particles are then flushed from the tubes using water, which is collected and cleaned onboard.

Technology manufacturer Wärtsilä expects the WESP, which is installed on top of a conventional scrubber system, to remove 80 to 95 % of particulate matter from conventional fuels. The technology will play an important role in pre-treating the exhaust stream for onboard carbon capture and storage (OCCS) technology.

specialist Accelleron and engine tuner Wärtsilä.

WPLO is a straightforward solution, easily adaptable to standard overhaul procedures with no need for dry-docking. The project took six working days to complete. Immediately thereafter the vessel was able to maintain market speeds while staying EEXI compliant. Fuel savings reached 3-4 % on the engine, while combined fuel savings were 25 %. As a result, the vessel's CII rating improved from D to A.

"It is an almost unbelievable result", Mr. Tor Øyvind Ask, Fleet Director at Solvang, says.

Mewis Ducts

In 2023, Solvang made new investments in the Mewis duct programme, in collaboration with Becker Marine Systems. In 2013, Clipper Posh and Quito became the first VLGCs in the world to feature Mewis Ducts, which consist of a duct positioned in front of the propeller along with an integrated fin system. By straightening and accelerating the hull wake into the propeller and also producing a net forward thrust, the Mewis Ducts save up to 7 % of fuel in the tank segment. In the case of Solvang's fleet, annual savings will reach 10,000 tonnes of fuel or 30,000 tonnes of CO_2 when all vessels have Mewis Ducts.

Operational improvement

Deep sea shipping is the world's most energy-efficient transport. Still, the standard two-stroke direct driven low-speed engine has an efficiency ratio at just 50 % at the propeller. When converted into thrust, axial, rotational and frictional losses account for 10-15 % further energy losses, leaving only 35-40 % of the original fuel energy to drive the vessel through the water. Again being deprived of effect by hull friction and wavemaking.

To mitigate such losses, Solvang instituted the ECO LPG Carrier programme in 2015, covering an extensive set of improvement and innovation measures to minimize losses and save energy for propulsion. Read more about Solvang's ECO LPG programme on www.solvangship.no

Scan to read the article "A long journey towards discovery"

In the run for zero observations

Solvang's annual Quality Award celebrates the crew achieving the lowest number of observations. In 2023, a new team climbed to the top-scoring the lowest number.

The annual Quality Award compares the number of observations made during inspections. The result is based on observations made during SIRE (Ship Inspection Report Programme), CDI, port state, and class inspections.

The new champion

For the first time in seven years, Clipper Venus had to give up its gold rank. Clipper Mars is the new champion, scoring 1.25 observations in 2023. The previous winner Venus, which shared the 2022 gold medal with Clipper Eos, dropped to a bronze place with the score 1.35 in 2023.
The silver medal went to Clipper Quito, which stepped up from bronze last year and achieved 1.30 observations in 2023.
"Getting a place on the podium is still very impressive. Well done by our three winning vessels", states Fleet Director Tor Øyvind Ask.

More observations in 2023

The overall quality figures for the fleet, measured by inspection observations, show an average score for 2023 of 2.35. This is compared to 1.78 for 2022, which was an exceptionally low number.
According to the fleet director, the increased number of observations is due to extraordinary inspection circumstances directly after dry-docking of 10 vessels, plus gradual implementation of SIRE 2.0 inspection principles.
Still, Mr. Tor Øyvind Ask encourages the crew to aim for high goals.
"We set the bar higher for ourselves for 2024 and measures have been taken to improve. The Quality Award winners on board Mars, Quito and Venus have done an excellent job throughout 2023. I know everyone makes an effort onboard our vessels every day, and I can't wait to see the entire fleet delivering excellent results in 2024", says Mr. Ask.

Energy Efficiency Award 2023

Solvang's annual Energy Efficiency Award gathers our crews for a friendly match: Who can outperform the others in seamanship and vessel operation?

To inspire a further dimension of excellency throughout our fleet, Solvang kicks off a special competition every year. The crews pit themselves against crews on the other Solvang vessels in terms of tactical and strategic seamanship, smart operation and technical proficiency. Who can outperform the others and achieve the best result – effectively expressed as energy efficiency?
The rules of the competition are adjusted for each vessel's SEEMP, the Ship Energy Efficiency Management Plan.

The competition

- Who picks the best routes?
- Who navigates the weather better?
- Who hits the optimal trim of vessel?
- Who operates the engines best?
- Who has best engine maintenance/performance?
- Who thinks out the best power-saving plan?

The 2023 Solvang efficiency award was marked by several worthy candidates for the podium. Many vessels showed high quality with their SEEMP, resulting in intense competition. Consequently, the score point range was extended from 3 to 5 to "winnow the chaff from the wheat".

The point scores

SEEMP

Every year the vessels reevaluate their own SEEMP and make an updated plan. Each vessel is then externally evaluated on their own SEEMP with a score between 1 and 5 where 5 points mark strong effort and highly relevant plans for three different departments: Bridge/deck, engine, and galley, whereas 5 shows strong effort and 1 shows lack in effort.

The vessels are accordingly challenged to self-assess how their goals and effort paid off, how it was monitored, as well as assessing next year's plan. A score from 1 to 5 is given to each vessel, whereas 5 reflects strong effort and 1 lack of effort or relevance.

AER performance

The AER value for 2023 is compared to 2022, if the IMO rating has changed. Additionally, estimated "AER at sea" value for sailing condition, i.e. removing fuel consumption from port stay and maneuvering shows us how well the vessels actually sail. Other parameters in a complete performance evaluation include fuel consumption per 24 hours for all machineries, vessel speed, time at sea, time in ballast conditions, as well as time since last docking. The results yield a score from 1 to 5.

Dashboard:

ENVIRONMENTAL PERFORMANCE

EMISSIONS TO AIR

2024 target	2023 progress	2023 targets
Innstallation of world first full scale CCS plant	Done	Continue detailed planning for the Solvang full scale CCS project.
100 % Compliance with IMO 2020	Done	100 % Compliance with IMO 2020
		Scrubber operation > 99.8 %
Average Sulfur in fuel < 0.2 %	0.21 %	Average Sulfur in fuel < 0.2 %
Environment and Seemp 2/3 month in LTV programme	Done	Environment and Seemp 2 month in LTV programme
Maintenance according to plan better than 0,4 % Overdue non-critical jobs	0,605	Maintenance according to plan better than 0,4 % Overdue non-critical jobs
Engine health 9/10	Engine health 9/10	Engine health 9/10
Fuel optimization potential better than 0.6 %	0,6 % pr average	Fuel optimization potential better than 0.8 %
Search for new projects	Done; project ended in 2023	Continued Partisipation in the research project Smart Maritime and CLIMMS
Continue Solvang Energy savings competition	Done , winner published in this report	Continue Solvang Energy savings competition

ENERGY CONSUMPTION

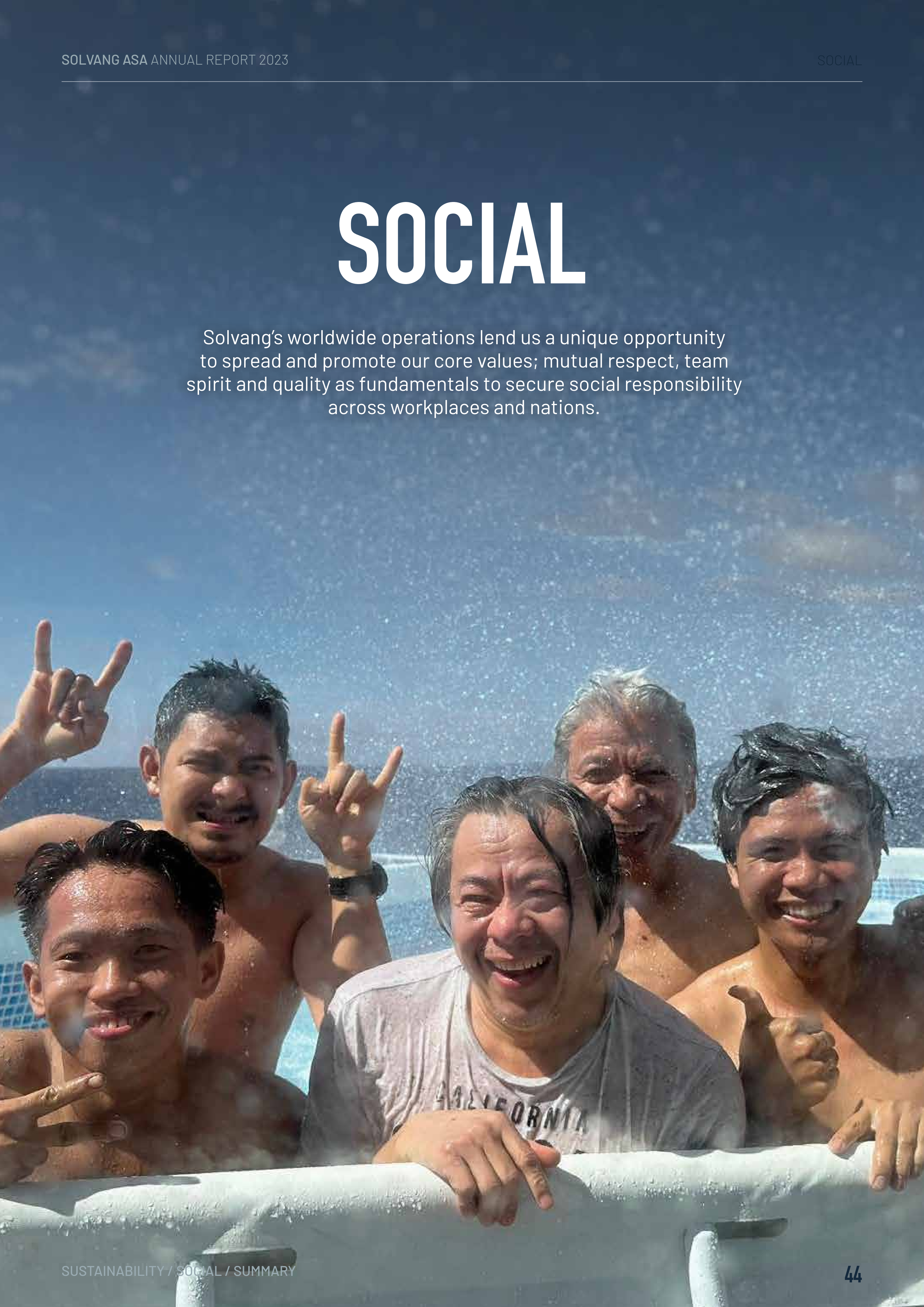
2024 target	2023 progress	2023 targets
Present historical fuel efficiency for the fleet	Done, this report.	Present historical fuel efficiency for the fleet
Continuous evaluation of vessel energy consumption against base line	Done,	Continuous evaluation of vessel energy consumption against base line
12 vessels in project Energy Optimization Cargo Handling (Operim++)	In progress	12 vessels in project Energy Optimization Cargo Handling (Operim++)
Environment and Seemp as focus aerea 2 months in LTV program	Done	Environment and Seemp as focus aerea 2 months in LTV program
Dry docking and renewal of high quality anti-fouling on 6 vessels	Done	Dry docking and renewal of high quality anti-fouling on 10 vessels
Maintenance according to plan better than 0,4 % Overdue non-critical jobs	0,61 % overdue	Maintenance according to plan better than 0,4 % Overdue non-critical jobs
Engine health 9/10	Engine health 9/10	Engine health 9/10
Fuel optimization potential better than 0.7 %	0.7 %	Fuel optimization potential better than 0.8 %

LIFE IN SEA AND ON LAND

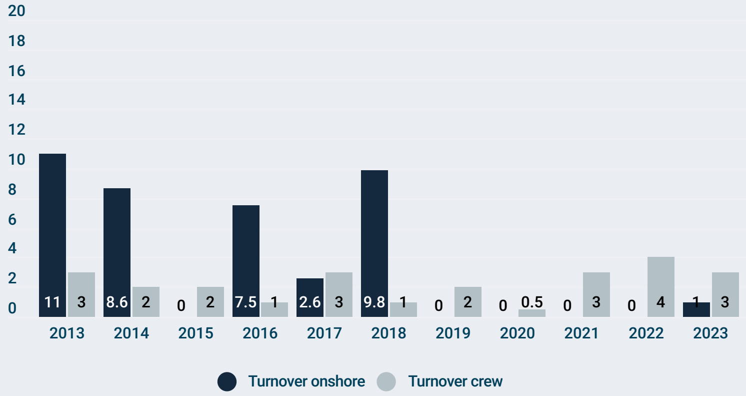
2024 target	2023 progress	2023 targets
Zero spills to sea	Zero	Zero spills to sea
100 % compliance with IMO and local scrubber washwater requirement	Done	100 % compliance with IMO and local scrubber washwater requirement
Zero non-compliance with Marpool Annex I and IV	Done	Zero non-compliance with Marpool Annex I and IV
Maintenance according to plan better than 0.4 %	0,61 %	Maintenance according to plan better than 0.4 %
Engine health 9/10	Engine health 9/10	Engine health 9/10
Fuel optimization potential better than 0.7 %	Fuel optimization potetial 0,7 %	Fuel optimization potential better than 0.8 %

SOCIAL

Solvang's worldwide operations lend us a unique opportunity to spread and promote our core values; mutual respect, team spirit and quality as fundamentals to secure social responsibility across workplaces and nations.



Employee turnover

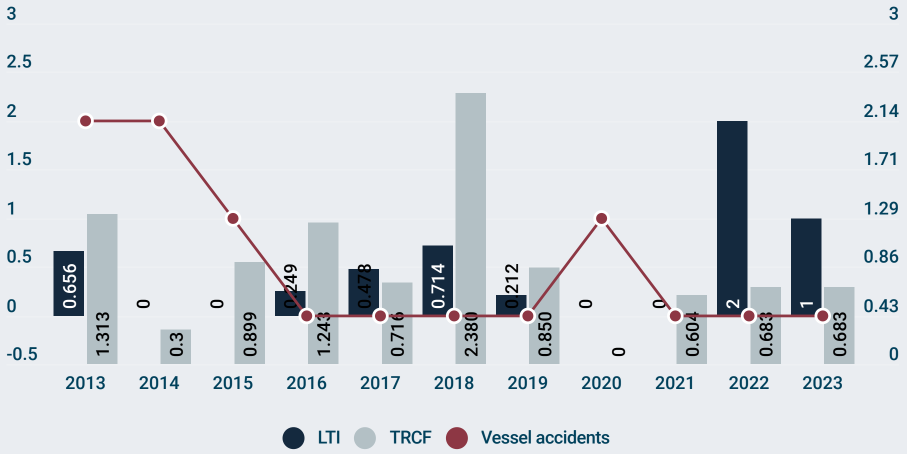


Turnover + retention rate 2023

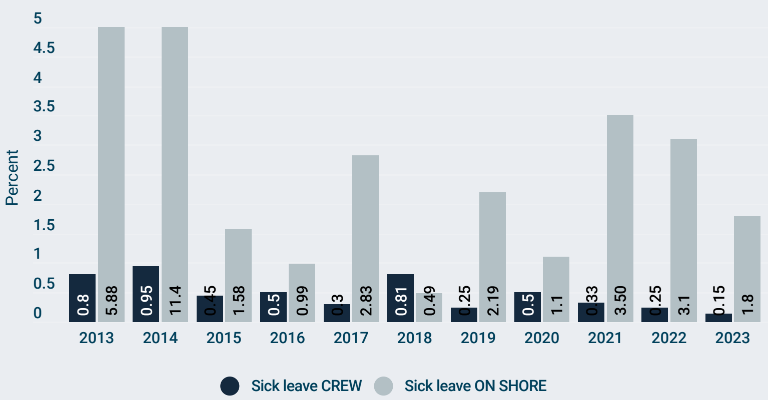
Year	Sea retention rate	Office turnover
2023	97.00%	1.00%
2022	96.00%	0.00%
2021	97.00%	0.00%
2020	99.50%	0.00%
2019	98.00%	0.00%
2018	99.00%	9.80%

Safety

Continuous HSEQ programme since 2009



Sick leave



Sick leave in Solvang 2023

Year	Sea	Office
2023	0.15%	1.8%
2022	0.25%	3.10%
2021	0.33%	3.50%
2020	0.44%	1.15%
2019	0.25%	2.19%
2018	0.81%	0.49%

Fitness status of Solvang seafarers' pre-departure health examination

Condition	2023	2022	2021	2020	2019	2018
FIT	94.00%	98.00%	99.30%	96.39%	96.70%	98.70%
UNFIT	1.00%	1.00%	0.60%	2.86%	2.60%	1.00%
EXPIRED	5. 00%	1.00%	0.10%	0.75%	0.70%	0.30%

I found a home far from home

A widened perspective of life is the highest treasure among the benefits of working in Solvang, according to Kathrine Jepsani, who serves as 3rd Officer on Clipper Posh.

As Kathrine Jepsani, 27, grew up with her four sisters in the Sorsogon province in Luzon Philippines, she was raised to be content with the cards she had been dealt in life. Complaining wouldn't take her anywhere, she was taught. But dreams would take her farther than she could imagine.

"Ever since I was a kid, a part of me wanted more. I always questioned myself, and by the time I was a teenager, I knew I had to do something to create a change", Kathrine reveals.

Before she finished high school, Kathrine started applying for scholarships in pursuit of higher education. After several attempts, she was accepted by the Norwegian Shipowners' Association, for the Philippines Cadet Program.

"I was in awe. I never thought someone like me would ever be in the program. Then I was even more lucky to be picked by Solvang as one of their cadets. From that day on, I will always be grateful to them for letting me enter the shipping industry", Kathrine says.

Welcoming crew

Beginning with her first meeting with Solvang at the shipowner's Philippine company in Manila, Kathrine experienced a warm welcome by crew and officers alike.

"I can remember the welcome party captain Iriz Paiton threw for the cadets in 2017. From that moment, I knew this is going to be my home far from home", Kathrine says.

She was introduced to a culture heeding independent thinking. Kathrine's superior encouraged her to step out of her comfort zone, to explore and think outside the box, in order to learn and maximize her potential. Kathrine quickly learnt to face her fears and overcome any obstacle in an environment that supports her.

"Clipper Posh maintains a good working environment because we treat each other equally with respect and understanding. We make sure nobody is left behind by sharing and listening, especially during tough times due to work or personal matters", Kathrine explains.

High dreams

Today, Kathrine Jepsani serves her second period as 3rd officer onboard Clipper Posh. She carries out watches during cargo operation as well as during navigation, ensuring everything is executed safely and according to plan. Fire fighting equipment onboard is another of her responsibilities, as well as assisting the captain with administration and documents requirements for port calls. Kathrine safeguards the whole crew in abiding by international and company regulations and procedures.

"All my tasks are stimulating and challenge me to learn", she says.

What is your plan for the future, and do you have a message to your colleagues?

"My plan is to continuously grow and expand my knowledge and skills, from onboard experiences as well as seminars and training during my vacation", says Kathrine. She dreams about one day steering the ship.

"I have always wondered how it feels to be a captain of the ship, now I just have to learn to become one!"

Benefits and sacrifices

Kathrine wants to be an inspiration to others – especially to people just about to start or those who just started their career in shipping.

"We should always be grateful for the things we have, for the people we meet, or the situations we go through. It doesn't matter how big or small, because we will add a silver lining to those things. A captain once told me, "What you feed your mind becomes You and it impacts everything that you do."

In Kathrine's opinion, Solvang's employees afford room for one another, allowing for people to turn their diversity into a strength.

"We grant each other a chance to expand our perception of life and seize the opportunity to showcase eachother's full potential. I always believed that diversity is the best tool for innovation. It suits Solvang's core values of mutual respect, team spirit and good quality", Kathrine states.

What is your benefit from working in Solvang?

"Solvang has given me the opportunity to have a better life not just for me, but also for my family. I had an opportunity to travel and expand the horizons of my being, my knowledge and people in my social circle. The most important of it all is the opportunity to widen my perspective of life and everything about it. But of course with these opportunities comes also sacrifices of being away from loved ones and leaving the version of myself that I have known as I grew up before I left home", Kathrine says.

Growing as a seafarer

Staying enthusiastic about company core values and heeding for your profession - that's Ydesia Mallari's best tip for growing as a seafarer.

It was June 18, and the vessel was anchored in Skagen, Denmark. When I embarked, I was nervous yet full of excitement, eager to learn and explore.

Ydesia Lei Mallari (27) is an ex-cadet in Solvang, who is now working as 3rd engineer on Clipper Saturn. According to managers and colleagues, Ydesia is among the representatives of Solvang's future, being friendly, proud, skilled and showing human strength to counter any challenge.

This interview with the dedicated young professional was made while she crossed the Atlantic on a voyage from Marcus Hook Philadelphia, to Sines Portugal.

From the Philippines to Denmark

Where did you grow up, and how did you end up working on a ship?

"I grew up in the Philippines, in Angeles City, Pampanga. At the age of 16, the family moved north to Bolinao, Pangasinan. Fortunately enough, I was admitted to the NSA Scholarship, where I entered Solvang's cadetship program. From 2015 to 2019 I took a B.Sc. in Marine Engineering at Davao Merchant Marine Academy".

How was your first day as a cadet onboard Clipper Star, back in 2018?

"It was June 18, and the vessel was anchored in Skagen, Denmark. When I embarked, I was nervous yet full of excitement, eager to learn and explore the real world of the profession I was pursuing. On board, we were given full sets of PPEs, then familiarization was conducted with a checklist. The chief officer guided us through equipment, emergency procedures, designated mustering stations and much more", Ydesia says, and adds:

"The very same night they threw us a welcoming party with karaoke, introducing the cadets to the crew. Everyone on board was very friendly and approachable. There was a sense of harmony, which put the first-timers at ease."

Being away from home

What opportunities did you get in Solvang, and what sacrifices did you make?

"Sailing high standard vessels with a skilled crew is a clear opportunity for my growth as a seafarer. Through the crew, I developed my confidence and skills to advance my career.

Of sacrifices, I must endure being away from loved ones and missing out on special events, in order to achieve my goals. Seafaring is not an easy profession, yet it is fulfilling and satisfying to overcome the challenges that it presents."

You have served as a wiper, motorman and engineer. Currently, you are 3rd engineer on Clipper Saturn. What does a work shift look like for you?

"The shift starts with a morning safety meeting or tool box talk were we discuss the work with the engineers together with the engine ratings. Afterwards, I brief the 2nd engineer on my work order and bring it into accordance with the planned maintenance system (PMS). We create a work permit and carry out a risk assessment before preparing tools and spare parts for the job. After completing the work, I report to the Star IPS and PMS."

Working as a group

How do you practice mutual respect, team spirit and quality on board?

"After having spent some time on board, I noticed that the crew practice these values with a sense of enthusiasm. From the senior crew, I observe no hesitation to acquire new knowledge. As a group, we accomplish complicated jobs without any sense of toxicity."

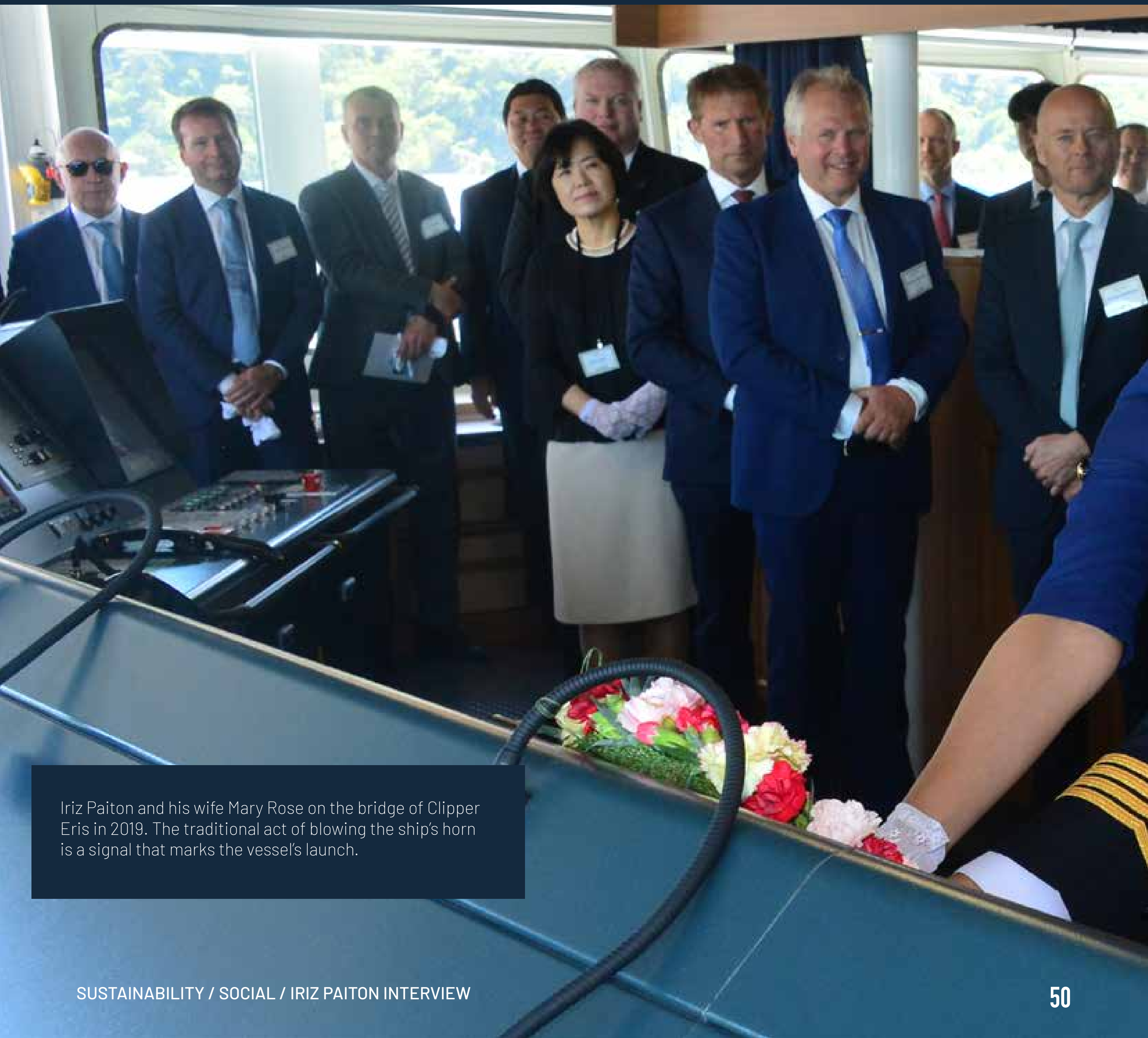
What is your message to colleagues across Solvang's fleet?

"I want to encourage my colleagues across the fleet to continuously embody our company core values and to keep an endless dedication towards your profession. This helps alleviate any friction between crew members, it heightens output and improves the company as a whole", says Ydesia.

Mutual respect and team spirit drives quality

A relationship to have and to hold

Solvang's crew describe their ships and sailing mates in words of affection. Captain Iriz Paiton goes even further.



Iriz Paiton and his wife Mary Rose on the bridge of Clipper Eris in 2019. The traditional act of blowing the ship's horn is a signal that marks the vessel's launch.

On a chilly winter day in Norway 21 years ago, Iriz Paiton laid his eyes on a large Solvang vessel for the first time. The 19 year-old had just been recruited as a cadet back in his home country the Philippines. He had no idea where the gangway was leading as he gazed at the sight of Clipper Skagen.

"I was astounded by the size of the ship, momentarily forgetting the biting cold as I made my way up the gangway. Despite being secured to the terminal, I saw how the vessel swayed in the gale winds. Standing on deck, nearly vomiting, immersed in cold, I was uncertain what the future could hold for me on this ship. Yet, the crew greeted me with smiles, jokes, and assurances that the real challenge awaited as we headed into the open sea", Iriz says.

Raising to command

Iriz stayed on deck as Clipper Skagen plowed the high seas, providing the young cadet with just the challenges he needed to realize his talent. During the first years of sailing, he got the grip of everything, gradually building his career up to the position of Master. Getting to command Clipper Star as one of the youngest employees ever to ascend to the rank of Master in Solvang, Iriz felt the pressure.

"I was acutely aware that I needed to excel in order to affirm my capability", he says.

When entering into the position, the new captain had a pivotal conversation with Solvang's CEO Edvin Endresen in Stavanger, instilling confidence and dedication into the talented young man.

"I confessed to the CEO that I felt nervous about living up to the Company's expectations and my ability to navigate the challenges that would come my way. But he reassured me, emphasizing that the entire shore team was behind me and just a phone call away, in case I should need support", Iriz says.

Filipino seamanship

Getting to know the crew over time, Iriz - like the other seafarers we interviewed in this report - tends to speak about family. It is no secret that close to all of Solvang's sailing crew come from the Philippines. Iriz can reveal a few details from his home country's seamanship.

"Most Filipinos grew up surrounded by the sea, as we live on an archipelago. Coming from many different islands, we naturally adjust to the culture aboard a ship, treating the environment as our own", Iriz tells. Additionally, people have strong and close family ties, and they highly value hard work as means to provide for the closest ones. Together, these values translate into mutuality and team spirit onboard Solvang's voyages.

"When people are on board working for nine months, they take care of each other like it was a home", Iriz says. Standing on the bridge commanding the ship, which Iriz did as a captain for many years, is an experience invoking even more devotion in the heart of a genuine seaman.

"Honestly, I treat the vessel like my second wife. I sail with her and I know how to handle her. She should get the highest recognition from everyone, be properly tended to and maintained, because she is my pride", Iriz confesses.

Building the team spirit

Solvang has established its philosophy of management throughout the global organization, starting from the very top.

"The owner at the top has entrusted us with a big responsibility, along with the freedom to make our very best decisions when realizing the operations. This integrity fosters a sense of ownership which is felt everywhere in the company, notably in the specific culture onboard our vessels", says HR Director Kjetil Meling in Solvang.

Captain Iriz Paiton recently advanced to Vice President of Solvang Philippines Inc., where he develops crew competency from an onshore position. He believes that Solvang's management style is aligned with the upcoming generation of seafarers.

"We deal with a generation inculcated into a digital era, paying attention to a different sort of leadership. How you respect them and listen to them, decides their sense of team spirit", Iriz says.

For a team to achieve high-quality outcomes, each individual has to demonstrate mutual respect. It creates an environment where everyone is encouraged to give their best effort, trusting that their views and work are valued by their peers.

"For me, team spirit transcends mere collaboration; it involves fostering a familial atmosphere among the crew. Such a connection bolsters our collective resilience and flexibility, making sure we function not merely as individuals performing tasks but as a united group working toward shared objectives", Iriz concludes.

"Coming from many different islands, we naturally adjust to the culture aboard a ship, treating the environment as our own"

A powerful diverse culture

Worldwide operations allows Solvang to spread the word - of mutual respect, team spirit and quality across markets, regions and cultures.

Solvang's ecosystem is profoundly global. Vessels are constructed and assembled in South Korea, Germany and Japan, using equipment and technology from Norway, Germany and a global set of producers. Recruitment of personnel takes place in the Philippines, Lithuania and Norway - among other countries. Clients, contractors and partners count on Solvang in all corners of the world. Both offshore and onshore, our organization itself depends on cooperation between societies and professional backgrounds as well as geography. Together, we make up a formidable diversity of cultures.

"We need people who want to take part in our voyage, going where we are going", says Mr. Kjetil Meling, HR Director at Solvang.

Transparent efforts

Shipping as an industry offers plentiful opportunities - when guided by the right values and governing principles - to make substantial contributions to peoples' lives in local communities where social security and stability is not guaranteed by public administration or others.
Solvang's declared values of respect, team spirit and quality are not self-evident around the world. Hence, our top management and Board of Directors acknowledge the impact of our decision-making on Solvang's employees, partners, their families and local communities around the world. Solvang practices social responsibility through care and consciousness in all our activities.

Cross department involvement

The onshore staff at Solvang is a team of 45 individuals sharing the same workspace. This includes executive management and various departments such as fleet operation, IT and technical support, chartering, finance and accounting, HR, legal, supply chain, HSEQ, and R&D, all operating from the main offices in Stavanger.

"People are not being slotted into boxes but get to participate in projects from a to z", explains Mr. Meling. For instance, taking on an inspector role involves overseeing an entire ship, not just focusing on a limited inspection scope. The possibilities for involvement and growth are extensive.

"We aim for top-notch performance with a compact team managing a large and growing operation. To succeed in Solvang's onshore crew, one needs to be resilient and value high standards of performance and quality," Mr. Meling remarks.

Living the vision

Solvang's intent to spread ideal values - mutual respect and team spirit - will succeed only when the company's employees live by the vision in all their encounters with others.

"We are an organization of diverse origin, pertaining to belief, life experience and nationality. But we sail under the Norwegian NIS flag, meaning we enforce our values under that jurisdiction", states Mr. Meling.
Solvang's ambition is to make the core values of mutual respect, team spirit, and quality influence colleagues, customers, owners, competitors, public sector, society and the local and global environment.

"Done right, we hope our efforts contribute to a positive spiral with positive dialogue and improved standards from an international perspective," Mr. Meling says.

Visit solvangship.no or scan the QR code for details about the "Living the Vision" programme.

Freedom to blow the whistle

A culture of confidence, personal integrity and high quality is the documented effect of trusting our employees on all levels.

« Motivating people to report an error they made, or to admit that they didn´t perform an obligatory task, that paves the way for compliance

Kjetil Meling, HR Director at Solvang

Keeping track of every incident on board a fleet of tankers seems like an overwhelming task. With the impossibility of monitoring every area around the clock through video surveillance, it's crucial for crew members to proactively submit their reports.

The notion that employees will report every incident, especially when it involves blowing the whistle on their own actions, might appear unrealistic. Yet, Solvang is confident that this is precisely what we've accomplished. Mr. Kjetil Meling, HR Director at Solvang, challenges, "Just ask any long-standing member of Solvang whether they've ever seen someone who reported an incident face any kind of backlash."

Trust is key

Solvang has strategically chosen to prioritize the reporting of incidents over penalizing the individuals involved in the mistake. Receiving a report of an incident provides the organization with valuable information for making enhancements.
"Our approach is based on trust, encompassing everyone from the top manager to the cadet," Mr. Meling confirms. Ever since Solvang implemented their HR policy of equally trusting all employees, the company has seen an increase in staff retention rates to between 97-99 % annually. The annual amount of incidents has decreased as well.
"While the high approval from our staff is rewarding, our aim is to continually improve, whether in terms of retention rates or reducing the number of incidents," Mr. Meling states.

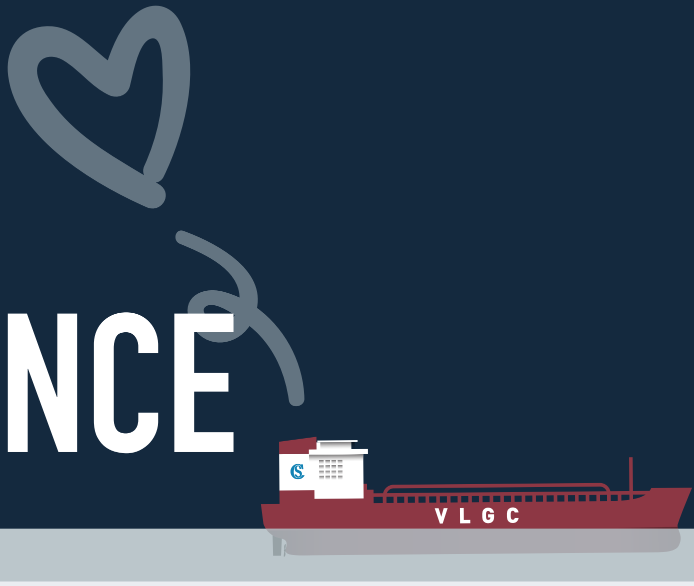
Nothing without you

Outspoken support from the top management makes it easier to handle situations on board the ships. Regularly, every ship holds meetings on safety, encompassing all crew members. In 2023, the crews were trained in Solvang culture, seizing ownership to mutual respect, team spirit and quality as inherent values of the company. The culture opposes values like fear and control, which don't contribute to quality.

"Motivating people to report an error they made, or to admit that they didn´t perform an obligatory task, that paves the way for compliance," Mr. Meling remarks.

Dashboard:

SOCIAL PERFORMANCE



EMPLOYEE RELATIONS

2024 target	2023 progress	2023 targets
High focus on diversity and gender equality in recruitment and under service.	Done	High focus on diversity and gender equality
Recruiting, educating and retaining a skilled workforce	Done	Recruiting, educating and retaining a skilled workforce
Systematic on-the-job training trough Living The Vision programme	Done	Systematic on-the-job training trough Living The Vision programme
Implement a good understanding of revised values (Mutual Respect, Quality and Team Spirit.	Done	Implement a good understanding of revised values (Mutual Respect, Quality and Team Spirit.
Highfocus on job/vessel specific training /Comp.Enhancement	Done	Increase focus on job specific training /Comp.Enhancement
Career development, communication/leadership development	Done	Career development, communication/leadership development
Use trainee positions on all vessels /cadets/jr offs/trainees to secure future recruitment need	Done	Secure trainee positions on all vessels /cadets/jr offs/trainees

DIVERSITY AND INCLUSION

2024 target	2023 progress	2023 targets
Select 20-30 % female cadets during our initial selection.		
Actively promote diversity in our recruitment and rotation		
Target minimum 2 female pr vessel when using femal crew		

COMMUNITY ENGAGEMENT

2024 target	2023 progress	2023 targets
Provide access to LPG as a clean source of energy and ammonia as a potent fertilizer	Done	Provide access to LPG as a clean source of energy and ammonia as a potent fertilizer
Support the communities where we operate	Done	Support the communities where we operate
Support NSA cadet programme in Manilla	Done	Support NSA cadet programme in Manilla
Officer and crew conferences in Stavanger and Manilla	2+1	Officer and crew conferences in Stavanger and Manilla
100 % compliance in Living the Vision programme	Done	100 % compliance in Living the Vision programme
Live up to our Mision statement	Done	Live up to our Mision statement: "Solvang aims to be an industry leading provider of LPG and petrochemical tonnage to our clients in the safest, cleanest and most cost-effective manner."

HEALTH AND SAFETY

2024 target	2023 progress	2023 targets
Work systematically to ensure the health, fitness and safety for all crew and employees, both at work and home	Done	Work systematically to ensure the health, fitness and safety for all crew and employees, both at work and home
Zero LTI	1 LTI	Zero LTI
Sick leave Solvang; Sea less than 1 %, Shore less than 3 %	1,8 % shore, 0.15 % sea	Sick leave Solvang (sea/ashore) less than 1 %
100 % compliance in Living the Vision program	Done	100 % compliance in Living the Vision program
Secure common platform for competence for galley personnel handling food/nutrition	Done	Systematic training of our chefs
Continue strict focus on pre-medical screeing before serving onboard for all nationalities	Done	Pre-medical screening of our Filipino seafarers
Health insurance and pension for all seafarers	Done	Health insurance and pension for all seafarers
Participate in Shell safety program	Done	Participate in Shell safety program

GOVERNANCE

Solvang's integrity of governance relies on steady control mechanisms fixed at top-level management and the Board of Directors.

Inspections 2023

Flag & Port State control 2023

42 DNV inspections
0.2 observations on average

42 port state controls
1 observations on average

Due to special circumstances, one vessel had an average of 6 observations.

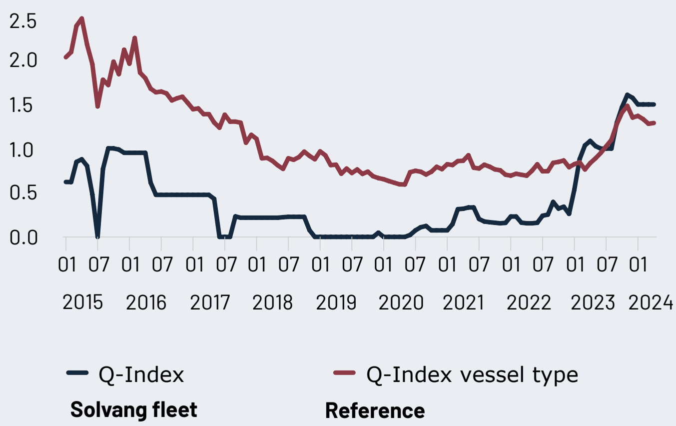
Internal inspections follow the fleet size. External inspections by DNV and flag states are done in 5 year intervals.

DNV Ship Quality Index 2015-2023

The DNV Ship Quality sums up Solvangs performance. The reference is the total LPG carrier fleet in the DNV system.

Up to 2022, DNV scored Solvang considerably above the world average LPG-tanker fleet. In 2023, Solvang's average aligns with the world average, due to one vessel detention and two special circumstances during dry-dockings.

Low number, few issues = high quality.



Solvang procedure revisions 2023

In order to comply with all rules and regulations we make frequent audits of our operating procedures. Below is an overview of how the audits have initiated and how many procedures have been updated in 2022.

REASON	PROCEDURES
Periodical	3
Internal observations	2
External observations	0
New regulations	1
Comments from the crew	32
Comments from shore staff	41
Risk assessments	0
New procedure	2
TOTAL	**79**

Rules and regulations outlook:

The Norwegian Transparency Act enforces routines to ensure human rights and decent working conditions are provided - throughout the supply chain. The act sets out detailed provisions for:

- Due diligence
- Publication of due diligence assessments
- Information duty

Read more about The Norwegian Transparency Act on page 52.

Corporate governance in Solvang

Reliable control mechanisms sustained at Company top-level constitute Solvang's principal governance structure, and warrant of our values.

Since its founding in 1936, Solvang kept answerability a focus for governing corporate assets and operations, including our human capital. By upholding the values of mutual respect, team spirit, and quality in everything we do, Solvang has created a culture of ethical business conduct which permeates our activities around the globe. As anyone who worked with Solvang may have noticed, a certain set of attitudes characterizes how we solve our tasks and relate to each other, our customers, suppliers and the society in general. We think enthusiasm and friendliness best describe this set of attitudes - from the top-level management and the Board of Directors, down to each and every one of the employees.

Attitudes and actions

The Company strives to continually earn the trust endowed upon us by our stakeholders. To achieve this, we safeguard a consistent relationship between values, attitudes and the work we actually do by bringing the world raw materials for sustenance and development. The governance control structure which we apply to secure this, includes mandatory approval of all significant operational and financial dispositions, internal control procedures, external audits, and control of the supply chain. By conscientiously adhering to our principles, we believe that gradual improvement will take place for all stakeholders.

No discrimination

Solvang does not accept any discrimination of the sexes, religion, cultural heritage, race or any other form of discrimination among our employees and suppliers.

The mission is to perform our activities based on respect for all employees. We will conduct our business with social consciousness and show respect for colleagues, business partners and competitors. Solvang will be marked by a high standard in matters relating to health, environment and safety, in accordance with present legislation.

Board of Directors

Michael Steensland-Brun
Chairman

Ellen Solstad
Independent Director

Christian Frustøl
Independent Director

Solvang ASA Executive Leadership

Edvin Endresen
Chief Executive Officer

Kim Larsen
Commercial Director

Egil Fjogstad
Chief Financial Officer

Tor Øyvind Ask
Fleet Director

Kjetil Meling
HR Director

Independent Checks and Balances

- External Audits - professional examination of accounts
- Annual General Assembly - shareholders participation

External Framework

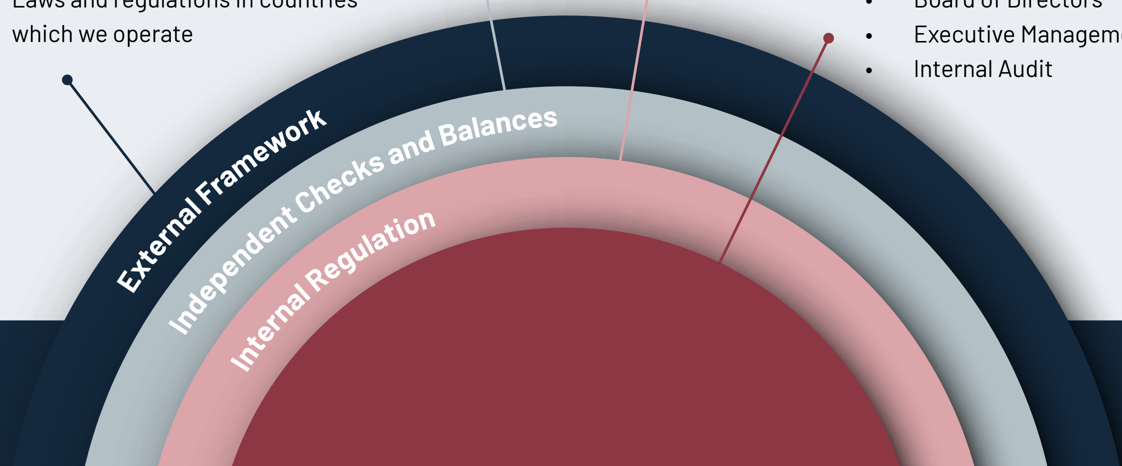
- The Norwegian Code of Practice for Corporate Governance
- Norwegian Companies Act
- The Norwegian Transparency Act
- Corporation Code of the Philippines
- IMO and flagstate regulations
- Laws and regulations in countries which we operate

Internal Regulation

- Bye-laws of Solvang ASA
- Quality managment system
- Ethical guidelines
- Authorization matrix
- Supplier code of conduct
- HSEQ framework «Living the Vision»

Internal Governance

- Board of Directors
- Executive Management
- Internal Audit



Stepping up to full transparency

In 2023, Solvang obtained systems and hired new people to ensure compliance with the Transparency Act, throughout the supply chain.

"The Transparency Act has very timely pointed out third party vendors and affiliated companies as important targets of our diligence", says Tanja Øvrebø Hunshamar, Supply Chain Manager at Solvang. In 2023, she directed a restructuring of the purchases and acquisitions processes in Solvang.

The changes imply a basic recognition of the supply chain as strategically significant for the Company, not mainly of operational value. This aligns well with Solvang's priority of due diligence as part of Solvang's corporate governance, to ensure the integrity of our values under the Norwegian Transparency Act.

"We have introduced strategic deliberations on the categories of purchase, we started registering compliance details on suppliers, we started benchmarking against the transparency act, and we obtained software to complement our existing systems", Mrs. Hunshamar remarks.

Risk management

The software was developed by Sandnes-based Profitbase and was ready for implementation at year-end. It provides a CFO platform programmed to identify, assess and mitigate financial risks, including compliance issues with the Norwegian Transparency Act. By customizing reports on suppliers with details about geographical location, internal and external sources of information, the platform helps Solvang fulfill our obligation towards due diligence, public information and risk management in general.

"The Profitbase platform conveniently helps us to map our field of purchase, arrange and overview our transactions, and to set our goals for 2024", Mrs. Hunshamar says.

Mandatory prequalification

In 2023, Solvang's supply chain department was expanded with new expertise, marking the ambition to extend our control of compliance down the supply chain. A.o. pre-qualification was made mandatory.

"We carry out a prequalification of all third-party vendors entering into our supplier register", states Mrs. Hunshamar. She underlines Solvang's commitment to fact-based, fair and consistent practices of evaluation at all times. As a member of Incentra, a procurement organization, Solvang mitigates any concerns related to suppliers assisting in vetting.

Framework of governance

As a global transporter of petrochemical tonnage, Solvang maintains a working relationship with a diversity of stakeholders in various jurisdictions. Hence, clearly defined routines for performing due diligence assessments, as well as rules for communication with suppliers, as well as reporting issues, are being arranged.

In 2024, Solvang will continue to analyze and refine the data from the supply chain, collected under the new regime. Based on concrete findings, Solvang will decide what actions are more appropriate and relevant towards suppliers.

Another next step in Solvang's supply chain management portfolio is an upcoming plan for supplier audits in 2024, deploying the large knowledge base being assembled on the CFO platform as a guide to follow-up audits.

Among these measures, the stakeholder dialogue will stand central. As a major value-driven organization proposing mutual respect, team spirit, and quality as principles to enhance our common good, Solvang stands ready to assist all suppliers who share our objective of continuous improvement.

SIRE 2.0:

Human and digital safety efforts

In my view, inspections evolve into regular safety assessments, where the inspector and the ship handle a task together

Knut Vespestad, Vetting Manager and Sr. Maritime Superintendent at Solvang

The ship vetting framework makes a veritable leap when SIRE 2.0 introduces a human element plus dynamic tools.

At the turn of the year, Solvang had initiated our first test inspections under the SIRE (Ship Inspection Report Programme) 2.0, which is under implementation. The framework for ship vetting is managed by OCIMF, the Oil Companies International Marine Forum, as an extra qualification to the legal ISM Code framework, and at the end of the day the "ticket to trade" commercially.
According to Capt. Knut Vespestad, Vetting Manager and Sr. Maritime Superintendent at Solvang, SIRE 2.0 introduces a more comprehensive and robust inspection regime.
"There is an increased focus on significant risks, and a recognition of the human element in comprehending and addressing safety on a ship", Mr. Vespestad asserts.

Expanding regulations

SIRE 2.0 exchanges the current 150 pages-questionnaire for a Dynamic Vessel Inspection Questionnaire (VIQ), amounting to 1300 pages on a tablet. Inspectors will now register and upload observations along with certificates, photographs and other material directly into the database SIRE Question Library (SQL). Adversely, standardized reports, governance data and supporting photos could be downloaded.

"In my view, inspections evolve into regular safety assessments, where the inspector and the ship handle a task together", Mr. Vespestad says.

Harmonization

SIRE 2.0 tightens requirements for inspector accreditation, including enhanced training programs to ensure inspectors' skills and knowledge about the latest industry standards and practices.
Among the expected gains from SIRE 2.0, OCIMF announces the greater transparency and accessibility of reports, allowing all parties to manage inspection observations. Another objective is to reduce duplication of controls by harmonizing SIRE with other frameworks, like the TMSA self assessment programme. The future TMSA chapter 14 about human behaviour and performance stands out.
"Overall, an emphasis on the human element constitutes a change of paradigms in ship vetting", Mr. Vespestad states.


CLIPPER POSH
STAVANGER

Finances:

Ballasted for stormy weather

Calm seas don’t train skilful sailors. Solvang spent years building a buffer to sail our stakeholders’ assets to port in any weather.

At the turn of 2023, all but two of Solvang’s 22 vessels were fixed on time-charter contracts. Not because markets didn’t perform well, or tonnage laid idle in the course of the year. On the contrary, global states of affairs handsomely awarded Solvang’s strategy of mixing long-term hedging with spot exposure. By combining a stable control situation with profitable long-term positions, Solvang has strengthened its fundamental position as a company.
“Solvang espouses long-term thinking. We have sailed our own ships for generations, never intending to let go or shift to short-term profit seeking”, says Egil Fjogstad, CFO at Solvang.

Partnership VLGCs

According to Mr. Fjogstad, Solvang is financially prepared to handle lasting turbulence.
“We enjoy a very stable contract situation in a cyclical business environment, which we consider to be the best asset management strategy in the face of uncertain times”, Mr. Fjogstad states.
Solvang is structured into a fully integrated shipowner. All services, including shipbuilding, are controlled in-house. In 2023, Solvang commissioned seven newbuilds in the Panamax class, five of them in the newly formed joint venture with Gunvor Group. Having a long-standing history of joint ventures, Solvang’s model of shared risk and revenues stands out as a successful setup.
“Our long-term relations with traders and refiners evolve from mutual trust, commitment and an ability to deliver quality shipping over time”, states Mr. Edvin Endresen, CEO of Solvang ASA.

ECO awards

Immediately after delivery, which is planned from 2026, all the newbuild VLGCs will enter into 10-year contracts. During this period, environmental performance is expected to increase its factor in financial operations. Financial institutions already include emission reductions in loan schemes, awarding a bonus for ECO performance. Solvang’s ECO LPG Carrier programme, including a.o. hull, shaft and propeller, engine optimization and emission cleaning, as well as potential onboard CCS, promises a growing competitive advantage for our partnerships.
“Solvang has started to receive symbolic financial paybacks for emission reductions, which come out as inspiration to our environmental endeavours,” Mr. Fjogstad says.

« We have sailed our own ships for generations, never intending to let go or shift to short-term profit-seeking

Egil Fjogstad, CFO at Solvang

8 DECENT WORK AND ECONOMIC GROWTH

Solvang's sanctions policy

As an advocate of international law and order, Solvang adheres to and supports sanctions and restrictions against blocked nations, entities and persons.

PEACE, JUSTICE AND STRONG INSTITUTIONS 16

Solvang adheres to economic or trade sanctions laws, regulations, embargoes or restrictive measures carried out by:

- The United Nations;
- The United States of America;
- The European Union, or member states;
- The United Kingdom;
- Norway,

or any countries to which any of these are bound, as well as their institutions and agencies, and special sanctions authorities.

As a rule, Solvang follows the blocked nationals and persons list issued by OFAC, and the targets and investment ban list issued by HMT.

Solvang enforces our sanctions policy by the following means:

- Due diligence audits, particularly towards vessel buyers and new clients;
- Sanctions clauses in all contracts, encompassing time and voyage charter parties, covering all major transactions;
- Routine sanctions compliance checks among suppliers;
- Use of legal counseling in contractual negotiations.

How Solvang measures compliance to rules and regulations

Internal and external inspections such as SIRE (Ship Inspection Report Programme), CDI, port state, and class set the targets for Solvang´s improvement efforts.

When all of Solvang's tasks follow our core values, ***mutual respect, team spirit, and quality,*** continuous improvement is an outcome. The vessel operations have to comply with all rules and regulations, and we perform internal inspections to make sure all systems and processes are according to our procedures.

Our customers have their own inspections three times a year, and the Class inspects our vessels yearly on behalf of the flag state, and port state carries out separate inspections.

Passing inspections is our «ticket to trade», and detention or high-risk observations may have severe consequences. In total, Solvang has 70 KPIs in the areas of safety, human resources/health, environment, training, fleet operation and vetting & inspections (quality).
Since 2008, targets have been set annualy and followed up monthly and quarterly.

Sharing best practice and benchmarking are our tools to achieve continuous improvement. Our quality score is a weighted number of external observations.

Number of observations during inspections

* Based on the overall number of observations on the following inspections: OCIMF inspections, CDI inspections, DNV-GL Annual Class/ISM/ISPS/ISO 14001/MLC audits and Port State Controls (PSC).

The increased number of observations in 2023 is due to extraordinary inspection circumstances directly after dry-docking of 10 vessels, plus gradual implementation of SIRE 2.0 inspection principles.

Quality Awards results

Year	Vessel	Score
2023	Clipper Mars	1.25
	Clipper Quito	1.30
	Clipper Venus	1.35
2022	Clipper Venus/Eos	0.45
	Clipper Freeport	0,50
	Clipper Eirene	0.88
2021	Clipper Venus	0.45
	Clipper Freeport	0.70
	Clipper Eirene	0.73

Collective action against corruption

The far-reaching torrents of misconduct can only be mitigated by consistently dismissing proposals and reporting the incidents.

"Cooperating with other shipowners is the key to reduce the widespread challenge of corruption towards international shipping", states HSEQ Manager Per-Øyvind Nedrebø in Solvang.

Adhering to the UN Global Compact, Solvang is an active member of the Maritime Anti-Corruption Network (MACN). This is a global anti-corruption initiative, which offers Solvang a forum to discuss and improve shipowners' odds against criminal activities. According to the Chatham House rules, members can openly discuss cases, as long as identities of entities and persons are kept anonymous. MACN works with local governments in countries riddled with corruption, with the aim to raise awareness and incentivize adoption of new procedures against corruption. In 2023, some significant achievements were registered in specific ports, which show a positive development.

"Following anonymous reporting of incidents by MACN members, we have been able to act against local misconduct in ports, and to achieve results", states Mr. Nedrebø.

From "no" to reporting

In some countries, the central government has taken action against corrupt officials, opening a hotline to double-checks any claim for fees based on breach of local regulations and/or requirements.

Solvang strongly believes in standardizing the answer "no" to all attempts at undermining legal trade and transportation. Situations of extortion or menace are handled by subsequently submitting a report, both to local authorities and to international bodies.

"Solvang practices full reporting of as many incidents as possible, which we use to assign targeted actions against corruption", Mr. Nedrebø states.

Integrity of supply networks

Solvang is certified according to ISO 14001-2015, specifying ethical and environmental standards for the company, which is extended throughout the supplier network. It is a prerequisite for Solvang's collaboration with suppliers for them to respect local laws and not engage in any form of corrupt practices, including extortion, fraud, or bribery. If any employee or professional under contract with Solvang may have an interest of any kind in the supplier's business or any kind of economic ties with the supplier, Solvang requires this information to be shared with us in order to maintain the integrity of all our transactions.

Industry best practice initiatives

Norwegian Hull Club is another association assembling representatives from line, tankers, bulk and other shipping segments. Common topics are corruption trends. There should never be any doubt that Solvang assumes full responsibility for the integrity of its relationships with other parties. We will not accept nor offer any benefits in order to smoothen business with the Company.

To stay fully transparent and accountable Solvang will reject invitations to sporting or cultural events, holidays and recreational trips or activities paid by interested parties. Any exceptions connected with Christmas or other occasions will include only small gratuities which don't raise doubt about Solvang's dedication to fight corruption in all its forms, everywhere we go.

Solvang's membership of associations

Solvang is member of Norwegian Ship Owner Association, Maritimt Forum, MACN, Clean Shipping Alliance, Tidentalliansen, Incentra, and Intertanko.

Dashboard:

GOVERNANCE PERFORMANCE

GOVERNANCE AND COMPLIANCE

2024 targets	2023 progress	2023 target
44 technical inspections (FM) (2 per vessel)	46 technical inspections (FM) (2 per vessel)	46 technical inspections (FM) (2 per vessel)
110 internal audits (MS) [-] (5 per vessel)	115 internal audits (MS) [-] (5 per vessel)	115 internal audits (MS) [-] (5 per vessel)
Average number of observations Class 0	0.2	Average number of observations Class 0
Zero detention	1	Zero detention
Observation Port State < 0.5	1	Observation Port State < 0.5

«Solvang practices full reporting of as many incidents as possible, which we use to assign targeted actions against corruption

HSEQ Manager Per-Øyvind Nedrebø in Solvang

SOLVANG TOWARDS THE FUTURE

IMO's revised greenhouse gas strategy does not only set a 2050 target of zero emissions. It also indicates 20 % absolute emissions cut by 2030 and 70 % cuts by 2040.

IMO applies well-to-wake GHG intensity of fuels as a core principle to meet these ambitious targets.

The policy implies a successive cutting of fossile hydrocarbons in the fuel mix, or an all-out transfer to alternative technology.

Decarbonization: The race is on

IMO's new GHG reduction strategy puts world shipping on the line. Solvang has carefully prepared to lead the upcoming race.

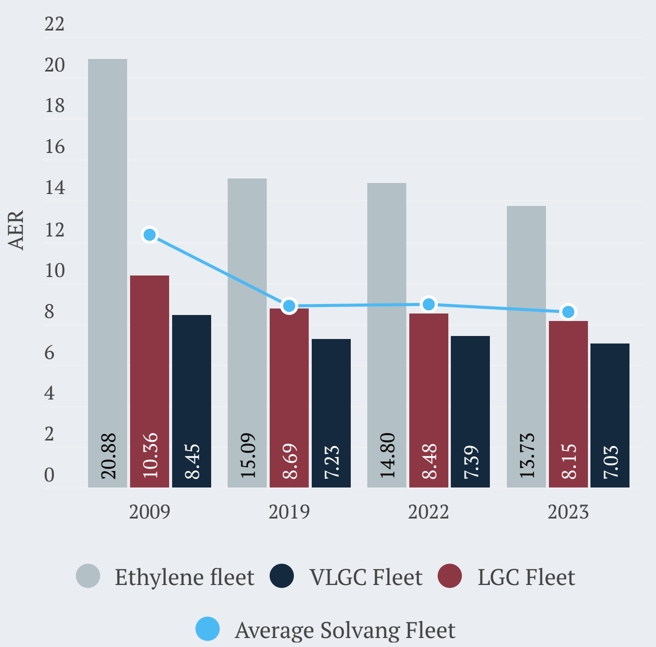
Solvang's ECO gas carriers showcase the achievements of systematic efforts, when relentlessly pointed at operations, design and technology. The effects in terms of reduced energy consumption and emissions coincide with the international strategy to curb global heating and mitigate climate change. In 2023, IMO revised its greenhouse gas strategy to reduce emissions by 20 to 30 % by 2030, by 70 to 80 % by 2040, and to fully eliminate net greenhouse gas emissions from international shipping by 2050.

The following statement is based on Solvang's actual AER (annual efficiency ratio) from 2009 to 2023 in the vessel categories A-E, see page 29.

Well-to-wake limitations

Systematic efforts pay off, but the potential carbon cuts are naturally limited within a well-to-wake perspective. The available carbon free sources like e-fuels processed from renewable electricity cannot possibly fuel the transport of the world's goods. If we are not to create a mercantile nuclear-powered fleet, an alternative is to look at onboard CCS (carbon capture and storage, OCCS). In 2023, Solvang moved from lab testing to sea application of full-scale OCCS, after receiving a specific grant of MNOK 80 from Norwegian authorities. The project onboard Clipper Eris is the first in its kind world-wide, as it enables regular bunker operation with carbon emission reductions well above 70 %. In combination with a scrubber, an exhaust gas recirculation system, wet electrostatic precipitator and the other parts of Solvang's ECO LPG carrier programme, an all-out emission elimination is no longer pure imagination. The race towards decarbonization of deep sea shipping is on.

Annual Efficiency Ratio development (AER)



CCS joint venture

Parties: Solvang ASA and Wärtsilä Norway AS, with support from vessel charterer Marubeni Corp.

Goals:

- To demonstrate that CO2 can be captured and stored as liquid CO2 in deck tanks;
- To gain real experience of operation of a shipboard CCS plant;
- To reduce energy consumption;
- To reduce cost (CAPEX/capital expenditures and OPEX/operating expenses);
- To explore maintenance requirements;
- To identify possible buyers of the captured CO2

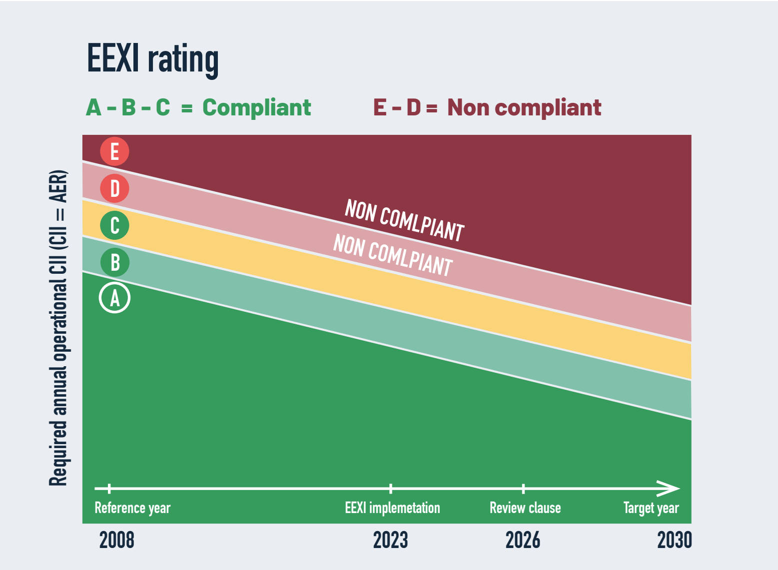
Scope:

Modification of existing EGC (exhaust gas cleaning) installation to incorporate a particle filter (WESP), during Q4, 2023:

- Testing of WESP unit
- Installing CO2 absorber and stripper units and associated peripherals, by Q3 2024;
- Modifying the existing liquefaction system and deck tanks to accommodate liquefaction and storage of CO2;
- Testing of the CCS system to optimize the operation and gain operational experience;
- Provide input to regulators for development of a coherent and practical set of rules for CCS onboard ships.

Solvang 2025/2030 target

EEXI-recertificated CII-factor for all vessels. Full compliance with the IMO reduction target adjusted for 2025.



Art from the IMO Headquarters in London

Ethylene (E and H-class) vessels AER rating

The average AER has changed from 14.8 (2022) to 13.73 (2023). The current fleet average rate is C in 2025, but corrected for a more "normal" trading pattern and the effect of the modification of the last vessel, the average could be a B rating (AER between 12 and 13).
The rest of the H-class has undergone the same upgrade in 2023.
Anticipating continuous 2% reduction in target AER, and simulating E-class and modified H-class up to 2020, the fleet average rate will be B up to 2026 and C up to 2030. Hence, our ethylene fleet will score far better than the required AER in 2025 and also be in compliance in 2030.

LGC fleet AER rating

AER improves from 8.5 to 8.1 from 2022 to 2023, and the current fleet average rate is C in 2025. With full effect of the upgrade in 2023, the average is B. The challenge is idle time. Compared to the IMO 2019- 2026 reduction target, the 8.1 value corresponds to a B-rating in 2025 and minimum compliance in 2030. Six of the LGC vessels dry-docked in 2023. 2024 will fully demonstrate the effect of modifications in this class. In 2023, the vessels had a relatively high fuel consumption due to the end of anti-fouling lifetime.
Assuming continued 2% reduction in target AER from 2026-2030 (see figure under rules and regulations), the LGC fleet average will require 7.38 in 2030. Based on the EEXI certification and installation of Mewis Ducts on the rest of the LGC fleet, our LGC vessels operate in the same pattern with continued improvement of operations, best practice and maintenance. As a result, our LGC fleet will be in IMO compliance also in 2030.

VLGC fleet AER rating

The AER improves from 7.4 to 7.0 from 2022 to 2023, yielding a good C-rating in 2025, even close to B. One vessel is sold. Compared to the IMO 2019-2026 reduction target, the 7.44 value corresponds to a C-rating yielding compliance in 2025 without any further measures.
Three VLGCs were dry-docked in 2023, giving full effect in 2024 for the two vessels remaining in Solvang's fleet. The last one has been sold.
Assuming continued 2% reduction in target AER from 2026-2030, the VLGC fleet average required in 2030 should be < 6.56. Due to CII requirements, not the EEXI certification, speed for some of the vessels in 2030 will be limited to 15.5 knots. In 2023 average speed was about 16 knots.

Summary 2030

With the assumption given above and upgrades, the current Solvang fleet will be fully AER/CII compliant in 2030. Depending on the IMO revision scheduled for 2026, some adjustments could be expected.

Solvang 2050 target

Net zero-emission operation of deep sea shipping according to the revised IMO GHG Strategy. Solvang will implement radical green measures through our Clipper Future programme.

Clipper Future aims to design vessels to comply with future regulations while sticking to a reasonable writeoff-schedule. The scope is cost-effective and smart technical solutions to work in a well-to-wake framework. Based on this, all our newbuilds delivered from 2013 follow our vision.

GHG neutral fuels

In order to comply with IMO GHG emission targets, we need a zero-carbon fuel. Except from a small amount of biofuel, such fuel is not available in any amount needed today. As for zero-carbon fuel, the challenge is to avoid energy and cost intensive processing which today leads to substantial losses. The price factor is 4 to 10, compared to standard fossil fuels (IMO 4th GHG study 2020). Pertaining to standard fuels, a well-to-wake approach is crucial to avoid GHG emissions shifting from shipping to oil power plants or coal-burning facilities.

GHG-neutral fuel: Electro-fuel

Artificial fuel processed from air, water, and renewable electricity. According to recent investigation it is good reason to anticipate that renewable electricity would be a limited resource the next decades. The fundamental challenge are that even if the world allocate all renewable electricity in the word to produce e-fuel it would not be enough to fuel deep sea shipping with green ammonia. This is a challenger shipping cannot solve alone. For this reason, it is difficult to see that e-fuel would be available in more than small amounts in the next decades. The challenge would be the availability of the e-fuel not the actual use of it.

Onboard CCS

Solvang expects our onboard carbon capture (OCCS) project to signal how the world fleet could make use of this technology. Combined with biofuel and/or electro-fuel with CO2 from air as well as CO2 permanently stored beneath the sea floor, GHG figures could become negative. Another option is artificial fuel processed from air, water, and renewable electricity, often named e-fuel.

Carbon offset

While all GHG emissions cannot be avoided, high quality emission reduction projects can be used for compensation in a carbon offset scenario. A market for carbon quotas is currently open, trading CO2 cuts to a lower price than using alternative fuels.

Future regulations

The conditions for future ship design and fuels will manifest itself through rules and regulations not yet defined. The industry expects tighter regulations on emissions to air other than CO2, particularly SOx, NOx, CO, THC, and particles. This poses technological challenges, as reduced NOx outlets normally correspond with increased GHG outlets. As an example, TIR III requires an 80 % NOx reduction compared to TIR II. This is not achievable on a diesel engine by means of engine design and adjustments. Even costly modifications to bring down NOx emissions would result in higher GHG outlets, possibly ruling out compliance with other parts of the regulatory framework. The conditions for future ship design and fuels will manifest itself through rules and regulations not yet defined. At the same time, charters will go to the lowest bidder, whether transporting LPG, petchem, ammonia or other gasses. In this perspective we assume that transport expenses in the future will rise.

Design criteria for Clipper Future

All vessels ordered today need the possibility to operate on GHG-neutral fuel. At the moment, there is no alternative to our two-stroke directly driven main engines for propulsion. We project 100 % cut by 2050 in a scenario with a mix of CCS and e-fuel, comparing total annual GHG emissions to 2008, on Solvang vessels running OCCS, fuel efficiency exceeding 50 %, and the option to modify for all fuels operation. The following examples illustrate that all foreseeable solutions today would be GHG-neutral when using biofuel or e-fuel, without modifications.

Technical fuel specifications

The specific choice of fuel for Clipper Future would be made after careful evaluations of the alternatives above,

FUTURE FUEL SCENARIOS

Example 1

Today:	Tomorrow:
Conventional fuels	Conventional fuels + CCS

Example 2

Today:	Tomorrow:
Fuel oil/LSFO (SCR/EGR)	Biofuel (fuel oil/MGO) or e-diesel

Example 3

Today:	Tomorrow:
Dual fuel LPG/MGO (SCR/EGR)	Biofuel (LPG/MGO) or E-LPG

Example 4

Today:	Tomorrow:
Dual fuel LNG/MGO (catalyst + exhaust gas recirculation + LP-dual fuel)	Bio-LNG/MGO or E-LNG

Example 5

Today:	Tomorrow:
Dual fuel methanol / MGO (SCR/EGR/water in methanol)	Bio-methanol/MGO or e-methanol

Prerequisites for all examples:
No change in engine tank or system, the amount E-fuel/biofuel can be adjusted to reach the GHG target.

Between 2030 and 2050, we need a mix of GHG-neutral and conventional fuel, or CCS operation, in order to comply with the GHG intensity target for the fuel.

which are currently projectable in terms of commercial operation, environment, technology, and operational expenses and revenues.

More alternatives are expected to arrive, some more or less radical, like wind assistance or air lubrication of the hull. They should all be considered in due time. As for now, Solvang focusses on fuel optimization plus OCCS for optimal flexibility. In the future, given sufficient supply of GHG-free electricity, we will deliver CO2 to the bunker barge, and in return receivee-fuel produced by our captured CO2.

In line with technical specifications for vessels, we stick to the Solvang ECO vessel design, including the optimization of hull lines, cargo intake, cruising range, propeller/rudder design, heat recovery and others.

BOARD OF DIRECTOR´S REPORT

1. INTRODUCTION

We are very pleased to present another very strong financial year for the Solvang Group. The underlying operational results in 2023 are even stronger than the record year 2022. However, the net earning results are somewhat down from net earning levels shown in 2022, which had exceptional gains from interest rate swaps, gains from selling three vessels and an overall lower interest level.

The Group recorded a profit before tax of USD 74.7 million against a profit of USD 88.7 million in 2022. Net Cash flow was positive USD 34.2 million compared to negative USD 25.8 million in 2022. Tax expense was negative USD 0.6 million, and the Group had a profit after tax of USD 75.3 million against a profit of USD 88.9 million in 2022.

The board of directors proposes to pay dividends of NOK 3,- per share for 2023 on the basis of strong results and liquidity, as well as good market outlook in the LPG segment, and improvements in ethylene.

2. OPERATIONS

The company's headquarters are located in Stavanger, Norway, with an additional commercial office in Oslo, and a crewing office in Manila, Philippines. The operation of all the ships, both commercial and technical, is managed from the company's fully integrated shipping organization.

The company operates and has ownership in 22 ships by year end, and 7 newbuilds for delivery 2026-2027.

The Group's activities are divided into three segments for the transportation of Liquefied Petroleum Gas (LPG), ammonia (NH3) and petrochemical gasses:

2.1 Semi-refrigerated / ethylene carriers

This segment includes semi-refrigerated ethylene carriers from 17,100 to 21,000 cbm. In this segment the Group had 8 ships operating in the spot market, and on short to medium term TC contracts.

2.2 LGC

This segment is defined as fully refrigerated LPG ships from 59,000 to 60,000 cbm. The fleet consists of 9 LGC ships, all operating on TC of varying length.

2.3 VLGC

This segment is defined as fully refrigerated LPG ships from 78,000 to 84,000 cbm. Solvang has a total of 5 ships in this segment. The Group has three Panamax VLGC ships between 78,000 and 80.000 cbm, and two VLGC ships of 84.000 cbm.

The Panamax VLGC's are purpose-built for transporting LPG from the Atlantic Ocean and Gulf of Mexico to the west coast of Central America as well as the Far East. All vessels are currently on contracts, three on long term and the other two on medium to short term contracts.

The Group has ownership in seven 88,000 cbm Panamax VLGC's on order from Hyundai Heavy Industries, scheduled for delivery from July 2026 to June 2027.

3. PROFIT

(Figures in parenthesis refer to 2022)

Total income increased from USD 248.0 million to USD 255.6 million. The increase is mainly due to an improved VLGC market and gain from sale of one vessel.

The Group's result after tax was USD 75.3 million (USD 88.9 million). The result for the parent company was NOK 469.7 million whereof NOK 491.9 million was dividend received from subsidiary (NOK 641.1 million).

3.1 Financial items

The Group reported net financial items of USD -36.0 million (USD -10.3 million). The corresponding figure for the parent company was a result of NOK 486.7 million (NOK 647.3 million).

3.2 Liquidity and financial strength

At year-end, the Group had liquidity consisting of cash totalling USD 70.0 million (USD 35.7 million). The corresponding figure for the parent company was NOK 602.7 million (NOK 273.4 million). For the Group, total current assets at year-end were USD 94.4 million (USD 69.9 million), while current liabilities totalled USD 120.9 million (USD 53.8 million). Long-term liabilities and obligations totalled USD 403.8 million (USD 485.3 million). For the parent company, total current assets at year-end amounted to NOK 629.6 million (NOK 330.6 million), while short-term liabilities totalled NOK 875.5 million (NOK 480.4 million). The parent company's long-term liabilities and obligations totalled NOK 2,537.6 million (NOK 2,715.4 million).

Net cash flow from operating activities was USD 127.6 million, compared to an operating profit of USD 168.4 million. The main difference between operating profit and cash flow from operating activities is due to depreciation and changes in working capital/accruals.

The Group's book equity totalled USD 546 million (USD 535 million) at the year-end.

3.3 Taxes

The Group is part of the tonnage-tax regime through its subsidiary Clipper Shipping AS. Other companies within the Group are subject to ordinary company taxation.

All the Group's ships and shipping partnership interest by year end are owned under the tonnage-tax regime.

3.4 Financial risk

The Group's activities are primarily USD-based, where most of the revenues and the majority of expenses are in USD. Furthermore, the market value of the ships, and thus the greatest share of the assets, is priced in USD. The same applies to the financing of the ships. This entails that the real foreign currency exposure is limited in financial terms.

The Group's entire fleet is financed by long-term financing at favourable terms.

Most of the Group's liabilities consist of secured debt on ships. This is denominated in USD and priced at compounded reference rate (SOFR) and a margin. The Group has a satisfactory debt-equity ratio, and this, together with active management of the interest rate exposure, ensures that the risk associated with any change in interest rate levels is acceptable.

The Group's fleet is hired in a mix of long and short TC contracts as well as in the spot market. This is a result of a strategy aimed at ensuring earnings and cash flow, while at the same time benefiting from upturns in the market. The development of the world economy makes future market prospects uncertain.

The Group has 8 ships on TC contracts in excess of one year. The charterers are oil majors, the largest traders and major operators in the ammonia market. Credit risk is considered to be limited. The company evaluates the settlement risk for the business carried out in the spot market as satisfactory.

3.5 General

The year-end accounts are based on the assumption of a going concern. In the opinion of the board of directors, the accounts provide a true picture of the results for the year and the company's year-end position.

4. ORGANIZATION, HEALTH, SAFETY, AND THE ENVIRONMENT

4.1 Organization

Both at sea and onshore, the company's primary focus is to ensure continuity of personnel. The company strives to maintain an interesting and attractive workplace that attracts competent employees, where appraisals and employee surveys are key measures. We believe that we have succeeded in this context and that we have a stable and highly qualified workforce.

Of the company's office staff, 41 % are women and 59 % are men. Women and men have equal opportunities to qualify for all types of jobs and positions, and they enjoy equal opportunities for promotion. Working conditions are deemed to be good. Salaries reflect individual qualifications, regardless of gender.

Solvang is an international company keeping employees from a number of countries and cultures in addition to Norway. This recruitment policy is important for the future development of the company. The company wants to attract competent employees, regardless of religion, gender, race or sexual orientation.

The company engages in research and development work to optimize the ships' operations, and to reduce emissions.

4.2 Health
The Group has 44 onshore employees and around 900 sailing personnel. Working conditions onshore and on board the ships are considered to be good. Sick leave on board the ships was 0.15 %. The Group had one incident that resulted in lost time in 2023. The target is always zero accidents, and the very low injury frequency can be attributet to the attention given to this area across the entire Group.

Sick leave among onshore employees was 1.8 % in 2023. There were no incidents resulting in personal injury among onshore personnel in 2023.

4.3 Board of directors
The board of directors consists of one woman and two men. There is a healthy and positive working relationship between the management and board of directors.

The Group is covered by Solvang ASA's insurance policies which are in place for the board members and management regarding their potential liability towards the business and to third parties. Such policies are purchased on an annual basis and have policy limits, terms and conditions in line with what is common practice in the industry.

4.4 Compensation policy
By offering a complete range of jobs, salaries and other benefits, Solvang aims to be an attractive employer for skilled individuals from all relevant disciplines.

All of Solvang's employees, including the managing director, have in 2023 been employed at a fixed salary with no share based compensation. Salaries are adjusted once a year. The managing director's salary is evaluated correspondingly by the board once a year. A named group of employees with management responsibilities have an incentive plan based on achievements regarding HSE, economic results, and quality. The incentive plan is limited to an equivalent of maximum 25 % of the basis salary.

The company has a hybrid pension scheme which covers all employees. In addition, the company has an ordinary insurance scheme covering disability, accidents and death.
The board is remunerated by fixed directors' fees determined annually by the general meeting. Board members have no bonus or share-based compensation agreements with the company.

4.5 External environment
The transport of LPG and petrochemical gasses by sea entails little risk of emissions or leakage into the sea. Loading and unloading operations are conducted within enclosed systems, and strict quality and safety requirements minimize the risk of emissions.

All traditional transport at sea entails emissions to the air from the combustion of oil by the ships' main and auxiliary engines. Our policy in this area is thus to reduce such emissions as much as practically possible. The Group focuses primarily on reducing the consumption of bunker and lubricants, and has applied active measures which continue the positive trend achieved during recent years. We strive to stay ahead of regulators' implementation of new legislation for reducing all kinds of emissions, among them CO2 and other threats to the environment. Our CCS project is an example of the latter. Read more about this in the "Sustainability" section included in the annual ESG report.

4.6 Safety
The company has strict quality and safety requirements, both on board the ships and within the onshore organization. This is reflected by very good statistics for Lost Time Injury (LTI) occurence, with one incident in 2023 and only eleven incidents in the entire period from 2013-2023. The basis is around 4.2 million working hours per year the later years. Quality and safety is further demonstrated in our good insurance statistics. In order to continue the positive development, the company invests significantly in programmes for continuous improvement of quality and safety on board and on land. Read more about this in our "Sustainability in Solvang" section included in the annual ESG report.

4.7 Corporate social responsibility
The Group's main contribution to society is to conduct long-term, sustainable and value-added business for our shareholders, employees, customers, suppliers and other relations. Our goal is to ensure that our business practices and investments are sustainable and contribute to long-term economic, environmental and social development. The Group's material sustainability areas represent environment, finance, human resources and community, including ethics and anti-corruption. Please read more about this in our "Sustainability in Solvang" section included in the annual ESG report.

A statement regarding the Transparency Act is published on the company's website. Read more about the Transparency Act in the article "Stepping up to full transparency" in our "Sustainability in Solvang" section included in the annual ESG report.

5. OUTLOOK

The improvement seen in the ethylene product market in 2022, continued throughout 2023, with more available contracts, as well as improved spot market. Solvang's ethylene fleet has gone from mainly spot to securing significant timecharter coverage at healthy levels. The strong market continues into 2024, and the fleet now only has one vessel remaining in the spot market. The outlook seems positive, but in petchem, the future levels are always difficult to predict.

For the fully refrigerated vessels (VLGC and LGC), 2023 was another strong year, a further step up from 2022. Into 2024 the underlying strength of the LPG market is still present, with some weakening during Q1, but the market recovered somewhat, although not to the levels seen through 2023. There is a considerable amount of newbuild delivery in the VLGC segment in 2024-2026, and it is still unclear what effect this will have.

The Group had at year-end contract coverage of 93 % for 2024 for the fully refrigerated fleet, with only two vessels coming open mid/late 2024.

Existing and future geopolitical risk in deep-sea shipping is always present, affecting shipping routes, supply chain and overall business operations. The war in Ukraine temporarily affected the ammonia market, while the current unrest in the Red Sea makes for longer voyages for some of our vessels. These events represent risks that are difficult to mitigate but are managed through open dialogue with customers and making sure we are diversified in terms of trade areas.

6. ALLOCATION OF PARENT COMPANY'S PROFIT

Solvang ASA posted a result of	KNOK 469,663	

The board of directors proposes the following allocation:

Dividend:	KNOK	-279,437
To other equity:	KNOK	-190,226

At the year-end, the parent company's equity amounted to KNOK 2,622,700 (KNOK 2,712,084).

7. SUBSEQUENT EVENTS

Clipper Helen is agreed sold, and the vessel will be delivered to the new owner during Q2, 2024.

The Group has signed a shipbuilding contract with HD Hyundai Heavy Industries Co, Ltd. for delivery of two 88,000 cbm Class LPG Carrier. Expected delivery is Q1 and Q2, 2027. The vessels are fixed on a 7/10-year time charter starting from delivery of each vessel in 2027. With these orders the Group has ownership in seven newbuilds to be delivered in 2026 and 2027.

There are no other events after the balance sheet date that impact the reported numbers.

8. CONCLUSION

The board of directors and the management would like to thank all the employees, both at sea and on land, for their fine efforts during a challenging period, where the Group delivers strong results in terms of safety, operation and quality. We would also like to thank our customers and suppliers for their good support and cooperation in 2023, as we look forward to the same good cooperation in 2024.

Stavanger, 29th April 2024

This document has been signed electronically.

Michael Steensland Brun
Chairman

Ellen Solstad

Christian Frustøl

Edvin Endresen
CEO

FINANCIAL STATEMENTS SOLVANG GROUP

Consolidated income statement | Solvang Group

Amounts in USD 1 000	Note	2023	2022
Operating revenue	5	263 062	302 157
Voyage expenses		-21 672	-62 778
Net gain from sale of fixed assets	15	14 148	8 416
Result from affiliated ship owning companies equity method	3,4	-65	0
Management fee		99	0
Other income		0	168
Total income	5	**255 572**	**247 963**
Crewing expenses	12	43 665	46 158
Ship related operating expenses		33 644	32 238
Salaries and other personnel expenses onshore	10	7 922	7 639
Other operating expenses	10	1 948	4 186
Total operating expenses		**87 179**	**90 222**
Operating result (EBITDA)		**168 393**	**157 741**
Depreciation vessels	15	45 387	46 968
Depreciation other fixed assets	15	96	36
Depreciation right-of-use assets	16	371	371
Depreciation capitalized dry-docking	14	11 899	11 237
Amortization of contracts		0	153
Total depreciation and amortization		**57 752**	**58 765**
EBIT		**110 641**	**98 976**
Financial income and cost			
Affiliated companies equity method	6	-16	13
Financial income	7,12	3 494	16 929
Financial expenses	8	-39 444	-27 210
Net financial items		**-35 966**	**-10 268**
Ordinary result before tax		**74 675**	**88 708**
Income tax expense	9	-589	-178
Net profit / (loss) for the year		**75 264**	**88 885**
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME/(LOSS)			
Profit / (loss) is attributable to:			
Controlling Owners		69 534	74 383
Minority interest		5 729	14 503
Earnings of the period		75 264	88 885
Items that will not be reclassified to profit or loss			
Remeasurements pension liability		-24	-4
Tax effects of remeasurements pension liability		5	1
Items that may be reclassified to profit or loss			
Translation differences to presentation currency		338	-2 006
Comprehensive income		**75 583**	**86 876**
Comprehensive income is attributable to:			
Controlling Owners		69 854	72 373
Minority Interest		5 729	14 503
Total Comprehensive Income		75 583	86 876

Consolidated balance sheet | Solvang Group

Amounts in USD 1 000	Note	31.12.2023	31.12.2022
ASSETS			
Fixed Assets			
Tangible fixed assets			
Right-of-use assets	16	1 060	1 431
Vessels	15	900 499	983 368
Capitalized dry-docking	14	48 635	20 822
Office equipment, furniture etc.	15	331	319
Total tangible fixed assets		**950 525**	**1 005 940**
Financial fixed assets			
Investments in affiliated ship owning companies equity method	3,4	15 970	0
Investments in other affiliated companies	6	23	39
Loan to affiliated ship owning companies equity method	12	10 696	0
Other shares		2	2
Total financial fixed assets		**26 691**	**41**
Total fixed assets		**977 216**	**1 005 982**
Current Assets			
Bunkers / lubricant oil etc.		2 691	4 359
Receivables			
Accounts receivable	17	10 306	10 978
Other short term receivables	12,13,17	11 393	18 803
Total receivables		**21 699**	**29 781**
Cash and bank deposits	13	69 969	35 728
Total current assets		**94 359**	**69 868**
TOTAL ASSETS		**1 071 575**	**1 075 850**

Consolidated Balance Sheet | Solvang Group

Amounts in USD 1 000	Note	31.12.2023	31.12.2022
EQUITY AND LIABILITIES			
Equity			
Paid-in capital			
Share capital	19	45 815	47 533
Share premium reserve		204 252	211 910
Total paid-in capital		**250 067**	**259 443**
Retained earnings			
Other reserves		49 077	39 381
Retained earnings		206 931	185 011
Minority interest		39 909	51 175
Total retained earnings		**295 917**	**275 567**
Total equity		**545 984**	**535 010**
Liabilities			
Provisions			
Pension liabilities	11	530	593
Deferred tax	9	374	1 121
Total provisions		**903**	**1 714**
Long term liabilities			
Long term debt to financial institution	18	381 121	460 215
Lease liabilities	16	793	1 191
Other long term liabilities	18	21 898	23 922
Total long term liabilities		**403 812**	**485 328**
Current liabilities			
Accounts payable		11 792	10 608
Tax payable	9	222	259
Public duties payable		1 138	1 149
Current portion of long term debt incl accrued interest	18	89 924	19 196
Current portion of lease liabilities	16	398	379
Other short term liabilities	5, 12	17 401	22 206
Total current liabilities		**120 875**	**53 797**
Total liabilities		**525 591**	**540 840**
TOTAL EQUITY AND LIABILITIES		**1 071 575**	**1 075 850**

Stavanger, 29th April 2024

This document has been signed electronically.

Michael Steensland Brun
Chairman

Ellen Solstad

Christian Frustøl

Edvin Endresen
CEO

Consolidated statement of shareholders' equity

Amounts in USD 1 000	Share capital	Share premium reserve	Other reserves	Retained earnings	Minority interest	Total equity
2022						
Equity as of 31.12.2021	**52 807**	**235 424**	**12 603**	**172 421**	**68 337**	**541 592**
Profit/(loss) of the year				74 383	14 503	88 885
Remeasurements pension liabilities			-3			-3
Translation differences presentation currency	-5 274	-23 514	26 782			-2 006
Total comprehensive income	**-5 274**	**-23 514**	**26 779**	**74 383**	**14 503**	**86 876**
Paid dividend				-61 793		-61 793
Minority interest decrease of ownership					-13 566	-13 566
Minority share of capital decrease in subsidiary					-18 099	-18 099
Total changes in equity for the year	**-5 274**	**-23 514**	**26 779**	**12 590**	**-17 162**	**-6 582**
Equity as of 31.12.2022	**47 533**	**211 910**	**39 381**	**185 011**	**51 175**	**535 010**

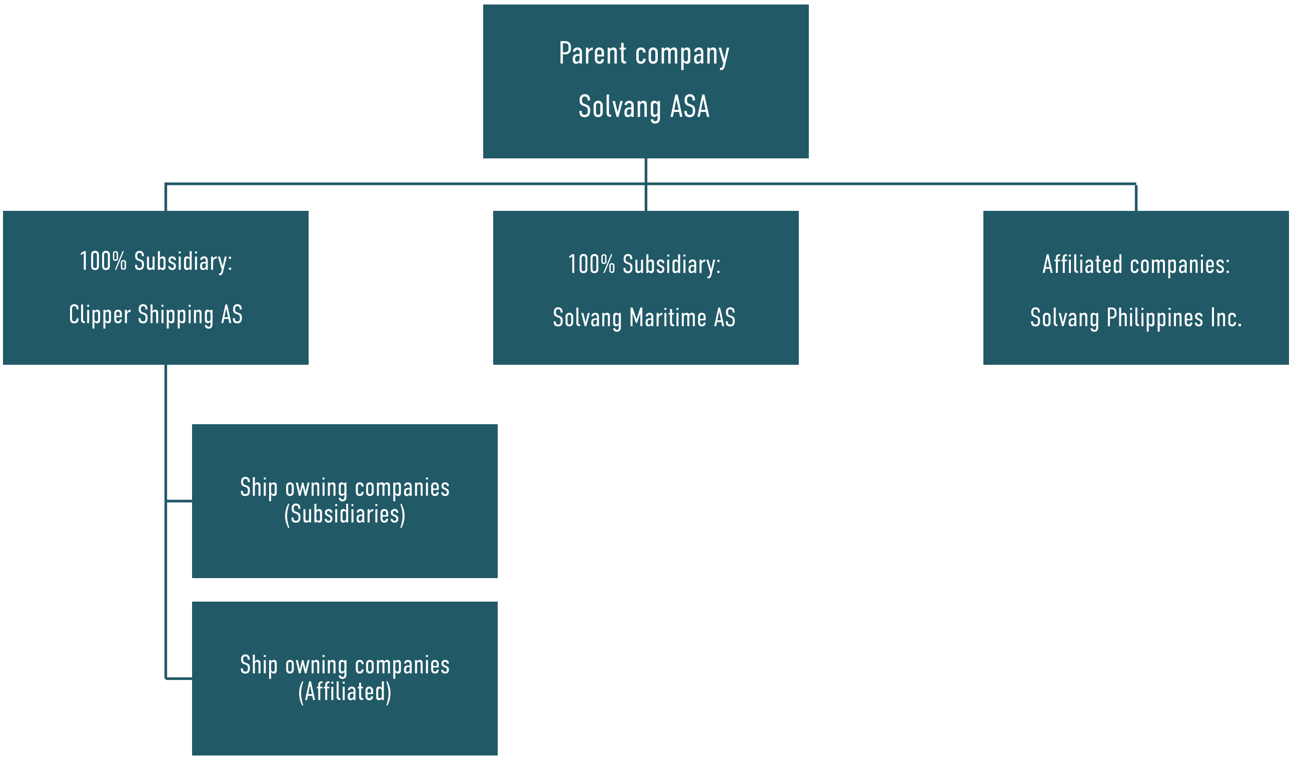
	Share capital	Share premium reserve	Other reserves	Retained earnings	Minority interest	Total equity
2023						
Equity as of 31.12.2022	**47 533**	**211 910**	**39 381**	**185 011**	**51 175**	**535 010**
Profit/(loss) of the year				69 534	5 729	75 264
Remeasurements pension liabilities			-18			-18
Translation differences presentation currency	-1 718	-7 658	9 714			338
Total comprehensive income	**-1 718**	**-7 658**	**9 695**	**69 534**	**5 729**	**75 583**
Paid dividend				-45 815		-45 815
Minority interest decrease of ownership				-1 799	-18 979	-20 778
Minority share of capital increase in subsidiary					7 750	7 750
Minority share of capital decrease in subsidiary					-5 767	-5 767
Total changes in equity for the year	**-1 718**	**-7 658**	**9 695**	**21 920**	**-11 266**	**10 974**
Equity as of 31.12.2023	**45 815**	**204 252**	**49 077**	**206 931**	**39 909**	**545 984**

Consolidated statement of cash flows

Amounts in USD 1 000	Note	2023	2022
CASH FLOW FROM OPERATING ACTIVITIES			
Profit / (loss) before tax		74 675	88 708
Tax paid for the period	9	-247	-641
Loss/gain on sale of tangible fixed assets		-14 148	-8 416
Depreciation and amortisation	14,15,16	57 752	58 765
Difference between expensed pension and paid in/out	11	-87	-139
Result in affiliated ship owning companies	4	65	0
Result in other affiliated companies	6	16	-13
Changes in inventories, trade receivables and trade payables		3 525	338
Changes in other current balance sheet items		4 773	-3 754
Financial income - non cash	7	-1 833	-6 231
Financial expenses - non cash	8	3 070	3 416
Net cash flow from operating activities		**127 562**	**132 033**
CASH FLOW FROM INVESTING ACTIVITIES			
Purchase of tangible fixed assets	15,16	-9 691	-1 659
Proceeds from sale of tangible fixed assets	15	65 003	81 722
Payments for capitalized periodic maintenance	14	-43 450	-12 738
Dividend from Investment other affiliated companies	6	0	5
Payments received other receivables		0	7 367
Payments to ship owning affiliated companies	4,12	-26 747	0
Net cash flow from investing activities		**-14 885**	**74 696**
CASH FLOW FROM FINANCING ACTIVITIES			
Proceeds from other debt (long term)	18	67 500	
Repayment of debt (long term)	18	-80 725	-131 763
Payments of lease liabilities	16	-449	-449
Payments other commitments		0	-7 138
Payments for increased ownership in subsidiary		-20 778	-13 566
Minority interest share of capital changes in subsiduary		1 984	-18 099
Dividend payment		-45 815	-61 793
Net cash flow from financing activities		**-78 284**	**-232 807**
Effect of exchange rate changes on cash and cash equivalents		-152	258
Net change in cash and cash equivalents		34 242	-25 819
Cash and cash equivalents 01.01		35 728	61 547
Cash and cash equivalents 31.12		**69 969**	**35 728**

Notes 2023 | Solvang Group

NOTE 1 – CORPORATE INFORMATION AND SIGNIFICANT ACCOUNTING POLICIES



CORPORATE INFORMATION

Solvang ASA is a public limited company incorporated and domiciled in Norway. The company was incorporated in 1936, and the address of the registered office is: Solvang ASA, Strandkaien 36, 4005 Stavanger, Norway.

Solvang ASA and its subsidiaries' ("Solvang" or "the Group") business is fully concentrated on shipping and shipowning activities.

As of 31. 12. 2023, Solvang's fleet consisted of 22 ships and five newbuilding contracts for ships that carry liquid petrochemical gasses, liquefied petroleum gasses and ammonia.

BASIS OF PRESENTATION

The consolidated financial statements have been prepared on a historical cost basis.

The consolidated financial statements are presented in US dollars (USD).

Statement of compliance

The consolidated financial statements have been prepared in accordance with IFRS® Accounting Standards as adopted by the EU, together with adopted and appurtenant interpretations and additional country-specific disclosure requirements, according to the Norwegian Accounting Act in effect as of 31st of December, 2023.

The consolidated financial statement was approved by the board of directors and the managing director on the date which appears on the dated and signed balance sheet. The consolidated financial statements will be presented to the annual general meeting on May 28, 2024, for final approval. Until final approval, the board is authorised to amend the consolidated financial statements.

Basis of consolidation

The consolidated financial statements of Solvang ASA comprise the financial statements of Solvang ASA and its subsidiaries. Subsidiaries are all entities in which the Group has control. Whether control exists is based on an assessment of the partnership agreement for each investment together with the legislation that regulates the companies. The parent company's role as the managing director and other circumstances means that the group might also have control in ownership less than 50 %. Subsidiaries are consolidated from the date on which control is transferred to the Group and cease to be consolidated from the date on which control is transferred out of the Group. As of December 31, 2023, Solvang ASA controls the following subsidiaries:

- Solvang Maritime AS (100 %)
- Clipper Shipping AS (100 %)
    - PR Clipper Mars II DA (50 %)
    - PR Clipper Sirius DA (61,875 %)
    - PR VLGC DA (58,3 %)

All intercompany balances, transactions, income and expenses together with unrealized profits and losses resulting from intercompany transactions that are recognized in assets, have been eliminated.

Minority interests

Minority interests are included in the Group's income statement and are specified as minority interests. Correspondingly, minority interests are included as part of the Group's shareholders' equity and are specified in the consolidated balance sheet.

Functional currency

The functional currency of an entity is the currency of the primary economic environment in which the entity operates. Normally, that is the currency of the environment in which an entity primarily generates and expends cash. The parent company, Solvang ASA, has Norwegian kroner (NOK) as the functional and reporting currency, and all the subsidiaries have US dollar (USD) as the functional currency, hence the reporting currency for the Group is US dollar (USD). Exchange differences arising from the translation from the functional currency to the presentation currency are recognized in the comprehensive income, net of any deferred tax. Share capital and similar equity items in the parent company are translated at the exchange rate on the balance sheet date.

SIGNIFICANT ACCOUNTING JUDGMENTS AND ESTIMATES

Estimation uncertainty

The preparation of consolidated financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported revenues and expenses during the reporting periods. The most significant estimates and assumptions relate to fixed asset impairment tests. We evaluate these estimates on an ongoing basis, utilizing past experience, consultations with experts and other methods we consider reasonable in the particular circumstances. Nevertheless, actual results may differ significantly from our estimates.

The key assumptions concerning the future and other key sources of estimating uncertainty at the balance sheet date, and which have a significant risk of material adjustment to the carrying amounts of assets and liabilities within the next financial year, are discussed below:

Impairment of tangible fixed assets

The Group invests in ships directly or through shipping partnerships. The Group assesses at each reporting date whether there is an indication that an asset may be impaired. If any such indication exists, the Group makes an estimate of the asset's recoverable amount, which is the higher of fair value less costs to sell or value in use.

All tangible fixed assets are evaluated for impairment when events or changes in circumstances indicate that the carrying value may not be recoverable. This requires an estimation of the asset's value, which, if available, is based on market appraisals or value in use.

The value in use is determined on the basis of the total estimated discounted future cash flows, excluding taxes. In determining impairment of fixed assets, management must make judgments and estimates to determine the cash flows generated by those assets. Discount rates must also be estimated. Assumptions used in these estimates are consistent with internal forecasts. To support management's estimates, market outlook and considerations provided by shipping analysts have been used.

If the carrying amount of an asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

The Group considers whether there is a basis for reversing previous asset impairment write-downs, using the same evaluation criteria as for impairment. If the review suggests that there is a basis for reversal, the carrying amount is reversed to the estimated fair value, limited to the carrying value the asset would have had if no impairment had been recognized.

SIGNIFICANT ACCOUNTING POLICIES

Revenue and expense recognition

The Group's revenues derive mainly from TC contracts. Revenue from such contracts is recognized on a straight-line basis over the contract period as the service is performed. Ongoing operating expenses related to vessels on a TC contract are expensed as they accrue.

To a lesser extent, the Group has income related to spot contracts. Such income is recognized on the basis of the "load-to-discharge" principle. Under this method, freight revenues are recognized on a straight-line basis over the period from loading ("load") for the journey to unloading the same journey ("discharge"). The management uses judgment when estimating the number of days per journey based on historical information, technical specifications on the ship, and distance. Variable elements in the remuneration, including demurrage, are recognized with the amount most likely to be, based on historical experience. Contract costs incurred before loading are capitalized and recognized in the income statement on a straight-line basis over the contract period.

Foreign currency transactions

Transactions in foreign currencies are recorded using the exchange rate at the transaction date. Balances denominated in foreign currencies are translated using the exchange rates at the balance sheet date. Foreign currency gains and losses are recorded as financial items when incurred.

Vessels

In the shipowning companies, the ships are booked at cost less accumulated depreciation and impairment write-downs. Cost includes the expense of adding/replacing part of a ship, machinery or equipment when that expense is incurred if the recognition criteria are met. The carrying amount of those parts that are replaced is derecognized.

Depreciation of ships is computed using the straight-line method over estimated useful life. The depreciable amount is determined after deducting the residual value of the asset. The cost of ships has been categorized separately by its main components, and useful life has been determined for each component. The average useful life for gas ships is 30 years.

A part of the original cost of ships is allocated to periodical maintenance. Periodical maintenance for ships is recognized in the balance sheet and expensed over the period up to the next periodical maintenance. Current maintenance is expensed as incurred.

When assets are sold or retired, their costs and related accumulated depreciation are removed from the balance sheet, and any gain or loss is included in net income.

Estimates of useful life, residual values and methods of depreciation are reviewed at each financial year-end and adjusted if appropriate. Any changes are accounted for prospectively as a change in accounting estimate. The estimated useful life of the ships could change, resulting in different depreciation amounts in the future.

Periodic maintenance

Periodic maintenance of ships is recognized in the balance sheet and expensed over the period up to the next periodic maintenance. When a ship is purchased a share of the purchase price is recognized as periodic maintenance. Current maintenance is expensed as incurred. In connection with incidents that are covered by insurance, the deductible is expensed at the time of the incident. Claim on the insurances underwriters is recognized in the balance sheet.

Sale-leaseback transaction

When a sale-leaseback transaction does not qualify for sale accounting, the transaction is accounted for as a financing transaction by the seller-lessee and a lending transaction by the buyer-lessor. To account for a failed sale-leaseback transaction as a financing arrangement, the seller-lessee does not derecognize the underlying asset; the seller-lessee continues depreciating the asset as if it was the legal owner. The sales proceeds received from the buyer-lessor are recognized as a financial liability. A seller-lessee will make rental payments under the leaseback. These payments are allocated between interest expense and principal repayment of the financial liability. The amount allocated to interest expense is determined by the incremental borrowing rate or imputed interest rate. The sale-leaseback transaction that the Group had entered into as of December 31, 2021, involved a purchase obligation and is therefore treated as a financing arrangement. Please refer to note 18.

Taxes

The companies in the Group, with the exception of Solvang ASA and Solvang Maritime AS, are covered by the Norwegian tonnage tax regime. Consequently, these companies pay tonnage tax and otherwise only income tax on net financial items as well as recognition of the gain / loss account within the scheme. Deferred tax assets in tonnage taxed companies are generally not recognized, as it is not considered likely that the Group will be able to utilize this benefit.

Income tax expense consists of taxes payable and the net change in deferred taxes arising as a result of temporary differences. Tonnage tax is recognized in the profit and loss account as a ship-related operating cost.

Current tax for the current and prior periods is measured at the amount expected to be paid to the tax authorities for present and earlier years. The tax rates and tax laws used to compute the amount are those that are enacted by the balance sheet date.

Change deferred taxes reflect the future tax effects resulting from the activities for the period. Deferred taxes in the balance sheet are calculated on the basis of temporary differences between financial and taxable values, with consideration for taxable losses carried forward. The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that is not probable that sufficient taxable profit will be available to allow all or part of the deferred tax assets to be utilized. Unrecognized deferred tax assets are reassessed at each balance sheet date and are recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the balance sheet date.

Dividends

Dividends proposed by the board of directors are not recorded as liability in the financial statements until they have been approved by the shareholders at the annual general meeting.

Related parties

Parties are related if one party has the ability, directly or indirectly, to control the other party or exercise significant influence over the other party in making financial and operating decisions. Parties are also related if they are subject to common control or common significant influence. The Group believes that all transactions between related parties are based on the principle of arm's length (estimated market value).

Business areas/segments

Ship management and ship ownership are the business areas for Solvang. Ship ownership is further divided based on type and size of ship. Solvang has ownership interests in gas ships. These ships are divided into three types based on size, semi-ref ships from 17,000 – 21,000 cbm, LGC ships from 59,000 - 60,000 cbm and VLGC ships above 78,000 cbm.

Cash flow statement / cash and cash equivalents

The Group uses the indirect method for calculating cash flow statements. Cash flows generated by investment and financing activities is shown gross, while for operations, a reconciliation is shown between profit for the year and cash flows from operating activities. Interests are considered to be part of operating activities. Cash and cash equivalents include cash and bank deposits.

NEW IFRS AND IFRIC INTERPRETATIONS

There are no new or changed IFRSs or IFRIC interpretations that are effective for the 2023 financial statements, which is considered to have or expected to have a material impact on the Group.

The Group has adopted all other new standards and amendments that are applicable as of January 1, 2023, which had no material impact on the Group's consolidated financial statements.

New standards and interpretations which have not come into force

There are some new standards and interpretations that have been adopted by the EU but not yet made effective for the year ending 31.12.2023. For example:

- Amendments to IAS 1 Presentation of Financial Statements: Classification of liabilities
- Amendments to IFRS 16 Leases : Lease liability in a sale-leaseback

The Group has not used early adoption of any new or amended IFRSs and IFRIC interpretations, and based on the information known to Solvang ASA at the reporting date (when the financial statements are prepared), it has been determined that these will most likely not have a material effect on the consolidated accounts for Solvang ASA in 2023.

NOTE 2 – FINANCIAL MARKET RISK

The group is exposed to credit risk, liquidity risk and market risk by use of financial instruments.

Credit risk
Credit risk is risk for financial loss if a counterpart to a financial instrument does not manage to fulfil its obligations under the contract. The Company's receivables are subject to credit risk. Receivables are mainly towards large oil majors with good credit rating and/or towards customers we have a long relationship with. The credit risk is therefore considered minimal.

Liquidity risk
Liquidity risk is the risk for the group not being able to fulfil its financial obligations as they fall due. Shipping is a cyclical business, and the group has therefore chosen to be well capitalized, and has a significant cash position. As of 31.12.2023 the liquidity reserves amounted to 6.5 % of the total balance sheet. The liquidity reserves inclusive of short term receivables amounted to 8.5 %. Current liabilities together with current portion of long term debt amounted to 11.3 % of the balance sheet. In addition the group has unused committed credit lines of USD 70 million. The liquidity risk is considered acceptable and is monitored continously.

Market risk
Market risk is risk for changes in market prices, such as exchange rates on currency, interest rates and share prices and influence of income or value of financial instruments. There is attached financial market risk to bank deposits (exchange rate) and loans (exchange rate and interest rates). The groups activities are mainly USD based, and deposits are to a large extent held in USD to reduce exchange rate risk. The group is mainly exposed to interest rate risk through long term debt to financial institutions in the ship owning companies. These loans are priced at compounded reference rate (SOFR) + margin. Interest rate exposure is actively handled, and parts of the loans has previously been secured by fixed interest rate contracts to reduce interest rate risk. Due to a conservative strategy regarding financial instruments, and active handling of market risk, we are of the opinion that the groups market risk is satisfactory seen in relation to the balance sheet.

Capital management
The board's goal is to keep a sufficient capital base, to maintain confidence from investors, creditors and the market in general, and to develop the business activity. The Board considers any investments in financial instruments continuously. The Group currently has no investments in derivative financial instruments. Capital return is monitored by the board. There has been no changes in how assets are managed during the year.

SENSITIVITY ANALYSIS

Change in exchange rates		**Value change**
Bank deposits	10 % increase of exchange rates	521
	10 % reduction of exchange rates	-521

Change of interest rates		**Effect on profit or loss**
Mortgage loans of vessels	100 basis points increase of interest rates	-4 710
	100 basis points reduction of interest rates	4 710

The impact of change in interest rates on bank deposits is estimated to be insignificant.

NOTE 3 – SHIPPING ACTIVITY

SHARE IN SHIP OWNING COMPANIES UNDER THE EQUITY METHOD OF ACCOUNTING, SHARE OF P&L AND BALANCE SHEET ITEM

Company	Owner-ship % 31.12.23	Operating expenses	Net financial items incl tax	Net profit	Share newbuild contracts	Share current assets	Share long term liabilities	Share current liabilities	Net book value balance sheet at 31.12.2023
JustClipper AS (Group)	50,00%	45	-20	-65	26 980	41	10 696	355	15 970
Total 2023		45	-20	-65	26 980	41	10 696	355	15 970

Refer note 4 for comments towards changes in ownership.

NOTE 4 – SHIPPING ACTIVITY

SHARE IN SHIP OWNING COMPANIES UNDER THE EQUITY METHOD OF ACCOUNTING

		2023				
Company	Owner-ship % 31.12.23	Balance 01.01.2023	Share profit of the year	Other	Investments/ repayments/ sale	Balance 31.12.2023
JustClipper AS (Group)	50,00%	0	-65	-16	16 051	15 970
Total		0	-65	-16	16 051	15 970

JustClipper AS is located in Stavanger, Norway.
The JustClipper group was established in 2023.
Voting rights are according to pro rata ownership share.

Total payment to affiliated companies amounts to 26,7 million and consist of capital contribution (Ref table above) together with long term loan (Ref note 12).

NOTE 5 – OPERATING REVENUES

The total income of the Group can be divided into following segments based on the different types of vessels:

	2023	2022
Ethylene	64 759	59 257
LGC / MGC	84 983	94 433
VLGC	91 648	85 857
Total income	241 390	239 547

As of 31.12.23 the Group had one Ethylene vessel in the spot market. The other vessels are on shorter and longer Time Charter.

	2023	2022
Time charter contracts	230 967	198 677
Voyage contracts	32 096	103 480
Total freight income	263 062	302 157

Largest customers
In 2023, Solvang Group had two customers which individually accounted for 10% or more of total revenues. The customers in 2023 individually contributing 10% or more of total revenues were:

- Geogas Trading SA
- SwissChemGas

Expected future Time Charter revenues - undiscounted

Expected future time charter revenue from firm contracts from 1st January 2024 (undiscounted) has the maturity as follows:

	31.12.2023	31.12.2022
< 1 year	195 100	163 200
2 - 5 year	159 700	167 000
> 5 year	9 200	49 700
	364 000	379 900

The above table is based on the knowledge we had about market and contracts at year end 2023, and might be different from actual revenue as some of the contracts in example follows baltic index or include other variable items and hence will depend on the market development throughout the following periods.

Contract liability
The Group has invoiced USD 10.5 million to customers which is not earned as of year end. The amount is recognized within other current liabilities in balance sheet.

NOTE 6 – OTHER AFFILIATED COMPANIES

SHARE IN AFFILIATED COMPANIES INCLUDED UNDER THE EQUITY METHOD OF ACCOUNTING

Company	Owner-ship	Historical cost	Book equity at acquisition	Incoming balance 31.12.2022	Share profit of the year	Dividend	Translation	Outgoing balance 31.12.2023
Solvang Phillipines Inc	25%	12	12	39	-16	0	-1	23
Total		12	12	39	-81	0	-1	23

Solvang Philippines Inc. is located in Manila, Philippines.
Voting rights are according to pro rata ownership share.

We have not received final or audited accounts from the affiliated companies for 2023, hence the amounts presented in this note is based on financial statement 2022.

NOTE 7 – FINANCIAL INCOME

	2023	2022
Interest income	1 659	855
Currency gain	1 833	3 423
Interest other long term receivable	0	494
Fair value changes interest swap	0	2 313
Realized gain interest swap	0	9 836
Other financial income	2	8
Total	3 494	16 929

NOTE 8 – FINANCIAL EXPENSES

	2023	2022
Interest and banking expenses	36 183	21 751
SWAP interest realized	0	1 081
Interest element of financial lease	1 138	1 256
Amortized borrowing cost	1 933	1 844
Interest expense other commitments	0	317
Other financial expenses	191	962
Total	39 444	27 210

NOTE 9 – INCOME TAX EXPENSE

TAX EXPENSES FOR THE YEAR	2023	2022
Payable tax	90	117
Gross changes in deferred tax / deferred tax assets	-747	-449
Herof changes booked through other comprehensive income	5	1
Translation differences	64	154
Total tax on income for the year	-589	-178

SPECIFICATION OF TEMPORARY DIFFERENCES:	31.12.2023	31.12.2022
Long term temporary differences		
Tangible fixed asset	14	-4
Pension liabilities	-530	-593
Gain-/loss account of entry into tonnage tax system	1 637	2 123
Other temporary differences	4 346	4 509
Tax loss carry-forward	-14 030	-16 537
Total basis for deferred tax	-8 563	-10 502

ANALYSIS OF RECOGNISED DEFERRED TAX IN RESPECT OF EACH TYPE OF TEMPORARY DIFFERENCES AND UNUSED TAX LOSSES

			Changes	
	31.12.2023	31.12.2022	2023	2022
Temporary differences				
Tangible fixed asset	3	-1	4	20
Pension liabilities	-117	-130	14	30
Gain-/loss account of entry into tonnage tax system	360	467	-107	-182
Other temporary differences	956	992	-36	-110
Tax loss carry-forward	-3 087	-3 638	552	-757
Total deferred tax / tax asset (22%)	-1 884	-2 310	427	-999
Deferred tax asset not recognised (22%)	-2 257	-3 431	1 174	-550
Total recognised deferred tax (22%%)	374	1 121	-747	-449
Change deferred tax recognized through profit and loss account			-742	-448
Other changes deferred tax (recognized through OCI)			-5	-1
Total			-747	-449

Changes in deferred tax recognized through other comprehensive income consist of tax effect related to remeasurements of pension liabilities.

Reconciliation tax expenses for the year	2023	%	2022	%
22% of ordinary income/loss before tax	16 428	22%	19 516	22%
22% effect of permanent differences related to shares	0	0%	1	0%
22% effect of other permanent differences	-17 020	-23%	-19 707	-22%
Translation differences	3	0%	13	0%
Tax cost according to Profit & Loss account	-589	-1%	-178	0%

The Group's subsidiary, Clipper Shipping AS is taxed within the tonnage tax scheme, and is therefore only assigned tax on financial records in accordance with the tonnage tax regulations. Clipper Shipping AS is the owner of the investments in ship owning companies which result will then also be taxed under the tonnage tax regime.

There is no tax payable for 2023 under the tonnage tax regime, except for the tonnage tax itself which is reported as other operating expences, and this years income of gain/loss account related to entry into tonnage tax system.

No deferred tax assets are recognized on finance deficits related to the tonnage tax regime.

Tax payable in Balance sheet consist of:	2023	2022
Payable tax related to current year	90	117
Tonnage tax of current year	132	142
Total payable tax	222	259

NOTE 10 – PAYROLL EXPENSES

PERSONNEL EXPENSES	2023	2022
Salary	5 722	5 753
Employers tax	1 084	924
Pension cost	548	563
Other benefits	569	399
Total personnel expenses	7 922	7 639
Number of employees	43	45

REMUNERATION 2023 *(in USD 1000)*

KEY MANAGEMENT PERSONNEL	Salary	Bonuses	Pension costs	Other remuneration	Total remuneration
CEO	318	97	41	12	468
Commercial Director	232	54	22	31	339
CFO	170	27	21	7	226
HR Director	171	29	21	64	285
Fleet Director	209	33	25	36	303
Total remuneration 2023	1 100	240	130	151	1 621
Total remuneration 2022	548	155	65	11	778

5 individuals are included in key management personnel in 2023. (2 in 2022).

Board of Directors	2023	2022
Directors fee	38	68
Total	38	68

CEO has an additional contribution based pension of 15% of salary above 12G. In addition to this, CEO has an agreement of one year pay after termination of employment.

The company's senior executives are employed on a fixed salary. The Company has not granted loans or guarantees to any of its employees.

The company has an incentive scheme for senior executives based on achievement in HSE, finance and quality. The incentive scheme is set up as a cash consideration with a maximum of 25% of the basic salary. Settlement for the current year will be made during the first quarter of the following year.

In addition to the incentive scheme above, it was deceided that all other employees should receive a bonus equal to one months salary. This bonus was paid out in December 2023.

Auditor

Remuneration to auditor consist of the following	2023	2022
Audit mandatory by law	110	102
Other certification services	0	0
Other non-audit services	2	0
Total	**113**	**102**

NOTE 11 – PENSION COST AND LIABILITIES

The company is obligated to have a pension plan according to the Act on Mandatory occupational pension scheme, and has a pension plan which follows the requirement as set in the Act on Mandatory company pension. All employees are members of the defined contribution hybrid pension scheme with investment choices. Deposits in the scheme for 2023 are MNOK 4.2.

Non-funded plans

The group has non-funded pension obligations for 1 pensioner and an additional defined contribution plan for the CEO, which are not covered by the general pension plan. The pension obligations for the CEO include early retirement pension and pension for salary exceeding 12G.

Assumptions

Pension liabilities and pension costs are calculated by a third party independent actuary, and are valued according to Revised IAS 19. Changes in pension liabilities due to actuarial assumptions and differences between actual and expected return on plan a assets are recognized in other comprehensive income.

The following Assumptions were used for non-funded plans:

	2023	2022
Discount rate	3,10%	3,00%
Expected salary increases	3,50%	3,50%
Rate of pension increases	2,25%	2,00%
Increase of National Insurance Basic amount (G)	3,25%	3,25%
Expected return on plan assets	3,10%	3,00%
Social Security Tax	14,10%	14,10%
Disability tariff	KU	KU
Mortality tariff	K2013	K2013

Net periodic pension cost:	*Non-funded plans*	
	2023	**2022**
Net interest expense /(income)	10	8
Social Security Tax	1	1
Net pension cost	11	10

Present value of benefit obligation	*Non-funded plans*	
	2023	**2022**
Present value of benefit obligation at January 1	403	523
Remeasurements	6	-48
Net interest cost on benefit obligation	10	8
Pensions paid during the year	-81	-79
Present value of benefit obligation at December 31	338	403

Status of pension plans reconciled to the balance sheet	*Non-funded plans*	
	2023	**2022**
Present value of pension obligations	-338	-403
Fair value of plan assets		
Funded status of plans at December 31.	-338	-403
Social Security Tax	-192	-190
Net pension obligations as at December 31	-530	-593

	2023	**2022**
Total net pension liability non-funded and funded plans recognised at Dec. 31	-530	-593

Expected payments related to the pension plans in 2024

The Group has no secured pension scheme. However, a payment of NOK 4.2 million is expected for the Defined-contribution Hybrid pension arrangement in 2024, which includes employees onshore, as well as a payment of USD 1 million to the defined contribution plan for seafarers.

The Company's estimated payments for non-funded pension plans are NOK 1.2 million for the fiscal year 2024.

NOTE 12 – RELATED PARTIES

Related parties are the companies in which the group has an ownership share higher than 20%. In addition, companies controlled by the Steensland-Brun family are considered related parties. All transactions with related parties, follows market principles.

	Profit & Loss Account		Balance Sheet	
	2023	**2022**	**31.12.2023**	**31.12.2022**
Management fee and technical fee (income)	99			
Interest income other related parties	196			
Crewing expenses other related parties	-26 337	-27 593		
Receivables other related parties			242	67
Long term receivables other related parties			10 696	
Short term liabilities other related parties			-468	-21
Total	-26 042	-27 593	10 470	45

Long term receivables related parties are priced at compounded reference rate (SOFR) + margin of 2%.

NOTE 13 – BANK DEPOSIT

The group has the following restricted bank deposits

	2023	**2022**
Restricted bank deposit payroll withholding tax	506	892
Restricted bank deposit pension liability (*)	386	460

(*) The items are classified together with other receivables in the balance sheet.

The groups bank deposits at 31.12 are divided on different currencies as follows:

	2023	**2022**
NOK	3 195	2 159
EUR	1 335	492
GBP	3	7
SGD	528	30
USD	64 758	32 980
Other	150	59
Total	69 969	35 728

Guarantees
A bank guarantee of NOK 1.7 million has been provided for the rent of office space in Oslo.

NOTE 14 – PERIODIC MAINTENANCE

	Periodic Maintenance	
	2023	**2022**
Book value as of 01.01.	**20 822**	22 147
Additions during the year	**43 450**	12 738
Depreciation during the year	**-11 899**	-11 237
Book value sold/disposed asset	**-3 738**	-2 826
Book value as of 31.12	**48 635**	20 822
Depreciation plan	Linear	

The company recognizes the periodic maintenance and cost over a period of 5 years until the next periodic maintenance is expected to take place. Upcoming periodic maintenance is expected to complete in 2024 for 6 vessels. 11 vessels completed their periodic maintenance in 2023.

NOTE 15 – TANGIBLE FIXED ASSETS

	Vessels	**Other fixed assets**	**2023**	**2022**
Acquisition costs 01.01	1 124 731	1 443	**1 126 173**	1 248 531
Translation differences		-52	**-52**	-127
Additions during the year	9 568	123	**9 691**	1 659
Disposals during the year	-62 341		**-62 341**	-123 891
Acquisition costs 31.12	1 071 958	1 513	**1 073 471**	1 126 173
Accumulated ordinary depreciation 01.01	141 362	1 123	**142 486**	149 014
Depreciation during the year	45 387	96	**45 483**	47 004
Accumulated depreciation sold/disposed assets	-15 291		**-15 291**	-53 411
Translation differences		-37	**-37**	-121
Accumulated depreciation and write-off 31.12	171 459	1 182	**172 641**	142 486
Book value as of 31.12	900 499	331	**900 831**	983 688
Useful life	30 years	3 - 6 years		3 - 30 years
Depreciation plan	Linear	Linear		Linear
Depreciation percentage		0 - 30%		0 - 30%

The vessels have been tested for impairment by comparing the carrying values against valuations obtained from brokers. Estimated value in use are calculated for the vessels that have an indication of impairment. The recoverable amount is estimated at the calculated value in use for each vessel when the broker value is lower than booked values.

Based on broker value only there was no indications of impairment as of 31.12 .

Sale of vessels:
The group sold one vessel during 2023. Net gain of the sale amounted to MUSD 14.1.

NOTE 16 – RIGHT OF USE ASSETS / LEASES

By end of year the Group had two lease arrangements (Office facilities) accounted for using IFRS 16.

PRACTICAL EXPEDIENTS APPLIED

The Group leases smaller office equipment, such as coffee machines and water dispenser with contract terms of 1-3 years. The Group has elected to apply the practical expedient of low-value assets for these leases.

The Group has also applied the practical expedient for short-term leases. Short term is defined as a lease term of 12 month or less at the commencement date. For low-value leases and short-term leases, the Group does not recognize lease liabilities or right-of-use assets. The leases are instead expensed when they incur. Expenses relating to short-term and low value leases for 2023 amounts to KUSD 5.

SPECIFICATION OF RIGHT-OF-USE ASSETS

	2023	**2022**
Acquisition costs 01.01	**2 914**	2 914
Acquisition costs 31.12	**2 914**	2 914
Accumulated ordinary depreciation 01.01	**1 483**	1 113
Depreciations during the year	**371**	371
Accumulated depreciation and write-off 31.12	**1 854**	1 483
Book value as of 31.12	**1 060**	1 431

SPECIFICATION OF LEASE LIABILITY

	2023	**2022**
Book value as of 01.01.	**-1 570**	-1 931
Interest element of the lease liability	**-70**	-88
Payments for the principal portion of the lease liability	**449**	449
Book value as of 31.12	**-1 191**	-1 570

Maturity of lease commitment as per 31.12

	2023		**2022**	
	Minimum payment	Book value/ Net present value	Minimum payment	Book value/ Net present value
< 1 year	-468	-398	-466	-379
2 - 5 year	-870	-793	-1 331	-1 191
> 5 year				
	-1 337	-1 191	-1 797	-1 570

NOTE 17 – RECEIVABLES

Recivables consist mainly of trade debtors, prepaid voyage costs and accruals. None of the receivables is falling due more than one year after the end of the fiscal year. None of the receivables of significant amount is due on the balance sheet date.

Receivables at 31.12 can be divided as follows:

	2023		2022		
	Non-current	Current	Non-current	Current	
Financial assets at amortized cost					
Receivable related parties	10 696				
Financial assets at FVPL					
Deposit and guarantees		386		460	*(ref note 13)*
Prepayments and other assets					
Accounts receivable		10 306		10 978	
VAT receivable		272		277	
Accruals and prepayments		1 038		7 077	
Insurance claim		4 398		3 534	
Disputed tax claim		590		539	
Other receivables		4 708		6 917	
Total receivables	10 696	21 699		29 781	

All significant trade debtors at 31.12 are nominated in USD and are less than 30 days old.

There has been no material loss on accounts receivable in 2023, nor is it deemed necessary with provision for possible losses on the receivables.

The above book values are considered a reasonable approximation of fair value.

NOTE 18 – LONG TERM DEBT

The Group's interest-bearing debt is in its entirety related to the financing of vessels. The loan agreements are signed between the respective shipowning company and the lender. The loans are in USD and are priced at compounded reference rate (SOFR) + margin.

Solvang has together with the subsidiary Clipper Shipping AS a 5-year fleet loan agreement financing the major part of the vessels owned by Clipper Shipping AS. The loan is in the name of Solvang ASA as the Borrower and Clipper Shipping AS as the Guarantor.
As the loan is related to financing of vessels owned by Clipper Shipping AS, the loan is further distributed from Solvang ASA to Clipper Shipping AS on Back-to-back terms including capitalized borrowing cost.
The loan is set up as a revolving credit facility. Available credit line 31.12 is USD 322.7 million. Drawdown on loan is USD 252.7 million at 31.12.2023. The company has no debt that falls due more than five years after the balance sheet date.

The loan agreements have covenants requirements related to the market value of vessels in relation to outstanding debts, as well as working capital and / or minimum cash deposits. The group was in compliance with covenants in the loan agreements during the year and at 31.12.

SECURED DEBT	**2023**	**2022**
Long term debt to financial institution	386 157	466 869
Long term debt issuance cost	-5 037	-6 654
Long-term debt	381 121	460 215
Next year installment long term debt	81 870	12 167
Accrued interest long term debt	5 031	4 128
Current portion of long-term debt	86 900	16 295
Total net debt as of 31.12	**468 021**	**476 510**
Minority interest of book value as of 31.12.	63 311	50 647

COLLATERAL FOR DEBT	**2023**	**2022**
Vessel	900 499	983 368
Bank deposits	68 945	32 091
Bunkers, lubricant oil etc.	2 691	4 359
Accounts receivables	10 306	10 978
Book value as of 31.12.	**982 442**	**1 030 797**

NOTE 18 (continued) – LONG TERM DEBT

Change in interest-bearing debt is specified in the table below.

	Long term debt	Other long term debt	Total
Interest bearing debt as of 01.01.22	601 618	29 606	631 224
Paid Long term debt issuance cost	-1 144		-1 144
Repayment of borrowings	-127 835	-2 783	-130 618
Non-cash changes			
Changes in accrued interests	2 028		2 028
Amortized debt issuance cost	1 844		1 844
Interest bearing debt as of 31.12.22	476 510	26 823	503 333
Proceeds from borrowings	66 500	1 000	67 500
Paid Long term debt issuance cost	-315		-315
Repayment of borrowings	-77 509	-2 901	-80 410
Non-cash changes			
Changes in accrued interests	903		903
Amortized debt issuance cost	1 933		1 933
Interest bearing debt as of 31.12.23	468 021	24 922	492 943

Maturity overview of financial debt as of 31.12.

	Long term debt	Other long term debt	Total 2023	Total 2022
< 1 year	86 900	3 024	89 924	19 196
2 - 5 year	381 121	21 898	403 019	484 137
> 5 year				
	468 021	24 922	492 943	503 333

The figures in the above table does not include future interest prognosis.

NOTE 19 – EQUITY

The company's main shareholders as of 31.12.2023

	31.12.2023		31.12.2022	
Name of owner	**# of shares**	**Ownership**	**# of shares**	**Ownership**
Clipper AS	29 330 654	31,49%	29 330 654	31,49%
Straen AS	17 459 350	18,74%	18 117 245	19,45%
Audley AS	16 126 163	17,31%	16 126 163	17,31%
Barque AS	8 812 908	9,46%	8 812 908	9,46%
Leif Hübert AS	4 242 523	4,55%	2 882 741	3,09%
Jaco Invest AS	2 150 000	2,31%	2 150 000	2,31%
Hans Herman Horns Stiftelse	1 880 389	2,02%	1 880 389	2,02%
Motor-Trade Eiendom og Finans AS	1 578 373	1,69%	1 578 373	1,69%
Torkap AS	1 456 218	1,56%	1 456 218	1,56%
Mertoun Capital AS	0	0,00%	1 359 782	1,46%
Moredun Invest AS	1 364 320	1,46%	1 310 877	1,41%
Taif AS	1 308 608	1,40%	1 308 608	1,40%
Skagenkaien Eiendom Holding AS	1 276 318	1,37%	1 276 318	1,37%
Menne Invest AS	1 206 148	1,29%	1 206 148	1,29%
Other < 1%	4 953 636	5,32%	4 349 184	4,67%
Totalt	93 145 608	100,00%	93 145 608	100,00%

Exept from the Chairman, the board of directors has no direct ownership in the company, nor control any shares in the company as of 31.12.2023.
The Chairman, Michael Steensland Brun, controls 1 364 320 shares in the company as of 31.12.2023.
The CEO, Edvin Endresen, owns 142 299 shares in the company as of 31.12.2023.

Proposed dividend
The Board of Directors has proposed a dividend of NOK 3.00 per share for 2023. A total dividend of NOK 5 per share was paid in 2023 based on 2022 statutory accounts.
Allocated dividend is based on the number of shares outstanding on the grant date.
The company has no other dividend limitations than those imposed by Norwegian law.

Treasury shares
As of 31.12.2023 Solvang ASA holds no treasury shares.

NOTE 20 – SUBSEQUENT EVENTS

Clipper Helen is agreed sold, and the vessel will be delivered to new owner during second quarter 2024.

The Group has signed shipbuilding contract with HD Hyundai Heavy Industries Co, Ltd for delivery of Two 88,000 cbm Class LPG Carrier. Expected delivery is Q1 and Q2 2027.
The vessels are fixed on a 7/10 year time charter starting from delivery of each vessel in 2027.

There are no other events after the balance sheet date that impacts the reported numbers.

FINANCIAL STATEMENTS SOLVANG ASA

Income statement | Solvang ASA

Amounts in NOK 1 000	Note	2023	2022
Management fee	2	86 739	89 697
Total Operating income		**86 739**	**89 697**
Salaries and other personnel expenses	3	83 695	73 525
Depreciation	4	1 009	343
Other operating expenses	3	25 240	44 557
Total operating expenses		**109 944**	**118 425**
Operating result		**-23 205**	**-28 727**
Recieved group contributions	2	1 060	1 274
Affiliated companies equity method	5	-165	124
Financial income	6,2	718 983	762 556
Financial expenses	7	-233 229	-116 684
Net financial items		**486 650**	**647 270**
Ordinary result before tax		**463 445**	**618 543**
Tax on ordinary result	8	-6 218	-1 709
Net profit or loss for the year		**469 663**	**620 252**
Net profit or loss for the year is distributed as follows			
Dividend		-279 437	-186 291
To/from other equity		-190 226	-433 961
Total distributed		**-469 663**	**-620 252**

Balance sheet | Solvang ASA

Amounts in NOK 1 000	Note	31.12.2023	31.12.2022
ASSETS			
Fixed Assets			
Intangible fixed assets			
Deferred tax asset	8	9 583	3 312
Total intangible fixed assets		**9 583**	**3 312**
Tangible fixed assets			
Office equipment, furniture etc	4	3 369	3 127
Total tangible fixed assets		**3 369**	**3 127**
Financial fixed assets			
Investments in subsidiaries	9	2 860 869	2 860 869
Loans to group companies (Back-to-back)	2,10	2 537 613	2 715 387
Investments in affiliated companies	5	232	384
Total financial fixed assets		**5 398 714**	**5 576 640**
Total fixed assets		**5 411 666**	**5 583 079**
Current Assets			
Receivables			
Accounts receivables	2	2 435	653
Short term receivables group companies	2,11	9 311	19 768
Other short term receivables	11,12	15 067	36 795
Total receivables		**26 813**	**57 217**
Cash and bank deposits	12	602 746	273 429
Total current assets		**629 559**	**330 646**
TOTAL ASSETS		**6 041 224**	**5 913 725**

Balance sheet | Solvang ASA

Amounts in NOK 1 000	Note	31.12.2023	31.12.2022
EQUITY AND LIABILITIES			
Equity			
Paid-in capital			
Share capital	13	465 728	465 728
Share premium reserve		2 076 295	2 076 295
Total paid-in capital		**2 542 023**	**2 542 023**
Retained earnings			
Other equity		80 677	170 061
Total retained earnings		**80 677**	**170 061**
Total equity	13	**2 622 700**	**2 712 084**
Liabilities			
Provisions			
Pension liabilities	14	5 385	5 810
Total provisions		**5 385**	**5 810**
Long term liabilities			
Loan (back-to-back)	10	2 537 613	2 715 387
Total long term liabilities		**2 537 613**	**2 715 387**
Current liabilities			
Trade creditors		4 317	6 311
Current liabilities Group companies	2,12	569 570	266 000
Tax payable	8	0	0
Public duties payable		10 260	9 801
Dividend	13	279 437	186 291
Other short term liabilities		11 943	12 041
Total current liabilities		**875 526**	**480 443**
Total liabilities		**3 418 524**	**3 201 640**
TOTAL EQUITY AND LIABILITIES		**6 041 224**	**5 913 725**

Stavanger, 29th April 2024

This document has been signed electronically.

Michael Steensland Brun
Chairman

Ellen Solstad

Christian Frustøl

Edvin Endresen
CEO

Cash flow statement | Solvang ASA

Amounts in NOK 1 000	Note	2023	2022
CASH FLOW FROM OPERATING ACTIVITIES			
Profit / (loss) before tax		463 445	618 543
Taxes paid	8	0	-2 089
Depreciation	4	1 009	343
Difference between expensed pension and paid in/out	14	-665	-647
Recieved group contributions		-1 060	-1 274
Result in other affiliated companies	5	165	-124
Changes in inventories, trade receivables and trade payables		-3 776	4 509
Changes in other current balance sheet items		33 608	-20 446
Financial items		0	-1 709
Net cash flow from operating activities		**492 726**	**597 106**
CASH FLOW FROM INVESTING ACTIVITIES			
Proceeds from sale / purchase of tangible fixed assets	4	-1 251	-2 959
Investment affiliated companies	5	0	46
Received payments other receivable		0	65 369
Net cash flow from investing activities		**-1 251**	**62 457**
CASH FLOW FROM FINANCING ACTIVITIES			
Payment other commitments		0	-63 204
Change in outstanding accounts group companies		303 570	-155 613
Dividends paid	13	-465 728	-605 446
Net cash flow from financing activities		**-162 158**	**-824 264**
Net change in cash and cash equivalents		**329 316**	**-164 702**
Cash and cash equivalents 01.01		273 429	438 131
Cash and cash equivalents 31.12		**602 746**	**273 429**

Notes 2023 | Solvang ASA

NOTE 1 – ACCOUNTING PRINCIPLES

The annual accounts consist of the profit and loss account, balance sheet, cash flow statement and notes to the accounts, and have been presented in compliance with the Norwegian Companies Act, the Norwegian Accounting Act and Norwegian generally accepted accounting principles in effect as of 31st of December 2023.

The annual accounts have been prepared based on the fundamental accounting principles and the classification of assets and liabilities are according to the Norwegian Accounting Act. The application of the accounting principles and the presentation of transactions and other issues attach importance to economic realities, not only legal form. Contingent losses, which are likely to happen and are quantifiable, will be expensed.

General principles

Assets that are meant for long-term ownership or use are classified as fixed assets. Other assets are classified as current assets. Receivables are classified as current assets if they are to be re-paid within one year after payment. The same criteria apply for liabilities.

The annual accounts have been prepared based on the fundamental accounting principles historical cost, comparability, going concern, congruence and prudence. Transactions are recorded at their value at the time of the transaction. Income is recognised at the time of delivery of goods or service sold and matches costs expensed in the same period as the income to which they relate is recognized.

Valuation of fixed assets is entered in the accounts at original cost. If the fair value of a fixed asset is lower than book value, and the decline in value is not temporary, the fixed asset will be written down to fair value. Fixed assets with a limited expected useful life are depreciated according to plan.

Current assets are valued at the lower of acquisition cost and fair value. Short-term liability are recognized at their nominal value at the transaction date.

Solvang ASA has Norwegian kroner (NOK) as both the functional and reporting currency.

A more detailed description of application and use of the accounting principles for specific assets and liabilities are commented below.

Fixed assets

Fixed assets are entered in the accounts at original cost, with deductions for accumulated depreciation and write-down. If the fair value of a fixed asset is lower than book value, and the decline in value is not temporary, the fixed asset will be written down to fair value. Depreciation is calculated and distributed linearly over the estimated useful life. Maintenance of fixed assets is continuously booked to operating cost. Major replacement and improvements witch significantly improve the fixed assets useful life, are added to the purchase price of the assets.

Investment in subsidiaries

By subsidiaries means investments where the company directly or indirectly owns more than 50 % of the voting shares, where the investment has a long-term and strategic dimension, and investments where the company have a controlling interest. Investments in subsidiaries are accounted for using the purchase method. Cost price increases when means are contributed by a capital increase, or when group contribution is received by the subsidiary. Received dividends are normally booked as income. Dividends which exceeds retained earnings after the initial investment, is booked as reduction of historical acquisition cost. Year-end allocation related to dividend from subsidiaries is entered as financial income the same fiscal year.

Investment in affiliated companies

By affiliated companies means investments where the company directly or indirectly owns 20-50 % of the voting shares, where the investment has a long-term and strategic dimension, and investments where the company can exercise a considerable influence. Investments in affiliated companies are accounted for using the equity method.

Solvang's share of the profit in an affiliated company is based on profit after tax in the affiliated company less any depreciation on excess value due to the acquisition cost of the owner interest being higher than the acquired share of book equity. In the income statement, the share of the profit in affiliated companies is presented as financial items. In the balance sheet, owner interests in affiliated companies are presented together with fixed assets.

For affiliated participant taxed companies are Solvang's share of the profit based on the pre-tax profit in the affiliated company. Tax on profit share is recognized through the general tax cost of the Group.

Receivables

Receivables are valuated at face value after deduction of accrual for anticipated loss. Accruals for anticipated loss are made on basis of assessment of the individual outstanding claims.

Foreign currency

Transactions in foreign currencies are recorded at transaction date.
All cash and bank balances in foreign currency are accounted for at the exchange rate at year-end.

Financial expenses

When a new debt financing is established any up-front fees and other cost related to the financing are capitalized at the date of drawdown of the loan and amortized over the loan period.

Long term loan (back-to-back)

The interest and loan are presented gross in both P&L and Balance sheet as this relates to a flow-through loan. The loan is set up with Back-to-back terms, hence it has no actual effect to the accounts.

Pension liability and pension cost

All employees are members of the defined contribution hybrid pension scheme with investment choices. The company has no remaining obligations to the old schemes that have been settled. However, the non-funded schemes will continue as before and consist of defined benefit plans and defined contribution plans.

Defined benefit pension plan

Net pension cost includes the period calculated pension benefits, including expected salary increases, estimated interest expenses, less the expected return on plan assets and any effects of changes in estimates and plans. The surplus is capitalized to the extent it can be applied to future pension obligations. The company applies Revised IAS 19 Employee Benefits as a basis for accounting for pension.

Gains and losses arising from recalculation of the obligation due to experience variances and changes in actuarial assumptions are recorded against equity and deferred tax in the period when they occur.

Contribution based pension plan

For defined contribution plans the company pays contributions to publicly or privately administered pension insurance plans. The company has no further payment obligations once the contributions have been paid. Contributions are recognized as compensation expense in line with the obligation to pay contributions accrue.

Taxes

Taxes in the Profit and Loss statement contain both payable tax of the year and changes in deferred tax / deferred tax asset.

Deferred tax /deferred tax assets are calculated on basis of temporary differences between accounting standards and tax legislation by the end of the fiscal year. The calculation is based on nominal tax rate. Tax-augmenting and tax-reducing temporary differences that can be reversed in the same period are balanced in the accounts. Deferred tax assets arise if there are net tax-reducing temporary differences which can be justified by the assumption of future profits. This year tax on ordinary result consist of net changes in deferred tax and deferred tax assets together with payable tax of the year and adjusted for any differences in provision previous years.

Cash flow statement

The Cash Flow statement is prepared in accordance with the indirect method. Cash flow generated by investing and financing activities is shown gross, while for operations reconciliation is shown between book profit and cash flow from operating activities. Cash and cash-equivalents include petty cash and bank payments.

NOTE 2 – RELATED PARTIES

Related parties are the companies that are part of the Solvang ASA group as well as companies in which the group has an ownership share higher than 20%. In addition, companies controlled by the Steensland-Brun family are considered related parties. All transactions with related parties, are based on arm's length and market terms. In connection with Solvang's position as manager for the shipping partnerships, there are ongoing transactions between Solvang and the individual shipping partnerships. Solvang receives a yearly fee as managers. The size of the fee is regulated by the management agreement, and is approved each year by the annual general meeting of the shipping partnerships.

	Profit & Loss Account		**Balance Sheet**	
	2023	**2022**	**31.12.2023**	**31.12.2022**
Management fee (income)	86 739	89 697		
Interest subsidiaries (back-to-back)	225 751	112 890		
Dividend received from subsidiaries	491 946	641 114		
Group contribution received	1 060	1 274		
Receivables group companies			9 311	19 768
Liabilities group companies			-569 570	-266 000
Loan subsidiaries (back-to-back)			2 537 613	2 715 387
Net receivables other related parties			2 462	681
Liabilities other related parties			-17	-24
Total	**805 498**	**844 975**	**1 979 799**	**2 469 813**

NOTE 3 – PAYROLL EXPENSES

	2023	2022
Personnel expenses		
Salary	60 454	55 369
Employers tax	11 447	8 896
Pension cost	5 785	5 415
Other personnel expenses	6 009	3 844
Total personnel expenses	83 695	73 525
Number of employees	43	45

Remuneration 2023

	Director's fees	Salary	Bonuses	Pension costs	Other remuneration	Total remuneration
MANAGERS						
Edvin Endresen, CEO		3 361	1 024	433	124	4 942
Kim Larsen, Commercial Director		2 448	569	231	329	3 578
Egil Fjogstad, CFO		1 801	287	224	77	2 389
Kjetil Meling, HR Director		1 807	304	226	676	3 013
Tor Øyvind Ask, Fleet Director		2 209	348	260	384	3 202
BOARD OF DIRECTORS						
Michael Steensland Brun, Chairman	150					150
Jostein Devold, Board member	125					125
Ellen Solstad, Board member	125					125
Total remuneration	**400**	**11 625**	**2 533**	**1 375**	**1 591**	**17 524**

CEO has an additional contribution based pension of 15% of salary above 12G. In addition to this, CEO has an agreement of one year pay after termination of employment.
The company's senior executives are employed on a fixed salary. The Company has not granted loans or guarantees to any of its employees.
The company has an incentive scheme for senior executives based on achievement in HSE, finance and quality. The incentive scheme is set up as a cash consideration with a maximum of 25% of the basic salary. Settlement for the current year will be made during the first quarter of the following year.

In addition to the incentive scheme above, it was deceided that all other employees should receive a bonus equal to one months salary. This bonus was paid out in December 2023.

AUDITOR

Remuneration to auditor consist of the following	**2023**	**2022**
Audit mandatory by law	472	396
Other non-audit services	25	0
Total	**498**	**396**

NOTE 4 – TANGIBLE FIXED ASSETS

	Software and office equipment	Furniture and fixtures	Non depreciable assets	2023	2022
Acquisition costs 01.01	9 084	4 885	165	**14 134**	11 175
Additions during the year	1 186	65	0	**1 251**	2 959
Acquisition costs 31.12	10 270	4 950	165	**15 385**	14 134
Accumulated ordinary depreciation 01.01	6 604	4 403	0	**11 007**	10 664
Depreciation during the year	872	137	0	**1 009**	343
Accumulated depreciation and write-off 31.12	7 476	4 540	0	**12 017**	11 007
Book value as of 31.12	2 794	410	165	**3 369**	3 127
Useful life	3-4 years	6 years	-		3 - 6 years
Depreciation plan	Linear	Linear	Linear		Linear
Depreciation percentage	25 - 30%	15%	0%		15 - 30%

NOTE 5 – AFFILIATED COMPANIES

AFFILIATED COMPANIES INCLUDED UNDER THE EQUITY METHOD OF ACCOUNTING

Company	Owner-ship	Acquisition cost	Equity at acquisition	Opening balance 01.01.2023	Share of net profit	Dividend received	Translation differences	Closing balance 31.12.2023
Solvang Phillipines Inc	25%	102	102	384	-165	0	13	232
Total		102	102	384	-165	0	13	232

Solvang Phillipines Inc is located in Manila, Phillipines.
The voting rights are according to pro rata ownership share.

We have not received final or audited accounts from the affiliated companies for 2023, hence the amounts presented in this note is based on financial statement 2022.

NOTE 6 – FINANCIAL INCOME

	2023	2022
Interest income	1 280	736
Interest income back-to-back loan (*ref note 10)*	225 751	112 890
Interest other long term receivable	0	4 757
Dividend Norwegian shares (Subsidiary)	491 946	641 114
Currency gain	0	3 020
Other financial income	5	39
Total	**718 983**	**762 556**

NOTE 7 – FINANCIAL EXPENSES

	2023	2022
Interest and banking expenses	156	110
Interest loan (back-to-back) *ref note 10*	225 751	112 890
Interest expense other commitments	0	3 048
Currency loss	6 992	0
Other financial expenses	329	636
Total	**233 229**	**116 684**

NOTE 8 – TAX

		2023	2022
Ordinary income/loss before tax		463 445	618 543
Permanent differences related to shares		-491 946	-641 068
Permanent differences		73	14 881
Differences related to equity method		165	-124
Changes in temporary differences		-841	-1 442
Net taxable income/loss		**-29 105**	**-9 210**
Tax Payable	**22%**	**0**	**0**
Tax expenses for the year			
Tax Payable		0	0
Gross changes in deferred tax / deferred tax assets		-6 271	-1 718
Deferred tax of remeasurement pensions recognized in equity		53	9
Total tax on income for the year		**-6 218**	**-1 709**
Specification of temporary differences:			
Long term temporary differences			
Tangible fixed asset		140	-36
Pension liabilities		-5 385	-5 810
Tax loss carry-forward		-38 315	-9 210
Total		**-43 559**	**-15 056**
Deferred tax / deferred tax assets	**22%**	**-9 583**	**-3 312**
Reconciliation tax expenses for the year			
22% of ordinary income/loss before tax		101 958	136 079
Changes related to equity method		36	-27
22% effect of permanent differences related to shares		-108 228	-141 035
22% effect of other permanent differences		16	3 274
Tax cost according to Profit & Loss account		**-6 218**	**-1 709**

NOTE 9 – SHARES IN SUBSIDIARIES

(Amounts in full NOK)

Company name	Ownership/ voting rights	Share capital	Nominal value	Number of shares owned	Total nominal value	Carrying value 31.12
Clipper Shipping AS	100%	700 000 000	100	7 000 000	700 000 000	2 858 984 079
Solvang Maritime AS	100%	100 000	1 000	100	100 000	1 884 927
Total Subsidiaries						**2 860 869 006**

Clipper Shipping AS and Solvang Maritime AS are located in Stavanger.

NOTE 10 – INTEREST BEARING DEBT

Solvang ASA has given a guarantee for the share of debt that its subsidiary Clipper Shipping AS is committed to through its ownership in shipowning companies. This is limited to ownership of the individual shipping partnerships. Clipper Shippings share of the mortgage debt 31.12.2023 is MUSD 88.6. Solvang ASA has guaranteed for all of this amount.

Solvang ASA has provided a bank guarantee of NOK 1.7 million regarding the lease of office space in Oslo.

Solvang has together with the subsidiary Clipper Shipping AS a 5-year fleet loan agreement financing the major part of the vessels owned by Clipper Shipping AS. The loan is in the name of Solvang ASA as the Borrower and Clipper Shipping AS as the Guarantor.
As the loan is related to financing of vessels owned by Clipper Shipping AS, the loan is further distributed from Solvang ASA to Clipper Shipping AS on Back-to-back terms.
The loan is set up as a revolving credit facility. Available credit line 31.12 is USD 322.7 million. Drawdown on loan is USD 252.7 million at 31.12.2023. The company has no debt that falls due more than five years after the balance sheet date.

The loan agreements have covenants requirements related to the market value of vessels in relation to outstanding debts, as well as working capital and / or minimum cash deposits. The company was in compliance with covenants in the loan agreements during the year and at 31.12.

Summary of Long term loan as of 31.12.

Amounts in KNOK	**Receivables (back-to-back terms)**	**Long term loan**
Long term loan	2 568 784	-2 568 784
Capitalized borrowing costs	-31 171	31 171
Total	2 537 613	-2 537 613

NOTE 11 – RECEIVABLES

Debtors consist mainly of receivables from shipping partnerships. None of these receivables is falling due more than one year after the end of the fiscal year.

NOTE 12 – BANK DEPOSIT

In connection with payment of payroll withholding tax, the company has a restricted bank deposit of NOK 4,979,275,-.

Total bank deposit also includes provision on a restricted account related to pension for former managing director of the merged subsidiary. Restricted bank deposit as of 31.12 amounts to NOK 3,922,508,-
The account is included in other short term receivables.

Cash pool
Solvang ASA is the main account holder in a multi-currency corporate cash pool system in Nordea, in which the two subsidiaries Solvang Maritime AS and Clipper Shipping AS are included. The cash pool has been established to optimize liquidity management of Solvang Group. There are no overdraft facility linked to the cash pool. At year-end 2023, Solvang ASA had a net deposit in the cash pool. Ref below.

Cash and bank deposits can be divided as follows:

	2023	2022
Companys own deposit in Cash pool	23 701	-9 877
Subsidiaries deposit in cash pool (*)	569 570	266 000
Net deposits outside the cash pool	9 475	17 306
Total Cash and bank deposits	**602 746**	**273 429**

* *Subsidiaries deposits in cash pool are also recognised as current liabilities group companies in Solvang ASA's balance sheet.*

NOTE 13 – EQUITY

Solvang ASA	Share capital	Share premium reserve	Other Equity	Total equity
Equity as of 31.12.2022	**465 728**	**2 076 295**	**170 061**	**2 712 084**
Profit / loss of the year			469 663	469 663
Translation differences *(note 5)*			13	13
Remeasurement pension liability (net after tax)			-187	-187
Additional dividend paid out current year			-279 437	-279 437
Dividend			-279 437	-279 437
Equity as of 31.12.2023	**465 728**	**2 076 295**	**80 677**	**2 622 700**

Treasury Shares

As of 31.12.2023 Solvang ASA holds no treasury shares.

Shareholders

The share capital of Solvang ASA consist of 93,145,608 ordinary shares, each with a par value of NOK 5,-.
All shares have equal rights.

The company's main shareholders as of 31.12.2023

Name of owner	# of shares	Ownership
Clipper AS	29 330 654	31,49%
Straen AS	17 459 350	18,74%
Audley AS	16 126 163	17,31%
Barque AS	8 812 908	9,46%
Leif Hübert AS	4 242 523	4,55%
Jaco Invest AS	2 150 000	2,31%
Hans Herman Horns Stiftelse	1 880 389	2,02%
Motor-Trade Eiendom og Finans AS	1 578 373	1,69%
Torkap AS	1 456 218	1,56%
Moredun Invest AS	1 364 320	1,46%
Taif AS	1 308 608	1,40%
Skagenkaien Eiendom Holding AS	1 276 318	1,37%
Menne Invest AS	1 206 148	1,29%
Others < 1%	4 953 636	5,32%
Totalt	**93 145 608**	**100,00%**

Exept from the Chairman, the board of directors has no direct ownership in the company, nor control any shares in the company as of 31.12.2023.
The Chairman, Michael Steensland Brun, controls 1,364,320 shares in the company as of 31.12.2023.
The CEO, Edvin Endresen, owns 142,299 shares in the company as of 31.12.2023.

Proposed dividend

The Board of Directors has proposed a dividend of NOK 3.00 per share for 2023. A total dividend of NOK 5,- per share was paid in 2023 based on 2022 statutory accounts.
Allocated dividend is based on the number of shares outstanding on the grant date.
The company has no other dividend limitations than those imposed by Norwegian law.

NOTE 14 – PENSION COST AND PENSION LIABILITIES

The company is obligated to have a pension plan according to the Act on Mandatory company pension, and has a pension plan which follows the requirement as set in the Act on Mandatory company pension.
All employees are members of the defined contribution hybrid pension scheme with investment choices.
Deposits in the scheme for 2023 are 4,200,976, -.

Non-funded plans
The company also has non-funded pension obligations for 1 pensioner and an additional defined contribution plan for CEO, which are not covered by the general pension plan.

Assumptions
Pension liabilities and pension costs are calculated by a third party independent actuary, and has been evaluated according to revised IAS 19. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited through Equity. The following assumptions were used for non-funded plans:

	2023	2022
Discount rate	3,10%	3,00%
Expected salary increases	3,50%	3,50%
Rate of pension increases	2,25%	2,00%
Increase of National Insurance Basic amount (G)	3,25%	3,25%
Expected return on plan assets	3,10%	3,00%
Social Security Tax	14,10%	14,10%

Net periodic pension cost:	Non-funded plans	
	2023	**2022**
Benefits earned during the year		
Interest cost	106	80
Social Security Tax	15	11
Net periodic pension cost	**121**	**91**

Overview of actuarial gains and losses recognized directly through other equity:

	2023	2022
Net actuarial gains/losses 01.01	-5 294	-5 262
Current year actuarial gains/losses	-239	-42
Tax	53	9
Net actuarial gains/losses 31.12	**-5 481**	**-5 294**

Status of pension plans reconciled to the balance sheet

	Non-funded plans	
	2023	**2022**
Present value of pension obligations	-3 438	-3 948
Fair value of plan assets	0	0
Funded status of plans at December 31.	-3 438	-3 948
Social Security Tax	-1 947	-1 862
Net pension liability recognised at December 31.	**-5 385**	**-5 810**

NOTE 15 – AREAS OF OPERATION

Solvang ASA has one area of operation, ship management.

NOTE 16 – FINANCIAL MARKET RISK

The company's operations expose the company for low currency risk because income and the majority of cost are normally in the same currency (NOK). However, there is some exposure to currency related to foreign currency bank accounts as well as interim accounts with group companies and other shipping companies that Solvang is the managing director of, but the risk is considered low. The company only have a very limited exposure to credit risk and market risk.

CURRENCY RISK AND INTEREST RISK

Investment in ship owning companies (owned through subsidiary Clipper Shipping AS)
The operations of the company's investments in ship owning companies are mainly USD based. Most of the revenues are in USD. The majority of the income is in USD. Furthermore, the market value of the ships, and thus most of the assets, are priced in USD. Most of the debts are also in USD. This leads to foreign exchange exposure being limited. The Ship Owning companies are part of the Group and are fully consolidated.

Most of the company's debt is loan on back-to-back terms with Clipper Shipping AS. In addition Solvang has provided guarantee for the debt Clipper Shipping is committed to through its ownership in shipowning companies. (Ref note 10). All loans are denominated in USD and are priced at floating compounded reference rate (SOFR) + margin. The company has an acceptable equity ratio. This together with an active handling of interest rate exposure, leads to the risk of any changes in the interest rate level being limited for the company.

NOTE 17 – SUBSEQUENT EVENTS

There are no events after the balance sheet date that impacts the reported numbers.

AUDITOR'S REPORT

To the General Meeting of Solvang ASA

Independent Auditor's Report

Opinion

We have audited the financial statements of Solvang ASA, which comprise:

- the financial statements of the parent company Solvang ASA (the Company), which comprise the balance sheet as at 31 December 2023, the income statement and cash flow statement for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, and
- the consolidated financial statements of Solvang ASA and its subsidiaries (the Group), which comprise the balance sheet as at 31 December 2023, the income statement, statement of shareholders' equity and statement of cash flows for the year then ended, and notes to the financial statements, including material accounting policy information.

In our opinion

- the financial statements comply with applicable statutory requirements,
- the financial statements give a true and fair view of the financial position of the Company as at 31 December 2023, and its financial performance and its cash flows for the year then ended in accordance with the Norwegian Accounting Act and accounting standards and practices generally accepted in Norway, and
- the consolidated financial statements give a true and fair view of the financial position of the Group as at 31 December 2023, and its financial performance and its cash flows for the year then ended in accordance with IFRS Accounting Standards as adopted by the EU.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Company and the Group as required by relevant laws and regulations in Norway and the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

The Board of Directors and the Managing Director (management) are responsible for the information in the Board of Directors' report and the other information accompanying the financial statements. The other information comprises information in the annual report, but does not include the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the information in the Board of Directors' report nor the other information accompanying the financial statements.

In connection with our audit of the financial statements, our responsibility is to read the Board of Directors' report and the other information accompanying the financial statements. The purpose is to consider if there is material inconsistency between the Board of Directors' report and the other information accompanying the financial statements and the financial statements or our knowledge obtained in the audit, or whether the Board of Directors' report and the other information accompanying the financial statements otherwise appears to be materially misstated. We are required to report if there is a material misstatement in the Board of Directors' report or the other information accompanying the financial statements. We have nothing to report in this regard.

PricewaterhouseCoopers AS, Kanalsletta 8, Postboks 8017, NO-4068 Stavanger
T: 02316, org. no.: 987 009 713 MVA, www.pwc.no
Statsautoriserte revisorer, medlemmer av Den norske Revisorforening og autorisert regnskapsførerselskap

Based on our knowledge obtained in the audit, it is our opinion that the Board of Directors' report

- is consistent with the financial statements and
- contains the information required by applicable statutory requirements.

Our opinion on the Board of Director's report applies correspondingly to the statement on Corporate Social Responsibility.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation of financial statements of the Company that give a true and fair view in accordance with the Norwegian Accounting Act and accounting standards and practices generally accepted in Norway, and for the preparation of the consolidated financial statements of the Group that give a true and fair view in accordance with IFRS Accounting Standards as adopted by the EU. Management is responsible for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's and the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern. The financial statements of the Company use the going concern basis of accounting insofar as it is not likely that the enterprise will cease operations. The consolidated financial statements of the Group use the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.For further description of Auditor's Responsibilities for the Audit of the Financial Statements reference is made to: https://revisorforeningen.no/revisjonsberetninger

Stavanger, 29 April 2024
PricewaterhouseCoopers AS

Gunnar Slettebø
State Authorised Public Accountant
(This document is signed electronically)

GRI INDEX

GRI Disclosure	Description	Reference	Page
101: FOUNDATION	1. Reporting Principles 2. Using the GRI Standards for sustainability reporting	Sustainability in Solvang	20
102: General Disclosures	**Organizational profile**		
	102-1 Name of the organization	Front page	1
	102-2 Activities, brands, products, and services	This is Solvang Cargo Fleet	8 14-15 16
	102-3 Location of headquarters	The Board of Director's Report	77
	102-4 Location of operations	The Board of Director's Report	77
	102-5 Ownership and legal form	Note 1, Solvang Group Note 19, Solvang Group	87 105
	102-6 Markets served	Our Cargo The Board of Director's Report	14-15 77
	102-7 Scale of the organization	The Board of Director's Report	77
	102-8 Information on employees and other workers	"We want you, we need you" Social section 4.1 Organization	12 44-53 78
	102-13 Membership of associations	Norwegian Ship Owner Assosiation, Maritimt Forum, MACN, Clean Shipping Alliance, Tridentalliansen, Incentra, Intertanko.	68
	Strategy		
	102-14 Statement from senior decision-maker	Letter from CEO Solvang towards the future	3 70-75
	Ethics and integrity		
	102-16 Values, principles, standards, and norms of behavior	Vision, values and main goals Freedom to blow the whistle Collective action against corruption	13 54 68
	Governance		
	102-18 Governance structure	Corporate governance in Solvang Note 1, Solvang Group	60-61 87
	102-20 Executive-level responsibility for economic, environmental, and social topics	The Board of Director's Report	77-80

	102-21 Consulting stakeholders on economic, environmental, and social topics	The Board of Director's Report	77-80
	102-22 Composition of the highest governance body and its committees	Corporate governance in Solvang	60-61
	102-23 Chair of the highest governance body	Corporate governance in Solvang	60-61
GRI Disclosure	**Description**	**Reference**	**Page**
102: General disclosures	**Stakeholder engagement**		
	102-40 List of stakeholder groups	Sustainability in Solvang	21
	102-43 Approach to stakeholder engagement	Collective action against corruption	68
	102-44 Key topics and concerns raised	Collective action against corruption "We want you, we need you"	68 12
	Reporting practice		
	102-45 Entities included in the consolidated financial statements	Note 1, Solvang Group	87
	102-46 Defining report content and topic boundaries	Note 1, Solvang Group Note 1, Solvang Parent	87 111
	102-54 Claims of reporting in accordance with the GRI standards	Sustainability in Solvang The Board of Director's Report	20 76
	102-55 GRI content index		125-129
	Management approach		
	103-2 The management approach and its components	Letter from the CEO Corporate governance in Solvang	3 60-61
201: Economic performance			
	201-1 Direct economic value generated and distributed	The Board of Director's Report Group income statement Parent income statement	77 82 107
202: Market presence		The Board of Director's Report	77
203: Indirect economic impacts			
	203-1 Infrastructure investments and services supported		
	203-2 Significant indirect economic impacts	Our Cargo Collective action against corruption	14-15 68
204: Procurement practices			
	204-1 Proportion of spending on local suppliers	Stepping up to full transparency Collective action against corruption	62 68

GRI Disclosure	Description	Reference	Page
205: Anti-corruption			
	205-2 Communication and training about anti-corruption policies and procedures	Collective action against corruption Solvangs´s sanctions policy Stepping up to full transperancy Freedom to blow the whistle Living The Vision (incl. weblink)	68 66 62 54 53
GRI Disclosure	**Description**	**Reference**	**Page**
301: Materials		Letter from the CEO Balancing the world´s energy sources The well-to-wake reality (weblink)	3 30 30
	301-1 Materials used by weight or volume	Environmental performance	42-43
	301-2 Recycled input materials used	Balancing the world´s energy sources The well-to-wake reality (weblink)	30 30
302: Energy			
	302-1 Energy consumption within the organization	ESG Key figures 2023 Environmental performance	7 42-43
	302-3 Energy intensity	Environmental performance The well-to-wake reality (weblink) Reducing our environmental impact (weblink)	42-43 30 26
	302-4 Reduction of energy consumption	Environmental performance The well-to-wake reality (weblink) Reducing our environmental impact (weblink) Onboard carbon capture	42 30 26 35
303: Water and effluents			
	303-1 Interactions with water as a shared resource	ISO 14001 : No harm to water life Environmental policy in Living the Vision programme (weblink)	25 53
	303-2 Management of water discharge-related impacts	Discharges to sea and land	34
	Disclosure 303-4 Water discharge	Ballast/scrubber. Sea and land Environmental performance	34 42-43
305: Emissions			
	305-1 Direct (Scope 1) GHG emissions	Balancing the world´s energy sources The well-to-wake reality (weblink)	30 30
	305-2 Energy indirect (Scope 2) GHG emissions	Balancing the world´s energy sources The well-to-wake reality (weblink)	30 30
	305-5 Reduction of GHG emissions	Environmental performance The well-to-wake reality (weblink) Reducing our environmental impact (weblink) Onboard carbon capture	42-43 30 26 35

GRI Disclosure	Description	Reference	Page
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Environmental performance	42-43
306: Waste			
	306-1 Waste generation and significant waste-related impacts	Discharges to sea and land	34
	306-2 Management of significant waste-related impacts	ISO 14001 : No harm to water life	25
	306-3 Waste generated	Reducing our environmental impact (weblink) Discharges to sea and land Environmental performance	26 34 42-43
307: Environmental compliance			
	Management approach	Letter from the CEO	3
GRI Disclosure	**Description**	**Reference**	**Page**
308: Supplier environmental assessment			
	308-1 New suppliers screened using environmental criteria	ISO 14001 Incentra membership Stepping up to full transparency	62 62
401: Employment			
	401-1 New employee hires and employee turnover	Social key performance indicators	45
403: Occupational health and safety			
	403-1 Occupational health and safety management system	Living the Vision (incl. weblink) Social key performance indicators	53 45
	403-2 Hazard identification, risk assessment, and incident investigation	Living the Vision (incl. weblink)	53
	403-3 Occupational health services	Social key performance indicators	45
	403-5 Worker training on occupational health and safety	Living the Vision (incl. weblink)	53
	403-6 Promotion of worker health	Freedom to blow the whistle	54
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Freedom to blow the whistle	54
	403-8 Workers covered by an occupational health and safety management system	Living the Vision (incl. weblink)	53
	403-9 Work-related injuries	Social performance dashboard	56-57
	403-10 Work-related ill health	Social performance dashboard	56-57
405:Diversity and equal opportunity	405-1 Diversity of governance bodies and employees	ESG key figures 2023	7
408: Child labour		MLC + Flag state regulations	
409: Forced or compulsory labor		MLC + Flag state regulations	
410: Security Practices		ISPS + Flag state regulations	

412: Human rights assessment	UN SDGs	23-25
413: Local communities	Positive effects from International Shipping (UN SDG 17)	25
419: Socioeconomic compliance	Social key performance indicators	45

TOPIC	SOLVANG DOCUMENTS	EXTERNAL REFERENCES
Emissions to air	Environmental Policy Environmental Management System	IMO GHG Strategy IMO MARPOL ISO 14001 ISM Code NIS Flag State requirements
Energy consumption	Environmental Policy Environmental Management System	IMO GHG Strategy IMO MARPOL ISO 14001 ISM Code NIS Flag State requirements
Spills to sea	Ballast Water Management Policy and Management System Waste Management Policy and Management System Environmental Policy and Management System	IMO MARPOL IMO Ballast Water Management Convention European Waste Shipment Regulation The Federal Water Pollution Control Act US VGP regulations ISM Code
Recycling	Vessel Recycling Policy	NIS Flag State requirements
Community engagement	How we contribute to social welfare, jobs and stability.	
Health and safety	Emergency procedures Occupational Health and Safety Management System Health and nutrition programmes Contractor Safety Policy Living the Vision programme for employee development and communications.	International Labour Organization Convention (Marine Labour Convention) International Convention for the Safety of Life at Sea (SOLAS) 1974 OCIMF Marine Injury Reporting Guidelines ISM Code NIS Flag State requirements
Employee relations	Ehical guidelines Internal health and safety policy Non-discrimination Policy Living the Vision programme for employee development and communications.	Norwegian Shipowners Association UN Global Compact International Labour Organization Convention (Marine Labour Convention) NIS Flag State requirements
Goverance and compliance	Code of Conduct Executive Remuneration Guidelines Authorization Levels	
Anti-bribery and anti-corruption	Code of Conduct Whistleblowing Policy and Management System Anti-Bribery and Anti-Corruption Policy Conflict of Interest Policy	
Economic performance and benefits	Annual report Code of Conduct Responsible Tax Policy	International Financial Reporting Standards (IFRS) Norwegian Generally Accepted Accounting Principles (NGAAP)

GLOSSARY

Frequently used terms and abbreviations

OPERATIONAL GLOSSARY

AER

Annual Efficiency Ratio. CO2 emissions divided by fleet/vessel DWT. Total fuel consumption.

$$AER = \frac{\text{total CO2 emissions}}{\text{deadweight * distance sailed}}$$

CSR

Corporate Social Responsibility is a management concept whereby companies integrate social and environmental concerns in their operations.

(O)CCS(U)

(Onboard) Carbon capture and storage (and Utilization) is the process of capturing waste carbon dioxide (CO2), transporting it to a storage site, and depositing it where it will not enter the atmosphere.

Dry-docking

Normally related to a vessel´s periodic maintenance according to class requirements. The intervals are normally 5 years for newer vessels.

EEDI

Energy Efficiency Design Index. CO2 emissions divided by vessel DWT.

EEOI

Energy Efficiency Operational Indicator. CO2 emissions per ton cargo during voyage.

EEXI

Energy Efficiency Existing Ship Index describes the CO2 emissions per DWT and mile.

ESG

Environmental, Social, and Corporate Governance refers to the three central factors in measuring sustainability and social impact.

GHG

Greenhouse Gas, gasses in the earth's atmosphere which trap heat. F.i. CO2, methane (CH4), nitrous oxide, or various synthetic chemicals.

GRI

The Global Reporting Initiative helps businesses, governments and other organizations understand and communicate their impacts on climate change, human rights and corruption.

HSEQ

Health, safety, environment and quality.

KPI

Key Performance Indicator.

LTI

Lost Time Injury ratio measuring the level of injuries to employees in a company or an operation.

UN SDG

United Nations Sustainability Development Goals collect 17 interlinked global goals designed to be a "blueprint to achieve a better and more sustainable future for all". The SDGs were set in 2015 by the United Nations General Assembly and are intended to be achieved by the year 2030.

CARGO GLOSSARY

Ammonia / NH3

Mainly used as raw material for fertilizer production.

Cbm

Cubic meter. The most common capacity nomination for gas vessels.

LPG

Liquefied Petroleum Gas, propane and butane.

Petrochemical gasses

Gasses used as input/feedstock in petrochemical industry.

FLEET GLOSSARY

LGC

Large Gas Carrier. LPG vessels between 50,000 cbm and 70,000 cbm. Normal size for newer vessels is 60,000.

MGC

Mid-size Gas Carrier. LPG vessels between 30,000 and 40,000 cbm. Normal size for newer vessels is 38,000 - 40,000 cbm.

Panamax VLGC

Very Large Gas Carrier with a beam of 32,2 meter enabling the vessels to trade through both Panama Canals. Newbuilds are around 88,000 cbm.

Semiref/Ethylene vessel

A gas carrier capable of transporting cargoes both under high pressure and with full refrigeration.

VLGC

Very Large Gas Carrier. LPG carriers with over 75,000 cbm load capacity. The normal size for modern vessels is 84,000 cbm. As opposed to Panamax VLGC, these vessels can only sail through the new Panama Canal lockers.

MARKET GLOSSARY

CVC

Consecutive Voyage Contract. An agreement between shipowner and customer for the transportation from A to B and then return in ballast to A to repeat the voyage consecutively within a given time frame.

CoA

Contract of Affrightment. A CoA is an agreement between shipowner and customer for the transportation of a min-max volume of cargo at a given rate per ton, normally for one or several years.

Freight rate

The rate paid by customer to owners for the transportation service provided. Calculated either per ton basis or per day basis.

LIBOR

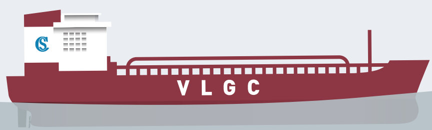
London Interbank Offered Rate.

Spot rate

The rate obtained when chartering out a vessel for a single voyage.

TC

Time charter. A contract between shipowner and customer for anything between 2 months and several years. All voyage costs such as bunkers, canal and harbour fees are payable by the customer. Operating cost is for the owner's account.



SOLVANG ASA

solvang@solvangship.no
www.solvangship.no

Norway

SOLVANG STAVANGER
Strandkaien 36
PO Box 90
N-4001 Stavanger

Tel: +47 51 84 84 00

SOLVANG OSLO
Haakon VII's gate 6
PO Box 1737
N-0121 Oslo

Tel: +47 22 47 19 50

Philippines

TSM House, 4. floor
1751 Dian St., Palanan
Makati City, Manila 1235

Tel:. +63 233 81 731
Fax: +63 233 81 732
E-mail: crew.phils@solvangship.no