



*SOLVANG ASA*

# CUTTING EDGE SUSTAINABLE SHIPPING

**ANNUAL REPORT 2024**

LAFN8  
IMO 98047



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Letter from CEO Edvin Endresen

DEAR READER

I am pleased to present our annual report for 2024, including a comprehensive ESG report, now also with alignment towards the EU's new Corporate Sustainability Reporting Directive – CSRD format. We hope it makes for interesting and informative reading.

2024 marks another strong year for the Solvang Group, with a solid market in all segments, and a start on our nearly USD 800 million newbuilding construction project. It has been a year of securing financing for newbuildings, purchase of a second-hand vessel, and sale of older tonnage. 2024 also marks the year for final installation of the onboard carbon capture pilot, a milestone 4 years in the making. In other words, a very busy year.

Earnings for the Group were good, but somewhat down from 2023 with a drop in revenue from fewer vessels on water, as well as continued inflation on operational costs. We were able to maintain dividend levels on par with previous years, despite having instalments to the yard for newbuildings, acquiring a 37 % share in two VLGCs from a partner, and depositing for the purchase of a second-hand VLGC from client. These additional spending elements were eased by sale of Clipper Helen (built 2007) and Clipper Star (built 2003).

We are very excited about our seven VLGC newbuilding project. The vessels will be uniquely positioned for future regulations and on track for the IMO target of zero GHG emissions by 2050. The vessels are 88.000 cbm Panamax VLGCs, all equipped with complete exhaust cleaning system, discharge washwater cleaning, EGR for NOx removal and ready for OCCS. Where ready-for is not just a certificate, it is hull and deck reinforcement, it is additional space for the OCCS equipment, additional accommodation deck for sightlines above CO2 tanks on deck, and much more. These vessels truly have the potential to be the next-generation VLGCs.

We are equally excited about the installation of the complete carbon capture pilot onboard Clipper Eris. The retrofit took about three months to complete, and

she sailed from Singapore mid-February 2025. Heading towards the USA, she was capturing CO2 already before rounding Cape. A great technical success already. The biggest challenge of this project is a clear and predictable set of global regulations. Unless we get a global set of regulations, where there is a cost for GHG emissions, no alternative fuel or alternative technology will be used in any significant quantity.

The global market is influenced by increasing geopolitical turbulence, where trade war has disrupted trade flows. The end result is hard to predict, but a large portion of LPG, ethane and ethylene goes from the USA to China, and is affected by the tariffs implemented. A gradual shift is already materializing, it will take time, but could create inefficiencies that will stretch the global fleet of vessels. It is too early to conclude anything, and with our high contract backlog, we will focus on what we can control, namely our performance in operating our vessels to the highest standard.

I would like to express my gratitude towards our employees, who have persevered through changing 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 firm with high contract coverage, well positioned for the opportunities ahead. We believe that our company's operational model will continue to drive us towards success in the years to come, creating long-term value for all our stakeholders.

**GRI reference**  
307-1 Management approach  
102-14 STRATEGY: Statement from senior decision-maker

**ESRS/CSRD reference**  
102-20 Executive-level responsibility for economic, environmental, and social topics

# Highlights Solvang 2024



## Onboard carbon capture – from concept to reality

**Read more on pages 38–39**

The long voyage from concept to reality for onboard carbon capture has brought Solvang to the point of building 7 Panamax VLGCs with the structural requirements for a full retrofit, and engine system configured for CCS.

## Clipper Eris: The carbon capture is running

**Read more on pages 42–43**

At year-end 2024, retrofitting of the full-scale CO<sub>2</sub> capture system onboard Clipper Eris was being concluded. The ship is the world's first fully operative decarbonized vessel running on conventional fuel oil.

## Material sustainability factors

**Read more on pages 24–25**

As a stakeholder in the EU's Fit for 55 roadmap and the UN's Net-Zero Coalition, Solvang has conducted a double materiality assessment of our sustainability-related activities.

## Zero percent turnover, zero LTIs

**Read more on page 51**

Solvang's maritime operation ensures stable and secure working environments with confident skilled seafarers across the fleet. In 2024, sick leave was 0.17 %, turnover 0 %, and retention rate above 95 %. Lost time incidents had zero occurrence.



## SIRE 2.0 vetting: It's all about our people

**Read more on pages 70–71**

In 2024, Solvang completed 33 inspections under the revised SIRE regulation, exchanging checklist controls for collaborative quality assessments. Solvang's vetting manager, Cpt. Knut Vespestad, says SIRE 2.0 is useful.

## More cargo, lower emissions year-on-year since 2009

**Read more on pages 33**

EEOI: Solvang's ongoing energy efficiency efforts brought CO<sub>2</sub> emissions down by 48 % from the 2009 level measured as GHG emitted per tonne cargo transported. The AER development shows a 35 % improvement in the same period.

## Supply chain: Reinforcing our values globally

**Read more on pages 68**

Solvang has implemented a risk management platform from Profitbase to effectively overview and manage supplier relationships in accordance with the Transparency Act. In 2024, we used the extensive information to make a big step in terms of supply chain integrity.

## The open-book manager

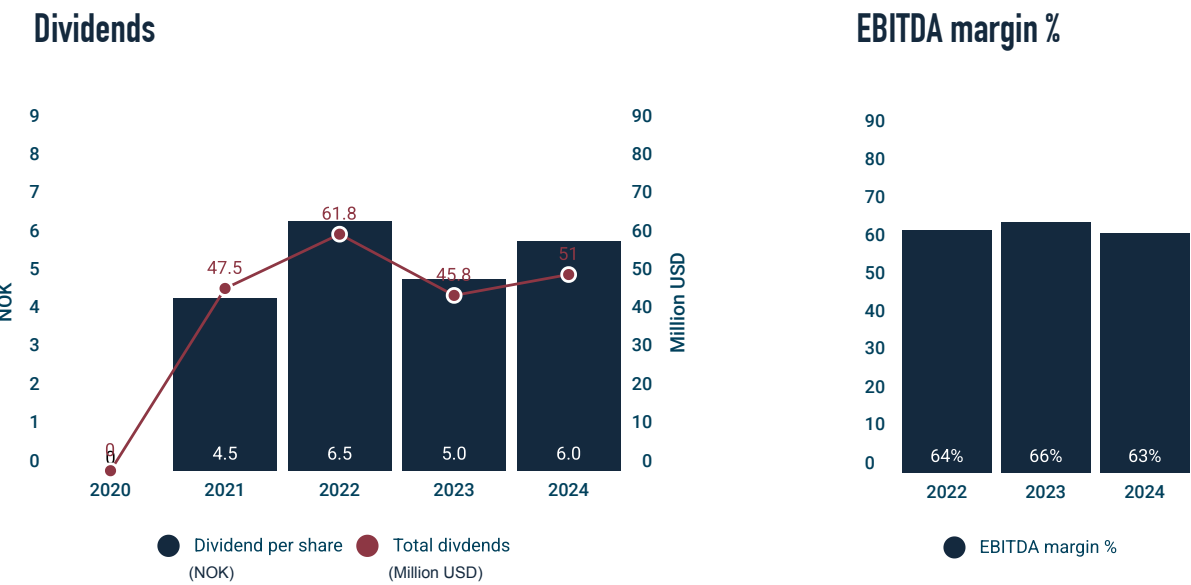
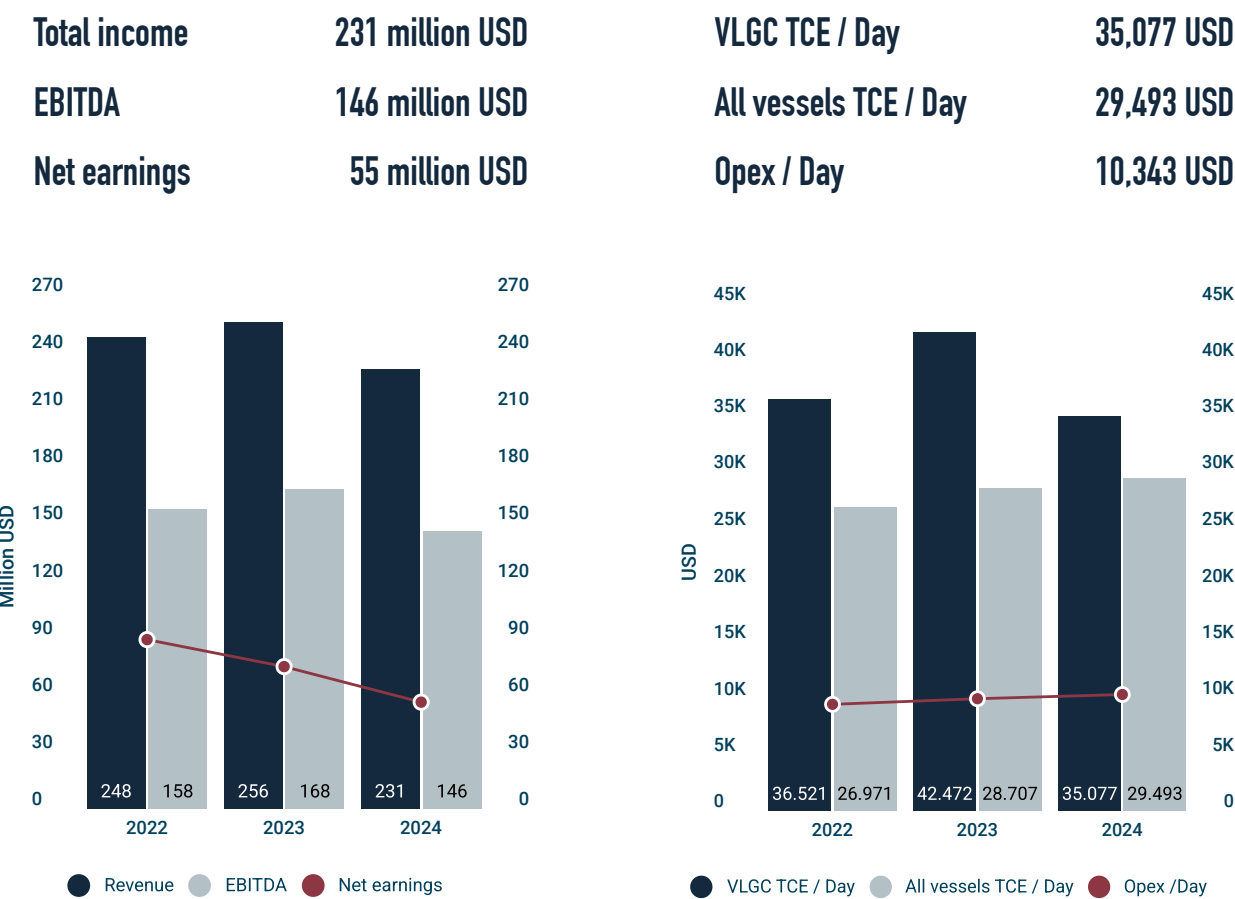
**Read more on pages 56–57**

Trusting people to perform at their best has led Solvang's sailing crew to achieve a record-low number of incidents and a record-high level of fuel efficiency in operations. This is how Capt. Christian Gonzaga interprets the challenge.

## 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.

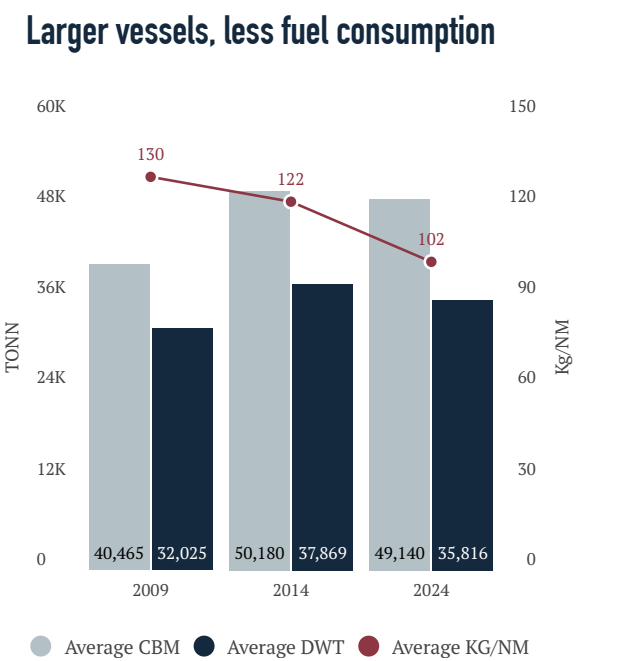
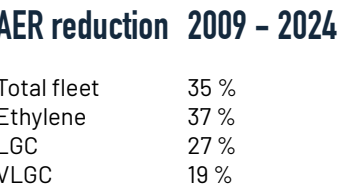
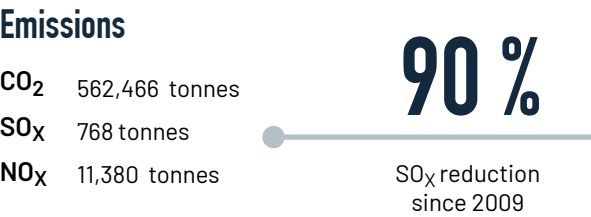
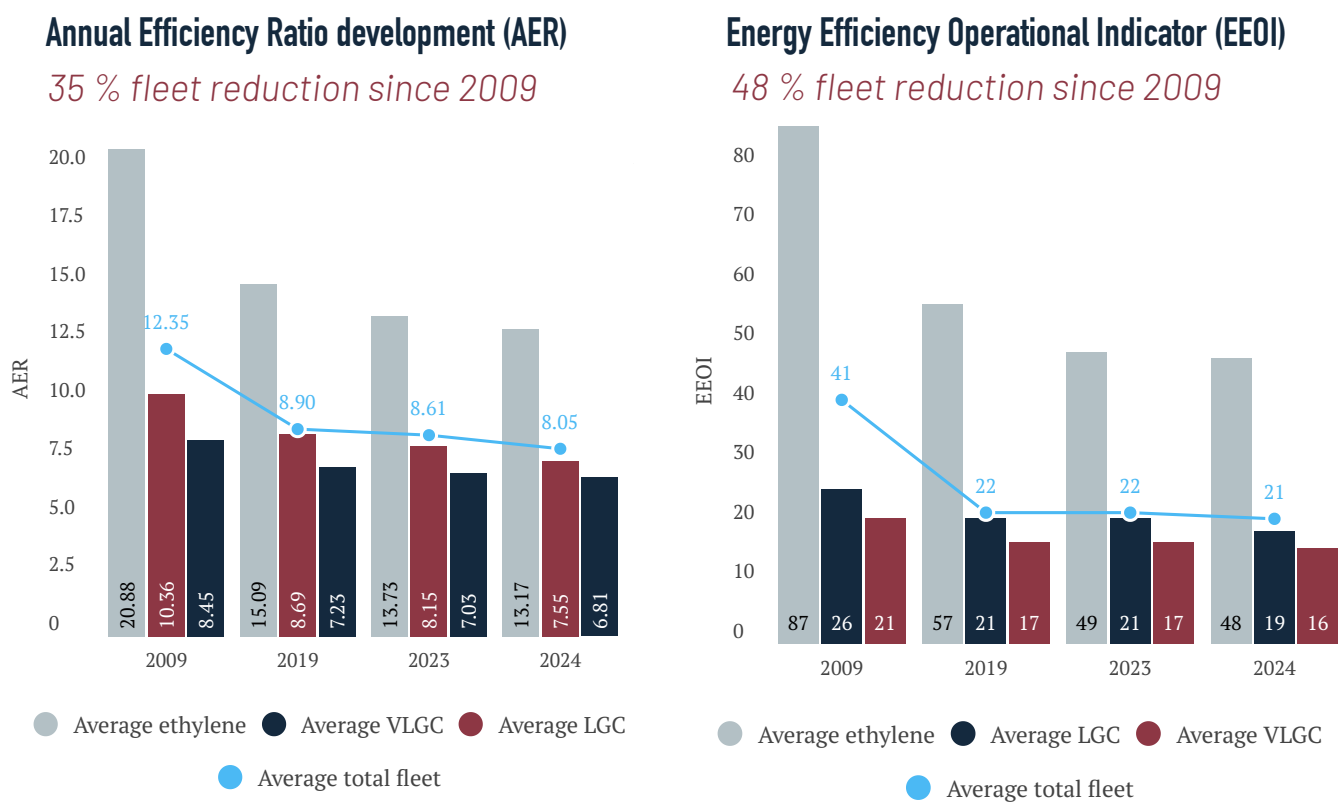
FINANCIAL KEY FIGURES 2024



SDG references  
SDG 7: Affordable and clean energy,  
SDG 9: Industry, innovation and infrastructure  
SDG 12: Responsible consumption and production,

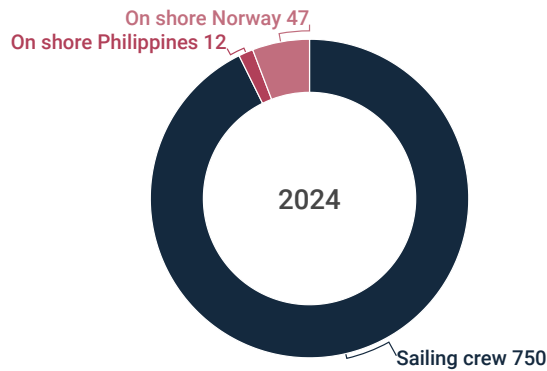
SDG 13: Climate action  
SDG 14: Life below water  
SDG 15: Life on land

ENVIRONMENTAL KEY FIGURES 2024

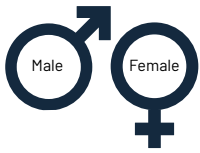


ESRS/CSRD reference  
E1: 2.3.2 Energy Intensity,  
E1: 2.3.3 Energy Efficiency Measures,  
E5: 3.3 Waste (recycling/management)

SOCIAL KEY FIGURES 2024



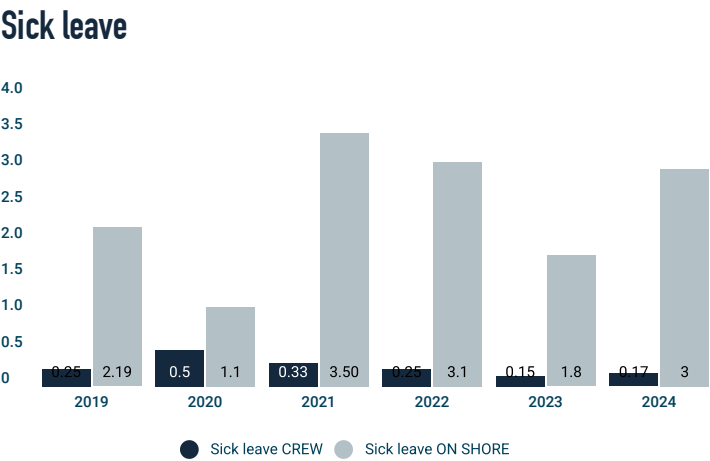
Gender balance



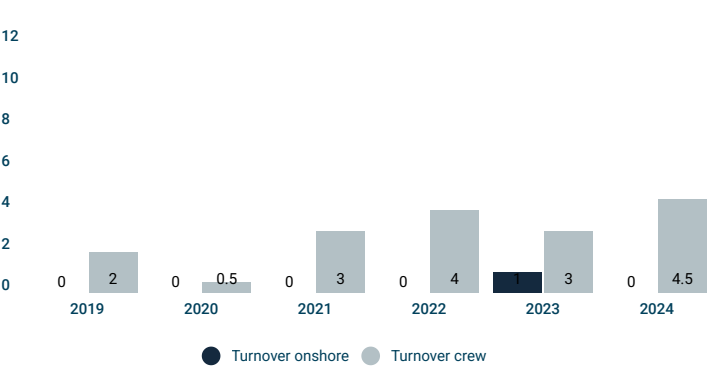
Onshore office Norway	57%	43%
Onshore office Manilla	25%	75%
Sailing crew	96%	4%

Lost Time Injuries 0

Total Recordable Case Frequency 1.243



Employee turnover



**SDG references**  
SDG 8: Decent work and economic growth, SDG 2: Zero hunger, SDG 3: Good health and well-being, SDG 4: Quality education, SDG 5: Gender equality, SDG 7: Affordable and clean energy, SDG 13: Climate action, SDG 14: Life below water, SDG 15: Life on land.

**GRI references**  
403-3 Occupational health services, 403-1 Occupational health and safety management system, 401-1 New employee hires and employee turnover, 419: Socioeconomic compliance

**ESRS/CSRD references**  
S17.1 Working conditions, S17.2 Equal treatment and opportunities for all, S17.3 Other work-related rights

GOVERNANCE KEY FIGURES 2024

22\* VESSELS

*\*Clipper Helen and Clipper Star were sold in course of 2024, hence the fleet had 20 vessels at year-end.*



8 Semi-refrigerated Ethylene Carriers



9 Large Gas Carriers



5 Very Large Gas Carriers

Operating hours

Main engines	122.055 hours
Auxiliary engines	273.512 hours
Boilers	23.661 hours

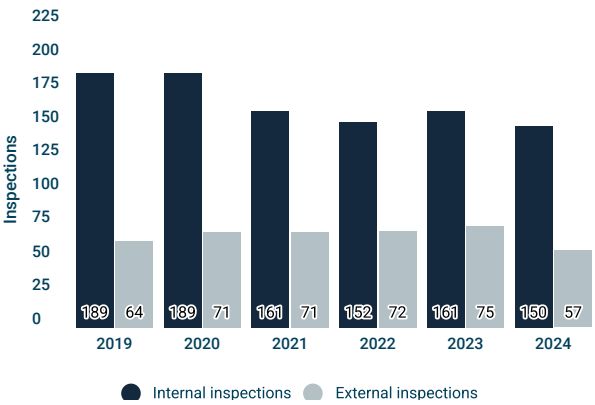
1 oilspill since 2009

119,910 maintenance tasks

0.314 % of which were overdue. The best score in TMSA is less than 1 %

666.3 days of operation in Particularly Sensitive Sea Areas (PSSA) in 2024

Inspections



Flag & Port State control 2024

18 DNV inspections  
0.06 non conformities on average

39 port state controls  
0.36 observations on average

Internal inspections follow the fleet size (5 per vessel).

External inspections by DNV and flag states are done in 5 years interval (3 per vessel).

**SDG references**  
SDG 16: Peace, justice and strong institutions, SDG 17: Partnerships for the goals, SDG 8: Decent work and economic growth

**GRI references**  
102-18 Governance structure

**ESRS/CSRD references**  
G1-11.6.2 Incidents, G1-11.91 Governance of Business Conduct





THIS IS SOLVANG



## 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.

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.

## TO THE FUTURE

2050 – Clipper Future

- Complete GHG accounts for the fleet in Scope 1 «well-to-wake».
- Minimal GHG outlets and pollution to air and water
- Large efficiency gains within transmission/propeller and hull.
- Large optimization gains in engine operation
- Material contribution to ammonia market.

2030

- Progressive GHG emission reductions, ref IMO/EU
- Full compliance with IMO's 40% efficiency ratio (CII) reduction target.
- OCCS expansion in the fleet.

2024

- OCCS pilot planned and installed on Clipper Eris
- Sustainability materiality assessment for Solvang ASA.
- Submitted verified EGC washwater analyses to IMO
- Detailed review of Panamax newbuilds including OCCS ready.
- Sold Clipper Helen (May) and Clipper Star (December).
- Bought Clipper Explorer (delivery January 2025).

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<sub>2</sub> 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 (SO<sub>x</sub> and NO<sub>x</sub>).

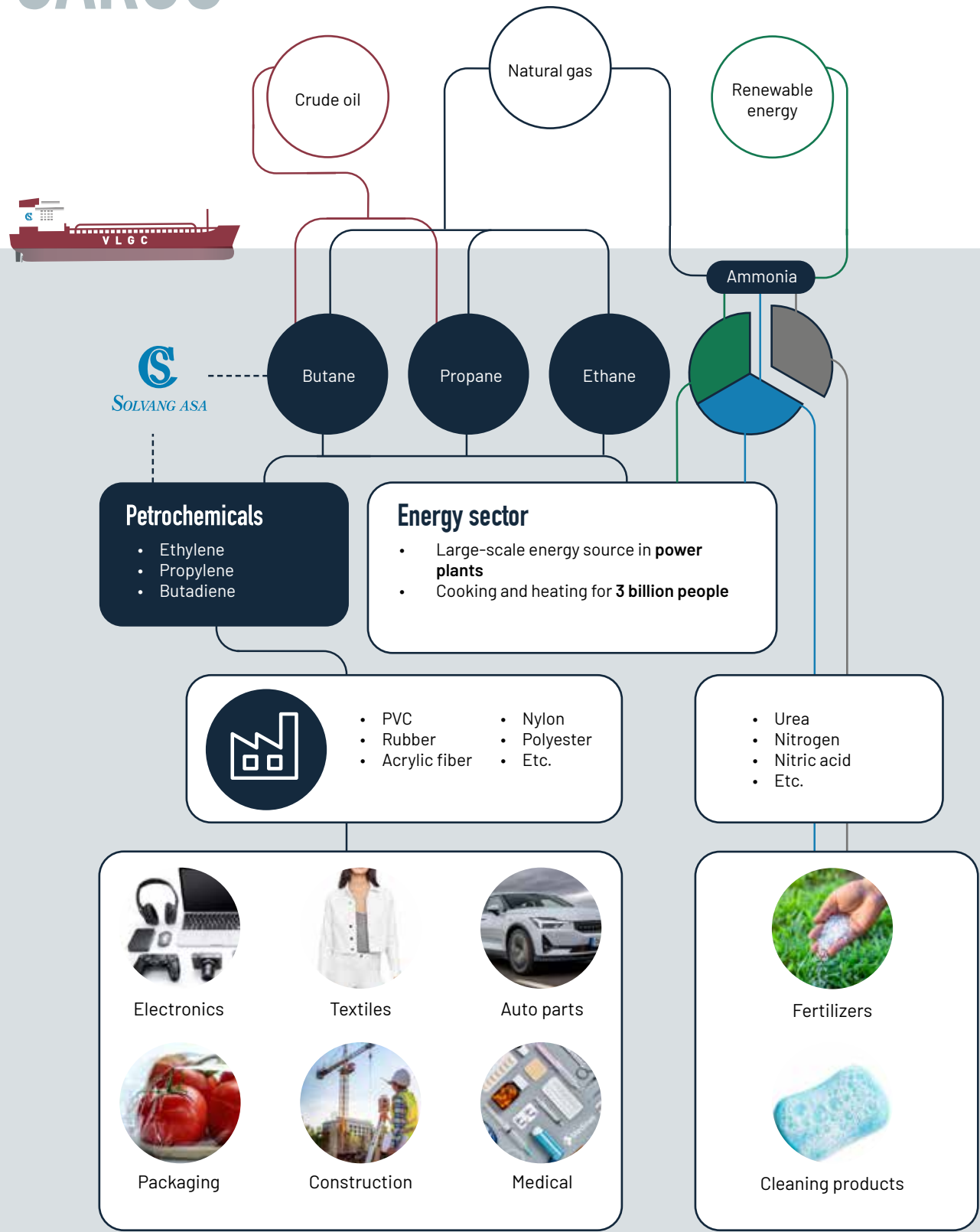
2017

Delivery of 2 Panamax ECO LPG carriers.





CARGO



**SDG references**  
SDG 2: Zero hunger  
SDG 7: Affordable and clean energy  
SDG 8: Decent work and economic growth,  
SDG 3: Good health and well-being

**GRI references**  
102-2 Activities, brands, products, and services  
102-6 Markets served  
203-2 Significant indirect economic impacts

**ESRS/CSRD references**  
2.4.2 Impact Assessment  
2.4.6 Opportunity Realization

THE BUILDING BLOCKS OF OUR FUTURE

Solvang's cargo is crucial for global development and local welfare. Whether it comes to LPG for the petchem industry or ammonia to fertilize feedstock and carry energy.

Ammonia gas (NH3)

Ammonia gas (NH3) has traditionally been used as a feedstock in production of fertilizers, for soap and related cleaning agents. Recently, it has emerged as a promising energy carrier, offering both clean hydrogen storage and transport, and potentially being a zero-carbon fuel in itself. Ammonia production is unevenly distributed across the globe, which generates a big need for deep sea NH3 gas transport.

Liquid Petroleum Gas (LPG)

**Butane** makes butadiene, used in synthetic rubber and plastics, such as PVC. **Propane** makes propylene, the basis for polypropylene plastics in everything from auto parts to textiles, to pharmaceutical production. Medical equipment and medicines both rely on plastic products. The third major LPG gas is **ethane**, a precursor for ethylene and polyethylene used in packaging, containers, and insulating materials.

Derivative products, such as PVC and polyester, are building blocks in construction materials, electronic components, and textiles.

Solvang's fleet of gas carriers specializes in transport of liquid petroleum gas (LPG) and ammonia. Perhaps the most versatile and indispensable bricks of society overall.

Essential raw materials

The main cargo of LPG consists of butane and propane, essentials in heating and cooking as well as a raw material in the petchem industry. Natural gas accounts for a quarter of the world's electricity production globally, and almost three billion people rely on gas for their daily cooking and heating needs, according to the World Bank.

Energy transition

Efficient low-carbon transport of LPG and petrochemical gasses has made Solvang a preferred partner in various markets. Innovations in the development of green ammonia for energy storage and hydrogen production is an example of the growing relevance of ammonia as a cargo.

4.4 million tonnes cargo worth  
2.7 billion USD

«Green or blue ammonia will no doubt play a part as a clean energy source in the future»

Mr. Edvin Endresen, CEO of Solvang ASA



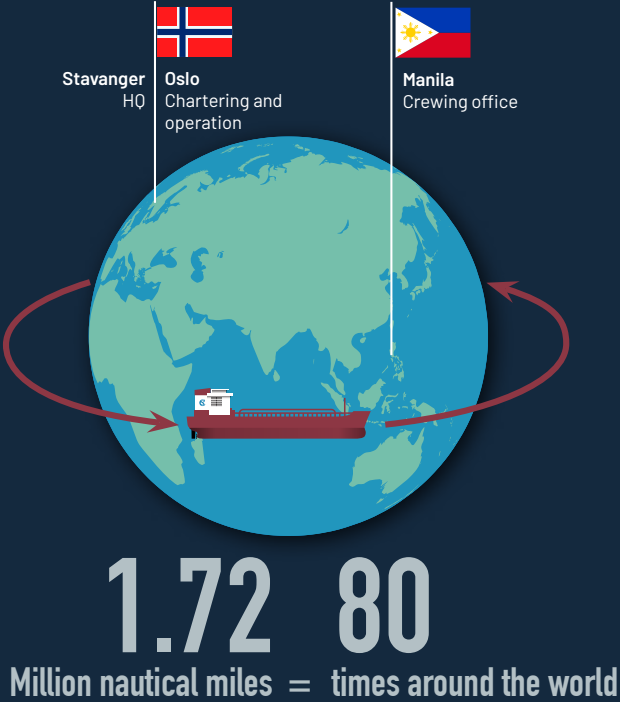


# FLEET

## VERY LARGE GAS CARRIER

This segment consists of six VLGCs, four 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	2026	-	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 Explorer*	2019	50,513	80,000



## LARGE GAS CARRIER

This segment is defined as fully refrigerated LPG ships of 60,000 cbm. We had nine ships at the opening of 2024 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 (Sold 2024)	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 had eight ships at the opening of 2024 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 (sold 2024)	2007	18,884	17,100

**SDG references**  
SDG 9: Industry, innovation and infrastructure

**GRI references**  
102-2 Activities, brands, products, and services

**ESRS/CSRD references**  
2.3.3 Energy Efficiency Measures  
2.3.6 Energy Management Systems  
2.3.8 Innovation in Energy Use

# Environmental technology on our VERY LARGE GAS CARRIERS



## HHI VLGC 78K PANMAX

Built 2017: Clipper Freeport and Clipper Vanguard

- ECO-design
- Premium anti-fouling
- Exhaust Gas Cleaning (Scrubber) with water treatment
- EPL (engine power limitation) upgrade
- ShaPoLi (shaft power limitation) upgrade
- Modelltestet optimal trim etc.
- Tekomar engine optimization programme
- Wartsila cargo optimization digital twin
- Vessel performance monitoring
- Certification: NOx Tier II
- EEXI required: 5.60, EEXI attained: 5.60



## HHI VLGC 84K

Built 2013: Clipper Quito and Clipper Posh

- First ECO VLGC
- ECO hull-line
- Mewis duct (integrated rudder/propeller)
- Premium anti-fouling
- Exhaust Gas Cleaning (Scrubber) with water treatment
- Frequency converters
- EPL (engine power limitation) upgrade
- ShaPoLi (shaft power limitation) upgrade
- Modelltestet optimal trim etc.
- Heat recovery on auxiliary engines
- Tekomar engine optimization programme
- Wartsila cargo optimization digital twin
- Vessel performance monitoring
- Certification: NOx Tier II
- EEXI required: 5.40, EEXI attained: 5.40

## HHI VLGC 80K PANMAX

Built 2019: Clipper Wilma

- ECO hull design
- Mewis duct (integrated rudder/propeller)
- Premium anti-fouling
- Exhaust Gas Cleaning Scrubber (hybrid) with water treatment
- LP-EGR (low-pressure exhaust gas recirculation)
- WESP (Wet Electrostatic Precipitator) exhaust cleaning system
- SCR (selective catalytic reductions) on auxiliary engines
- EPL (engine power limitation) upgrade
- ShaPoLi (shaft power limitation) upgrade
- Modelltestet optimal trim etc.
- Tekomar engine optimization programme
- Wartsila cargo optimization digital twin
- Vessel performance monitoring
- Certification: NOx Tier III
- EEXI required: 5.59 - EEXI attained: 5.59



Environmental technology on our

# LARGE GAS CARRIERS



## KAWASAKI 60K PANAMAX

**Built 2003-2004: Clipper Moon, Clipper Star (Sold 2024), Clipper Sky.**

- ECO hull line
- Clipper-bow (pioneer of hull design)
- Mewis duct (integrated rudder/propeller)
- Premium anti-fouling
- Engine upgrade
- EPL (engine power limitation) upgrade
- ShaPoLi (shaft power limitation) upgrade
- Tekomar engine optimization programme
- Vessel performance monitoring
- Certification: NOx Tier I
- EEXI required: 5.93/5.95
- EEXI attained: 5.85/5.88

## HHI 60K BOSPHORUS-MAX

**Built 2015: Clipper Jupiter, Clipper Saturn, Clipper Venus.**

- ECO-design hull-line
- Mewis duct (integrated rudder/propeller)
- Premium anti-fouling
- Exhaust Gas Cleaning (Scrubber) with water treatment
- Frequency converters
- Heat recovery on auxiliary engines
- EPL (engine power limitation) upgrade
- ShaPoLi (shaft power limitation) upgrade
- Tekomar engine optimization programme
- Wartsila cargo optimization digital twin
- Vessel performance monitoring
- Certification: NOx Tier II
- EEXI required: 6.08/6.08/6.08
- EEXI attained: 6.07/6.07/6.02



## HHI 60K PANAMAX

**Built 2008: Clipper Neptun, Clipper Mars, Clipper Orion.**

- Mewis duct (integrated rudder/propeller)
- Premium anti-fouling
- Environmental upgrade
- EPL (engine power limitation) upgrade
- ShaPoLi (shaft power limitation) upgrade
- Tekomar engine optimization programme
- Vessel performance monitoring
- Certification: NOx Tier I
- EEXI required: 6.01/6.01/6.02
- EEXI attained: 6.01/6.01/6.02



Environmental technology on our

# ETHYLENE CARRIERS



## MEYER H-CLASS

**Clipper Hermes, Clipper Hermod, Clipper Hebe (sold 2025), Clipper Helen (sold 2024)**

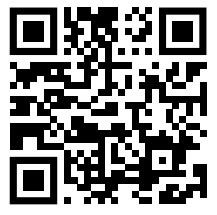
- Re-designed propeller with MAN EcoBulb
- Mewis duct (integrated rudder/propeller)
- Premium anti-fouling
- EPL (engine power limitation) upgrade
- Tekomar engine optimization programme
- Vessel performance monitoring
- Certification: NOx Tier I
- EEXI required: 8.81
- EEXI attained: 8.80



## HYUNDAI MIPO E-CLASS

**Clipper Eris, Clipper Eirene, Clipper Eos, Clipper Enyo**

- ECO hull lines
- Mewis duct (integrated rudder/propeller)
- Premium anti-fouling
- Exhaust Gas Cleaning (hybrid) with water treatment
- LP-EGR (low-pressure exhaust gas recirculation)
- WESP (Wet Electrostatic Precipitator) exhaust cleaning system
- SCR (selective catalytic reductions) on auxiliary engines
- Heat recovery on auxiliary engines
- Frequency converters
- EPL (engine power limitation) upgrade
- ShaPoLi (shaft power limitation) upgrade
- Tekomar engine optimization programme
- Wartsila cargo optimization digital twin
- OCCS (Onboard Carbon Capture and Storage): Clipper Eris
- SPM (Ship performance monitoring)
- Vessel performance monitoring
- Certification: NOx Tier III
- EEXI required: 8.98
- EEXI attained: 8.96/8.93/8.98/8.97



Visit [solvangship.no/fleet](https://solvangship.no/fleet) or scan the QR code for details about the vessels.







# ESG REPORT

*Environment, Social, Governance*



Environment, Social, Governance

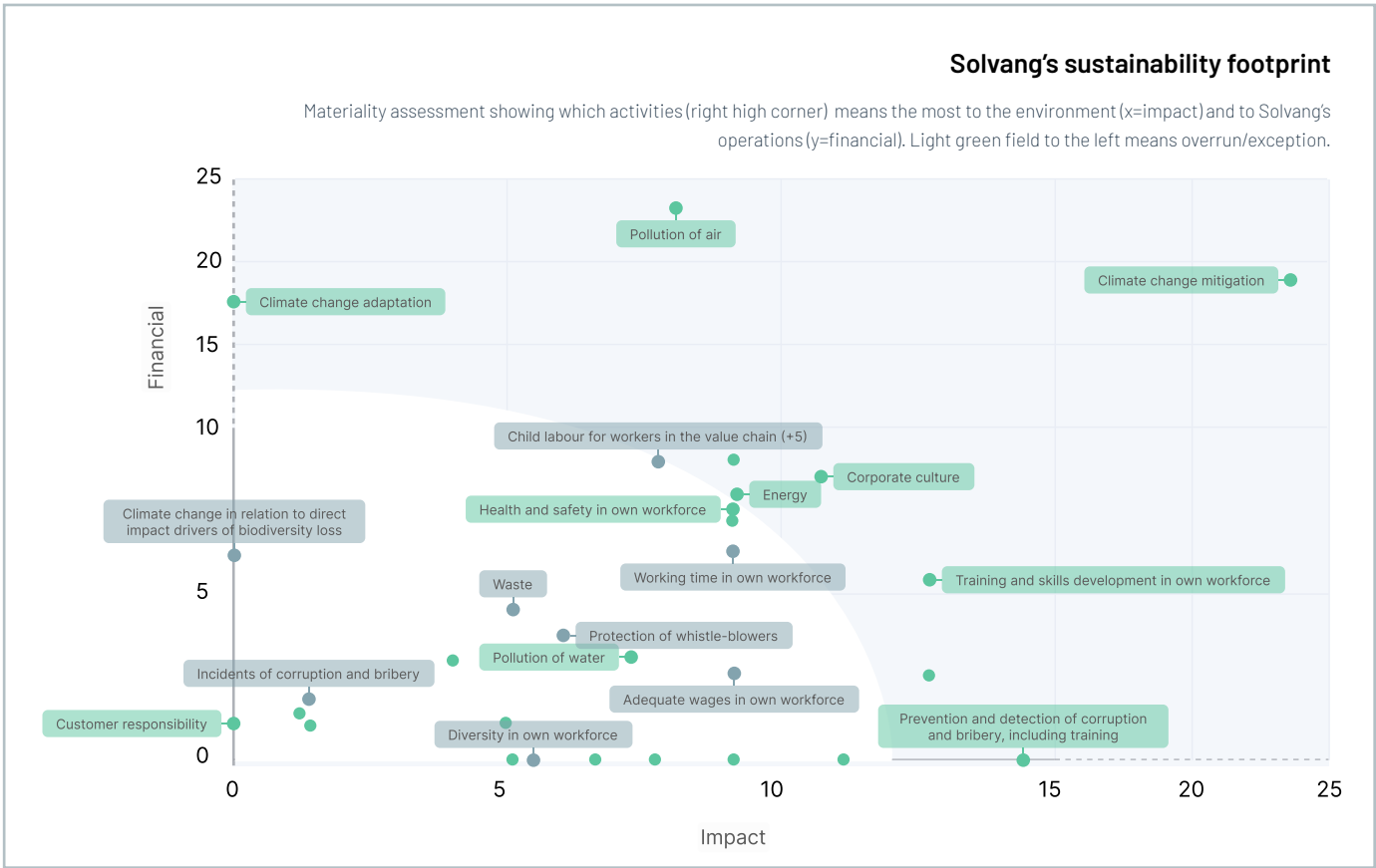
# HOW SOLVANG REPORTS SUSTAINABILITY

Choosing measures and standards for environmental reporting is a game of shifting frameworks. For Solvang, it's all about the underlying performance.

As a shipowner transporting carbon-based energy sources and ammonia by means of fossil fuel, Solvang has committed to facing the global energy challenges in a sustainable way. Our dealing with greenhouse gases, pollution and the social and political impacts of business comply with regulations reinforced by port and flag states, the European Union and the UN's International Maritime Organization (IMO).

**EU corporate sustainability**  
After the EU turned the NFRD (non-financial reporting

directive) into the mandatory CSRD (corporate sustainability reporting directive), Norway amended the national accounting legislation for private companies to comply with the ESRS environmental standard. At the turn of the year 2025, the European Commission backtracked on CSRD to alleviate companies of costly reporting and resort to voluntary reporting. The EU's overarching Fit for 55 package remains in place.  
In the present 2024 annual report, Solvang discloses our environmental and financial impacts using inspiration from CSRD, as a double materiality assessment of our activities.



- UN sustainable development goals**
- For 2024, Solvang continues our reporting of the sustainable development goals (SDGs) from the UN. Several SDGs closely align with Solvang's operations, markedly;
- SDG 3: Good health and well-being (Solvang's Living the Vision HR programme)
  - SDG 2: Zero hunger (Solvang's transport of ammonia for fertilizers)
  - SDG 7: Affordable and clean energy (Solvang's transport of LPG)
  - SDG 9: Industry, innovation and infrastructure (Solvang's ECO-friendly vessel development)
  - SDG 13: Climate action (Solvang's onboard carbon capture pilot)
  - SDG 14: Life below water (Solvang's total emission control system)
  - SDG 16: Peace, justice and strong institutions (Solvang's ethical guidelines, including anti-corruption reporting)

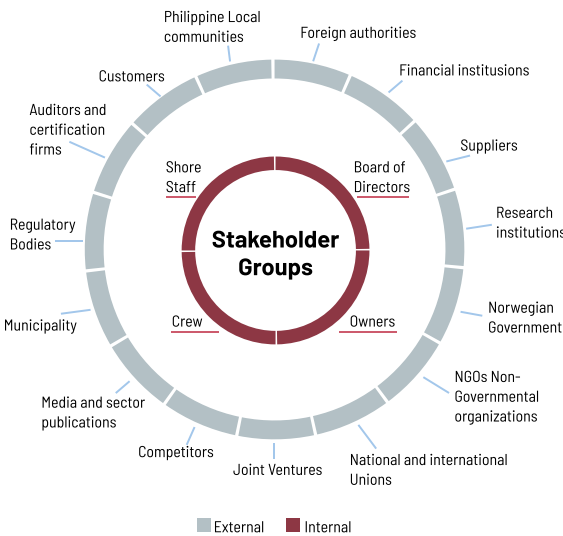
**GRI: The global reporting initiative**

The third framework for Solvang's sustainability reporting is the GRI standards, which enable us to define and report on impacts on the economy, environment and people in a transparent way. Covering a wide range of ESG topics, the GRI standards allow Solvang to serve our stakeholders across regulators, capital markets, clients and civil society. The present 2024 annual report includes references to GRI topics on all major reporting issues. As part of Solvang's GRI reporting, the company has assessed and determined impacts in line with the revised GRI sector standards as from 2023. The assessment is being conducted on a continuous basis, in dialogue with our stakeholders. The process of determining material topics is documented in Solvang's materiality assessment.

# OUR STAKEHOLDERS

In 2024, Solvang reached out to our stakeholders to assess our relationship.

During 2024, in line with the Transparency Act and the recently introduced EU corporate sustainability reporting directive (CSRD), Solvang has surveyed our supply chain to ensure compliance with our corporate social responsibility guidelines. In addition, we have requested our stakeholders to review Solvang's sustainability priorities. «The clearest feedback from our stakeholders is their identification with Solvang's priorities and values,» comments Mrs. Irene Ringen, Performance and Sustainability Engineer at Solvang.





## MATERIAL SUSTAINABILITY FACTORS

For 2024, Solvang has performed a double materiality assessment of sustainable impacts, risks and opportunities throughout our portfolio and operations.

The findings comprise sustainability impacts, risks and opportunities in Solvang's materiality assessment. They include significantly reducing emissions in order to support the Paris Agreement's 1.5°C global warming limit, and to position Solvang as a leader in sustainable shipping

practices while advancing our net-zero ambitions. The analytic method has been inspired by the EU's corporate sustainability reporting directive (CSRD).

### Positive impacts

#### Onboard carbon capture

Solvang has developed Onboard Carbon Capture and Storage (OCCS) technology to substantially lower the fleet's carbon footprint. OCCS installed on Clipper Eris captures 70- 80 % of exhaust CO<sub>2</sub>.

#### Total emission control

Solvang minimizes emissions as a combined effect from low-pressure exhaust gas recirculation (LP-EGR), exhaust gas cleaning (hybrid scrubber), electrostatic particle filtering, catalytic washwater cleaning, and OCCS.

#### Proactive anti-corruption measures

Solvang encourages the reporting of all attempted corruption cases. Solvang reports anonymously to the MACN database, we post anti-corruption notices in captains' offices, and we offer training at the Crew and Officers Conference.

#### Work-life balance improves overall satisfaction

Employees' ability to effectively manage their professional responsibilities and personal lives, promotes well-being, mental health, and overall satisfaction.

### Opportunities

#### Green loans

Eco-friendly financing of sustainability initiatives which provide 2-3 percent GHG reduction pose a significant opportunity for Solvang. Examples are retrofitting of vessels, OCCS installation, or upgrading to alternative fuels.

#### Lower emission taxes

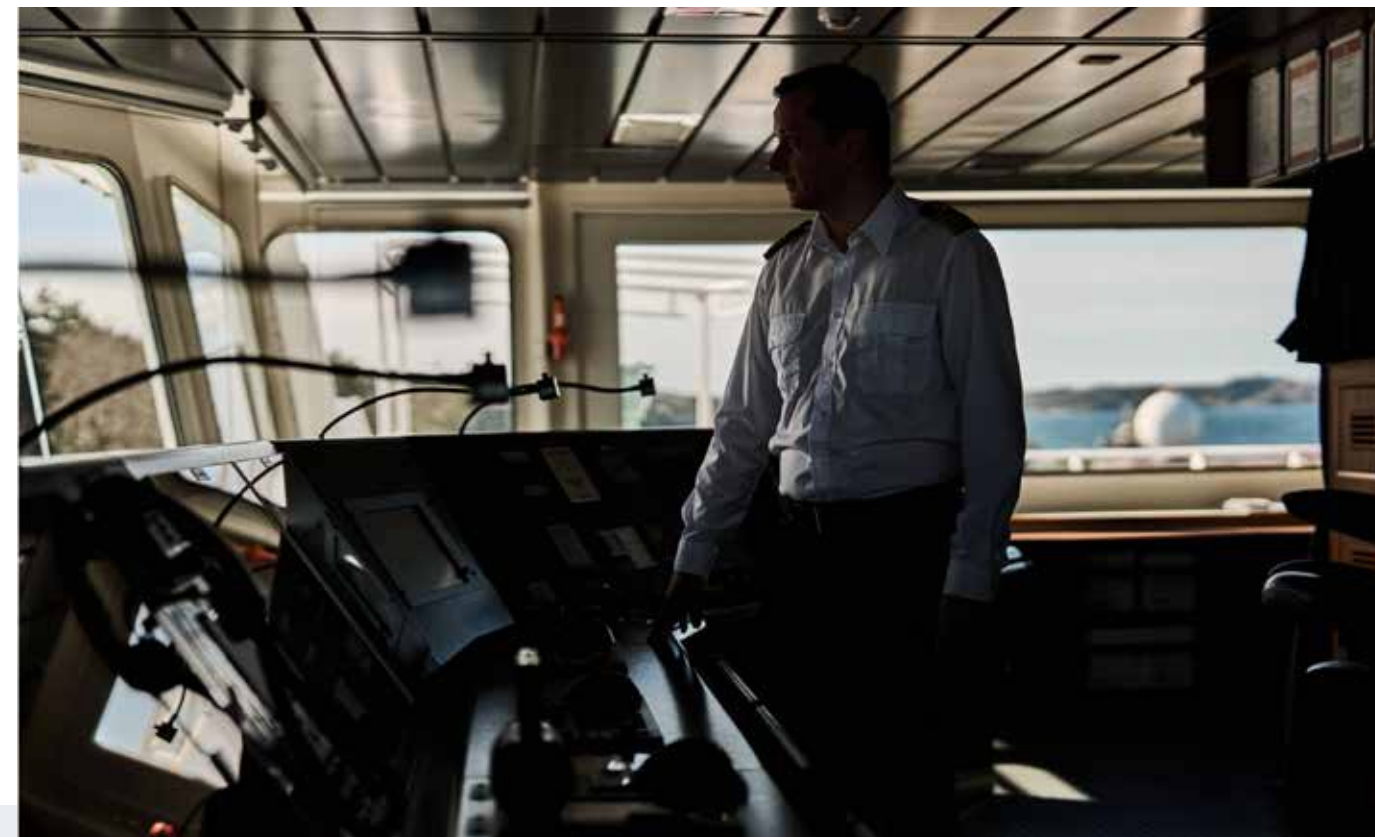
Solvang's exhaust gas cleaning system and OCCS technology position the company to reduce emission taxation in the future. The EU ETS framework is part of the opportunity.

#### Green for the future

Solvang's Green for the Future programme (est. 2011) generated revenues by attracting environmentally conscious customers. Measures include scrubbers, OCCS, drivetrain optimizations, operational and educational improvements.

#### Reliable HSEQ data

Solvang has since 2008 registered operational data from our performance KPIs, ranging from human factors, to safety, environment, to quality (HSEQ). The aggregated data represent a span of opportunities.



### Negative impacts

#### Scope 1 GHG emissions

Solvang delivers transportation driven by fossil fuels, which produces significant scope 1 GHG emissions, inflicting climate change. Solvang's long-term mitigation strategies and various energy efficiency measures have yet to provide net-zero emissions.

#### Supplier compliance

Solvang is short of a number of suppliers' declared compliance with the Transparency Act and Solvang's ethical guidelines. This amounts to a liability concerning ethical conduct, especially regarding suppliers in high-risk countries.

### Risks

#### Raising carbon taxes

Ever stricter environmental regulations impose increasing carbon taxes on fossil fuels used in shipping. This directly raises operating costs, especially due to Solvang's conventional fuel oil operation.

#### Carbon intensity requirements

Ever stricter carbon intensity requirements for C rating of a vessel means Solvang must invest in retrofits, upgrades and newbuilds to stay compliant, which poses substantial financial risks.



#### SDG references

SDG 13: Climate action,  
SDG 16: Peace, justice and strong institutions

#### ESRS/CSRD references

MDR-P: Policies adopted to manage material sustainability matters  
BP-1 General basis for preparation of sustainability statements  
SBM-1 Strategy, business model and value chain  
SBM-3 Material impacts, risks and opportunities and their interaction with strategy and business model  
IRO-1 Description of processes to identify and assess material impacts, risks and opportunities,  
IRO-2 Disclosure Requirements in ESRS covered by the undertaking's sustainability statements  
S-7.1.7 Work-life balance, S-7.1.8 Health and safety

#### GRI references

102-21 Consulting stakeholders on economic, environmental, and social topics  
102-40 List of stakeholder groups



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	ESRS (EU sustainability standards)	UN SDG
ENVIRONMENT	Emissions to air	ESRS E1, 2.1 Climate change mitigation ESRS E2, 4.1 Pollution of air	
	Energy consumption	ESRS E1, 2.3 Energy use and efficiency ESRS E5 Resource and circular economy	
	Spills to sea	ESRS E2 Pollution ESRS E3 Water and marine resources ESRS E4 Biodiversity and ecosystems	
	Recycling	ESRS E5 Resource and circular economy	
SOCIAL	Community engagement	ESRS S3 Affected communities ESRS S4 Consumers and end-users	
	Health and safety	ESRS S1 Own workforce ESRS S2 Workers in the value chain	
	Employee relations	ESRS S1 Own workforce ESRS S2 Workers in the value chain	
	Diversity and inclusion	ESRS S1 7.1.7 Work-life balance ESRS S2 8.2 Equal treatment and opportunities for all ESRS S2 8.5 Diversity	
GOVERNANCE	Governance and compliance	ESRS G1 Business conduct	
	Anti-bribery and anti-corruption	ESRS G1 11.2 Protection of whistle-blowers ESRS G1 11.6 Corruption and bribery	
	Economic performance and benefits	ESRS S1 Own workforce ESRS S1 7.1.3 Adequate wages ESRS 7.1.4 Social dialogue	



# 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 2024.

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 56-61

### 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 58-59

### 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 58-59



A trustworthy provider

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

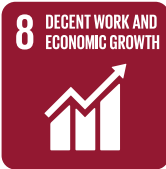


Focus on «happy ships»

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 56-61



Developing ECO-friendly vessels

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 38-39



Life Cycle Analysis (LCA)

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 36-37



Our climate actions

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 38-43



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 44-45



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 68-69, 72



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<sub>2</sub> (global warming)
- SO<sub>x</sub> (cloud formation and acid rain)
- NO<sub>x</sub> (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 44-45



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 72-73



SDG references

SDG 2: Zero hunger  
SDG 3: Good health and well-being  
SDG 4: Quality education  
SDG 5: Gender equality  
SDG 7: Affordable and clean energy  
SDG 8: Decent work and economic growth  
SDG 9: Industry, innovation and infrastructure  
SDG 12: Responsible consumption and production

SDG 13: Climate action  
SDG 14: Life below water  
SDG 15: Life on land  
SDG 16: Peace, justice and strong institutions  
SDG 17: Partnerships for the goals

GRI references

408-1 Child labor  
409-1 Forced or compulsory labor  
410-1 Security Practices  
412-1 Human rights assessment  
413-1 Local communities  
419-1 Socioeconomic compliance

ESRS/CSRD references

E1 Climate change  
E2 Pollution  
E3 Water and marine resources  
E4 Biodiversity and ecosystems  
E5 Circular economy  
S1 Own workforce  
S2 Workers in the value chain  
S4 Consumers and end-users  
G1 Business conduct

# 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.”

Solvang ASA

**SDG references**  
SDG 7: Affordable and clean energy  
SDG 13: Climate action  
SDG 14: Life below water  
SDG 15: Life on land

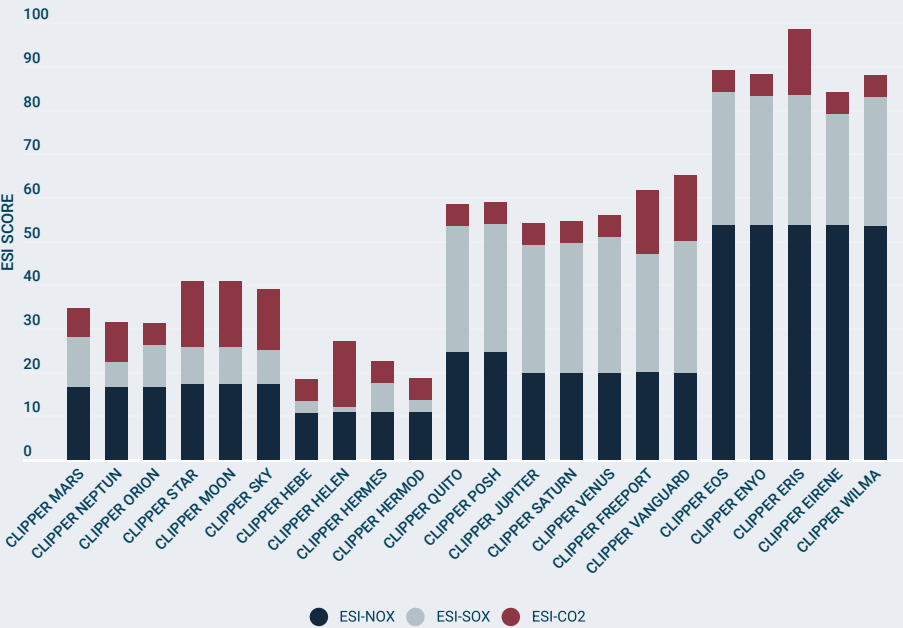
**GRI references**  
302-1 Energy consumption within the organization  
305-1 Direct (Scope 1) GHG emissions  
305-2 Energy indirect (Scope 2) GHG emissions  
405-1 Diversity of governance bodies and employees

**ESRS/CSRD references**  
E1 Climate change  
E2 Pollution  
E3 Water and marine resources  
E4 Biodiversity and ecosystems  
E5 Circular economy

## Environmental Ship Index (ESI) score 2024

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

ESI identifies seagoing ships which perform better in reducing air emissions than required by the current IMO emission standards.



## Waste

Fleet total 2024	cbm
Plastics	186
Food wastes	20
Domestic waste	361
Cooking oil	1
Incenerator ashes	21
Operational wastes	117
E-waste	10

## Sludge

Fleet total 2024	cbm
Sludge produced	3,688
Sludge incinerated	1,125
Watercontent evaporated	1,078
Sludge disposed	1,485

## Our vessel's energy consumption 2024

Fuel type	Ton fuel	Sulfur content	Energy per tonne fuel [MJ/kg]	Energy [MJ]
MGO	13,087	0.06 %	42.7	558,799,485
VLSFO	60,394	0.42 %	41.0	2,476,168,514
HFO unscrubbed/scrubbed	105,832	2.81/0.07 %	41.0	4,254,456,128
Total:	179,313	0.21 %	Total energy consumption:	7,289,424,128

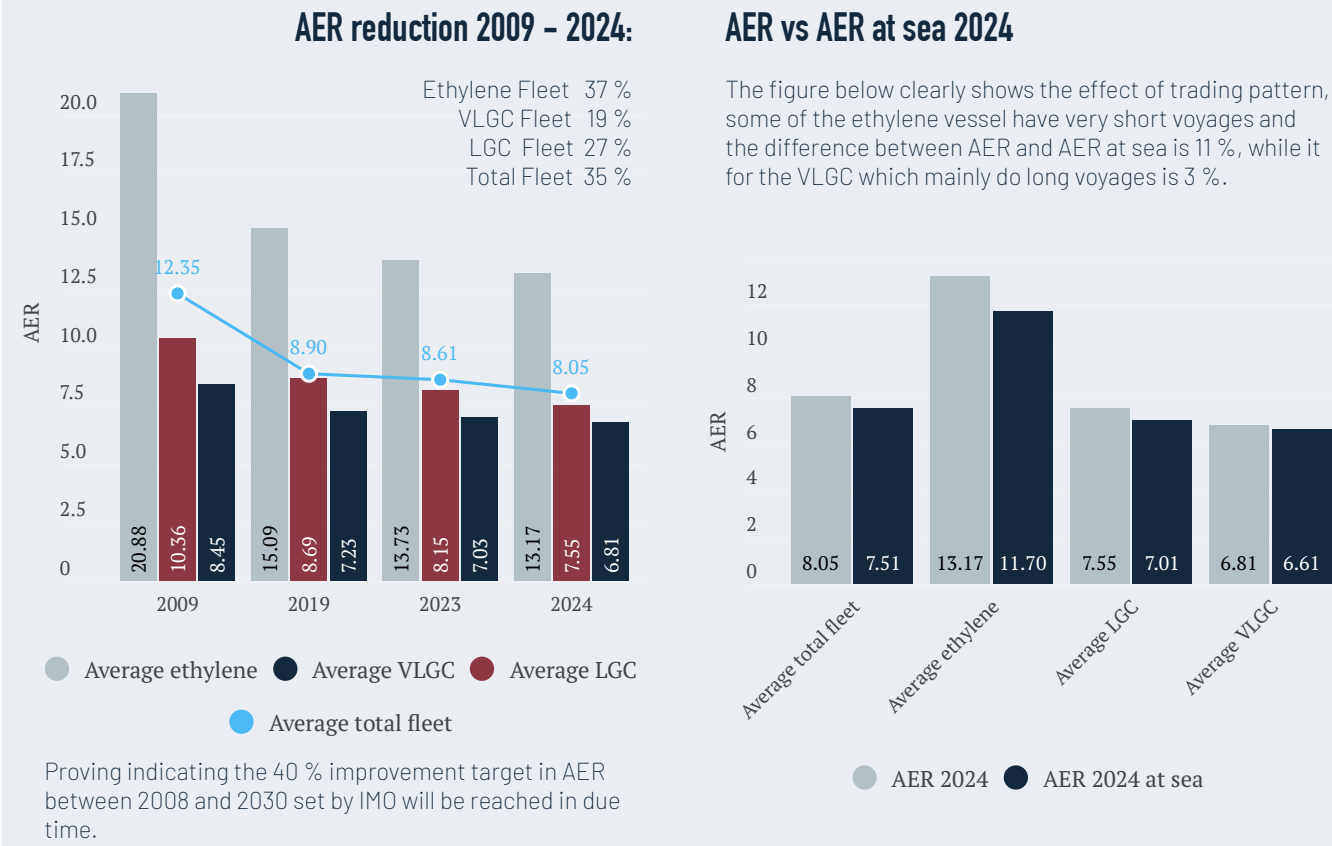
## Sulfur

### Efficiency of scrubber SO2 removal from exhaust.

	Vessels EGC	Vessels non- EGC
Total SOx emissions (tons)	167.1	562.0
Avg. SOx emissions (ton per vessel)	17.1	56.2
Total SOx emissions per distance (g/nm*)	186.5	916.5
Average sulfur content in fuel	0.07 %	0.42 %



# ANNUAL EFFICIENCY RATIO (AER) DEVELOPMENT

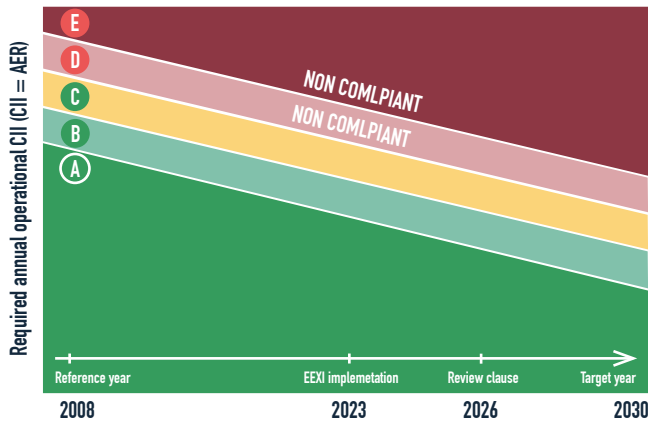


## Effect of upgrade and EEXI modification

In 2022 Solvang had eight vessels categorized as D. In 2024 there were two vessels categorized as E, the rest are C or better. The two E vessels get a B rating if adjusted for port operation/idling.

Six LGCs and four ethylene vessels were dry-docked/modified and EEXI certified in 2023/2024, giving full positive effect in 2024. The total fleet improvement between 2023 and 2024 is 5 %, where the ethylene and LGC fleets represent the main improvements, also due to major upgrades.

The sale of three older VLGCs since 2021 with a relatively high deadweight/cargo capacity ratio in CBM, contributes to an improved AER for the VLGC class, but negatively impacts the average for the fleet as a whole.

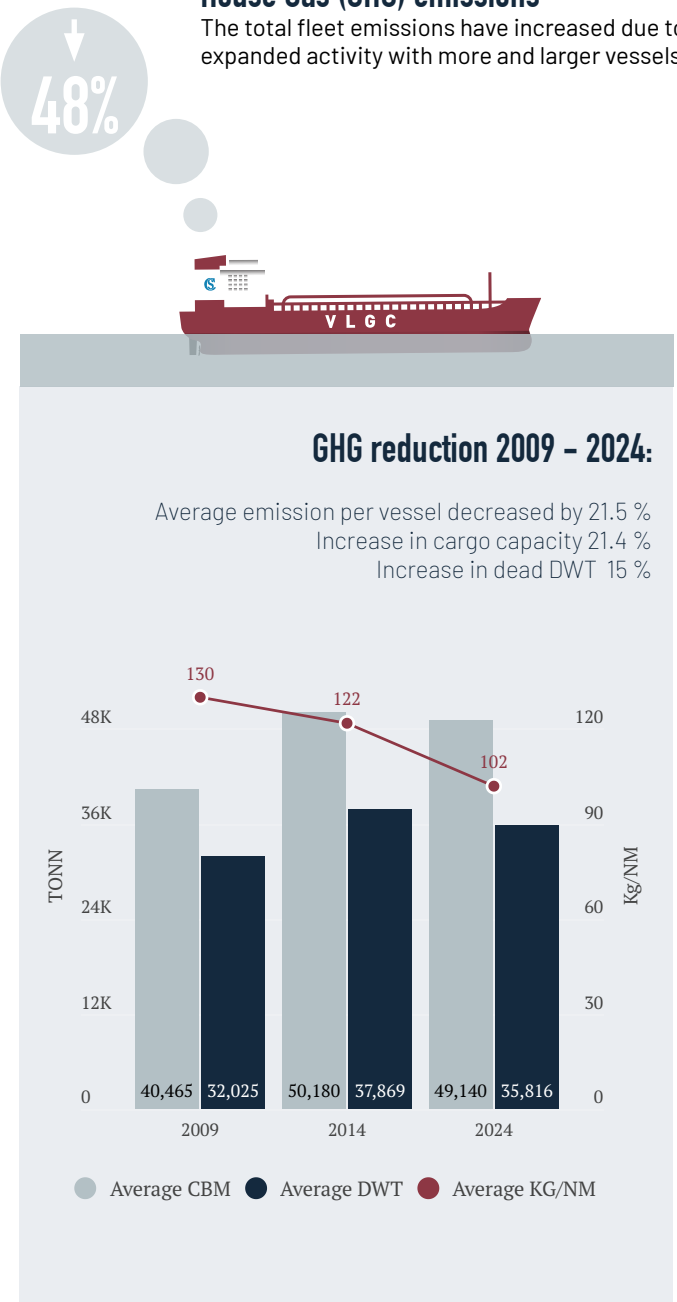


A vessel rating will be based on reported fuel figures and get a score between A and E, where A is the best, C is in compliance and D and E are non-compliant scores.

# MORE CARGO, LOWER EMISSIONS YEAR-ON-YEAR SINCE 2009

Since 2009, Solvang has reduced GHG emissions per ton-mile of cargo transported with 48 %, and the fuel consumption shows a similar trend.

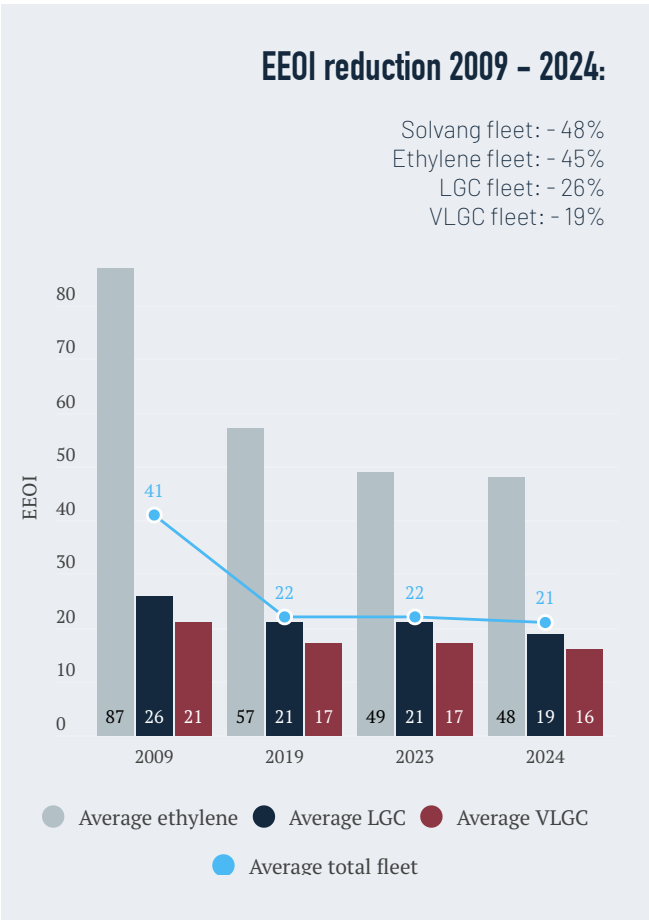
**Solvang energy consumption and Green House Gas (GHG) emissions**  
The total fleet emissions have increased due to expanded activity with more and larger vessels.



## Energy Efficiency Operational Indicator (EEOI)

EEOI measures the fuel consumption per ton-mile cargo transported. The improvement measured as EEOI is close to 50 %. The introduction of new 88K VLGCs in 2026/27 is expected to further reduce EEOI.

The sale of three older VLGCs since 2021 with a relatively high dead weight/cargo capacity ratio in CBM, contributes to improved AER for the VLGC class, but impacts the average for the fleet as a whole in a negative way.



- SDG references**

  - SDG 9: Industry, innovation and infrastructure
  - SDG 13: Climate action
- GRI references**

  - 302-3 Energy intensity
  - 302-4 Reduction of energy consumption
  - 305-1 Direct (Scope 1) GHG emissions
  - 305-4 GHG emissions intensity
  - 305-5 Reduction of GHG emissions
- ESRS/CSRD references**

  - E1-2.3 Energy use and efficiency
  - E1-2.3.2 Energy intensity E1-2.3.1: Energy Consumption Data E1-2.3: Energy use and efficiency E1-2.3.3 :Energy Efficiency Measures E1-2.3.6: Energy Management Systems

EMISSIONS TO AIR		
2025 target	2024 progress	2024 target
Research project /Pilot OCCS Clipper Eris	Done, completed january 2025	Innstation of world first full scale CCS plant
100 % Compliance with IMO 2020	2 cases in SECA discovered in internal audit	100 % Compliance with IMO 2020
Average Sulfur in fuel < 0.2 %	0.2 %	Average Sulfur in fuel < 0.2 %
Environment and Seemp 2 month in LTV programme	Progress, 2	Environment and Seemp 2/3 month in LTV programme
Maintenance according to plan better than 0.35 % Overdue non-critical jobs	0.314 % total 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 0.5 %	0,50 %	Fuel optimization potential better than 0.6 %
Continued participation in the research projects MarTrans and KSP WIND	Joined MarTrans and KSP WIND	Search for new projects
Continue Solvang Energy savings competition	Done, winner published in this report	Continue Solvang Energy savings competition
ENERGY CONSUMPTION		
2025 target	2024 progress	2024 target
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
13 vessels in project Energy Optimization Cargo Handling (Operim++)	Done	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 antifouling on 3 vessels	Done	Dry docking and renewal of high quality antifouling on 6 vessels
Maintenance according to plan better than 0.35 % Overdue non-critical jobs	0.314 % total 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 %
Fuel optimization potential better than 0.5 %	0,50 %	Fuel optimization potential better than 0.7 %

LIFE IN SEA AND ON LAND		
2025 target	2024 progress	2024 target
Zero spills to sea	Zero	Zero spills to sea
100 % Compliance with IMO 2020	Done, 1 cases in SECA discovered in internal audit	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 0.35 % Overdue non-critical jobs	0.314 % total overdue	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 0.5 %	0,50 %	Fuel optimization potential better than 0.7 %

Green award to Solvang

Solvang was awarded the most prominent green projects and partnerships prize together with Wärtsilä at the Green Shipping Summit 2024, for good collaboration in the OCCS project.



**SDG references**  
SDG 9: Industry, innovation and infrastructure

**GRI references**  
301-1 Materials used by weight or volume  
301-2 Recycled input materials used  
302-4 Reduction of energy consumption  
305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions  
306-3 Waste generated

**ESRS/CSRD references**  
E12.3 Energy use and efficiency  
E2-4.1: Pollution of air  
E2-4.5: Substances of concern



# THE WELL-TO-WAKE PRINCIPLE

Conventional HFO turns out to be an environmental asset due to energy efficiency throughout the well-to-wake cycle. The key is exhaust gas cleaning plus CCS.

A specific shipping fuel's environmental footprint can be correctly assessed only if you include the whole life-cycle of that fuel, from the oil well to the ship's wake. For conventional heavy fuel oil (HFO), marine gas oil (MGO), liquid natural gas (LNG) and liquid petroleum gas (LPG), the cycle starts with well extraction, on to refinement, engine combustion and mechanical propulsion. When comparing the ton-mile propulsion delivered at the wake, with the original energy value of the content of the oil well, you get a real picture of how much energy was wasted in the process.

Fact: Available fuel groups

- Conventional fossil fuels; HFO, VLSFO, MGO, LNG and LPG (with or without OCCS/onboard carbon capture and storage)
- 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

In terms of well-to-wake GHG emissions and pollution, all emissions coming from the original oil should be kept in the balance until ton-mile propulsion has been delivered. The EU and IMO have adopted a well-to-wake model in revisions of energy intensity regulations. HFO, which represents 85-90 percent of global shipping fuels, comes out favorably, with only 10 percent energy loss from well to tank (illustration next page).

Assessment: Biofuel

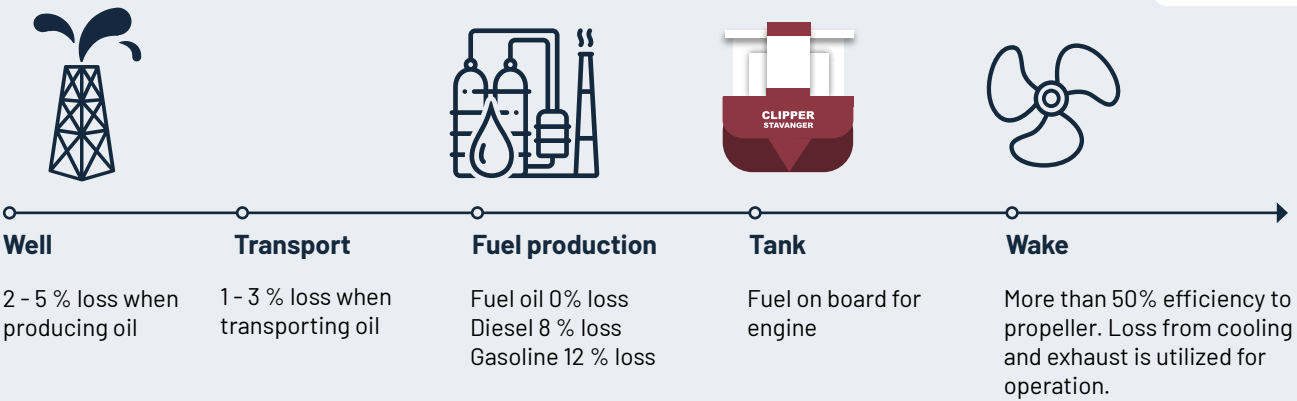
In a well-to-wake equation, fuel from a clean biological source may reduce greenhouse gas emissions by 75-80 percent compared to marine gas oil (MGO). However, this requires correct use of engine technology and clean energy sourcing. The well-to-wake approach is crucial when assessing the total GHG emissions. For example, biofuel from palm oil may increase the overall GHG emissions by 200-300 percent.

Assessment: E-fuels

GHG-neutral e-fuels represent an artificial fuel type processed from clean electricity, water and air. E-fuels may be e-diesel or e-LNG with the same properties as the original counterpart. Ammonia and hydrogen are other potential GHG-free e-fuels, assuming these are processed by renewable electricity or fossil fuels with CCS.



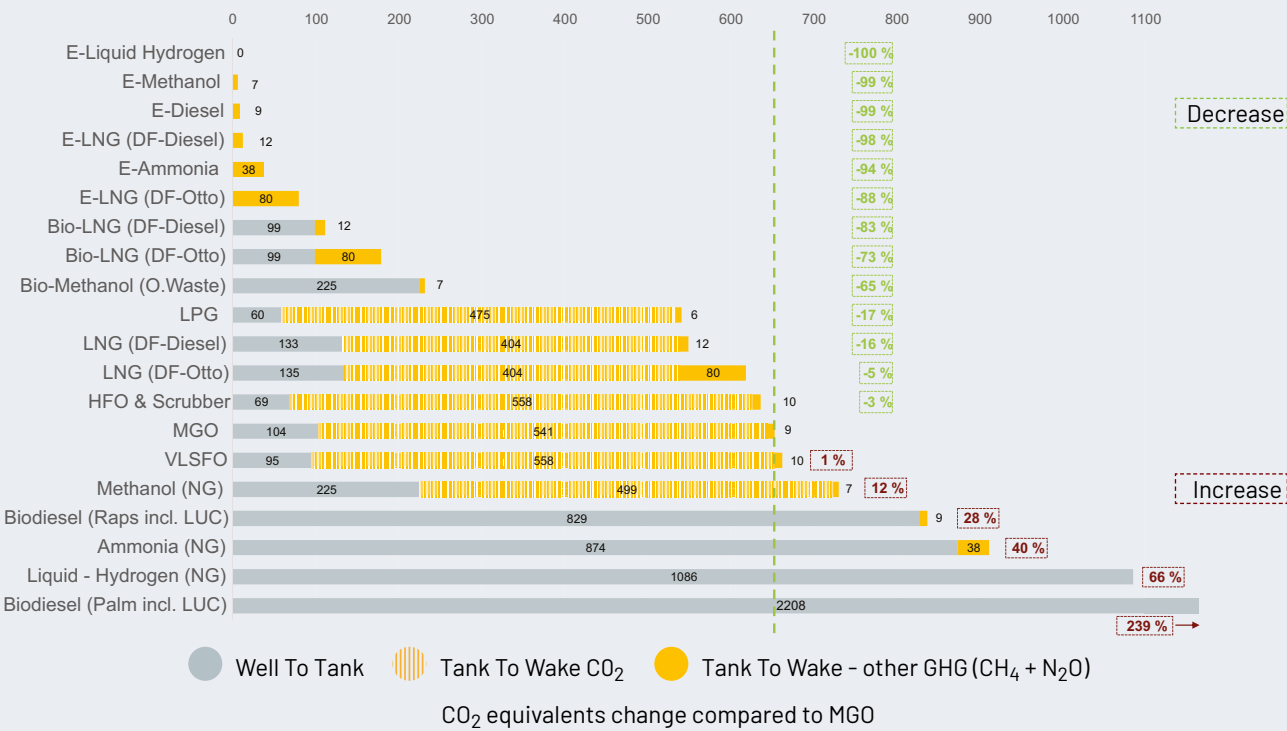
What is the well-to-wake principle?



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 gradually suppress GHG emissions from shipping. In practical terms, shipowners will need to use a mix of conventional bunker and alternative fuels such as e-fuel or biofuel. Output will be ensured by punitive taxes levied

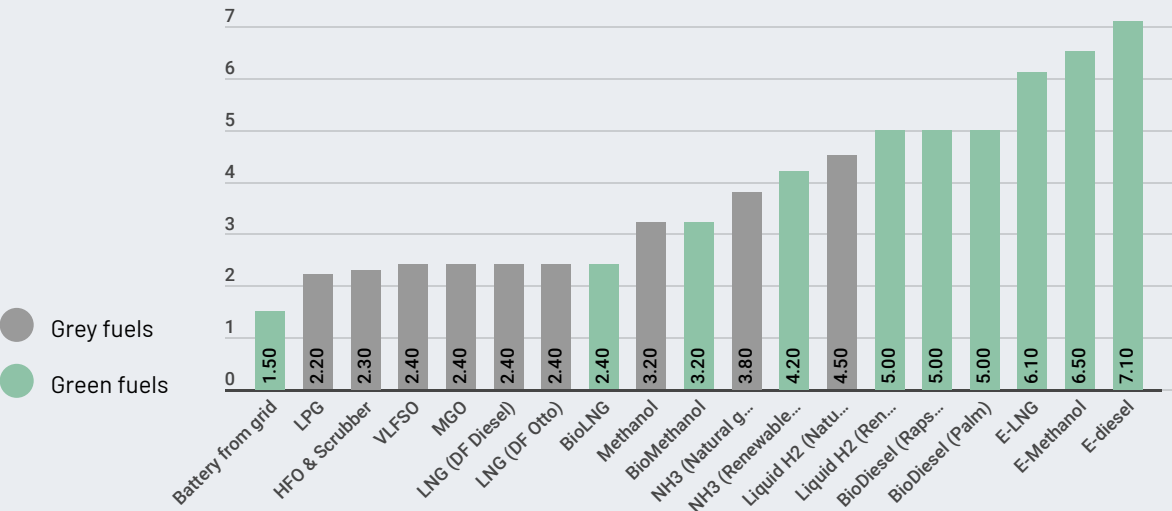
upon shipowners not able to comply. But the big challenge with all e-fuels is the large energy losses during production and the massive global lack of GHG-neutral electricity from renewable sources. See the figure below.

Well-To-Wake emissions in gram CO2 per kWh - GWP100



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

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



## Onboard carbon capture: FROM CONCEPT TO REALITY

Building a shipboard CCS plant has been a long and exciting voyage – from a “non-possible” starting point to a future-proof running installation.

«When we signed the letter of intent for onboard carbon capture back in 2021, all we had was a plan on the paper and a good understanding of what we needed», fleet director Tor Øyvind Ask in Solvang says. Running a fleet of gas carriers fuelled by conventional fossil fuel oil, Solvang managed to mitigate most emission factors. Including NOx, SOx, and particles. The remaining CO2 was the missing link.

«Changing to low-carbon fuel was not a realistic option, as it only meant CO2 emissions would shift to other parts of the value chain. In addition, the price of alternative fuels would price us out of competition. So we went for a radical solution to capture the CO2 post-combustion and keep conventional fuel. Which nobody had done before», Mr. Ask says.

### Engineering challenges

Solvang initiated studies in collaboration with the Norwegian flag, Wärtsilä, MAN, DNV and Seatrüm. This turned into real feasibility studies by year-end -22. Test running at Wärtsilä's facility in Moss, Norway, produced promising results. In 2023, Norwegian state environmental agency Enova supported the project for maritime testing.

«We got less than a year to prepare the technology for real-time operations», says Kai Heine Sirevåg, Solvang's manager for the newbuilding and OCCS preparations project.

The basic design comprised units for CO2 absorption by amine-MEA, a stripper tower, and liquefaction and condensation systems, as well as CO2 storage tanks. What might look feasible on the drawing table, would pose heavy engineering issues in a shipboard environment.

«From the fall of -23 to the fall of -24, we carried out hazard analyses, detailed design of dimensions, energy balance assessments, practical machinery and supplier vetting. Among the challenges was the need for extra heat energy, which required larger boiler steam capacity. Also, we had to arrange for fresh water supply, among the many

### Fact:

#### OCCS-ready newbuilding VLGCs

In 2023, Solvang ordered seven new 88,000 cbm Panamax VLGCs. The first two newbuildings are already under construction at Hyundai HHI shipyard in Ulsan, South Korea. The vessels feature the latest hull, shaft and propeller optimizations, as well as improved coating, exhaust gas recirculation, and exhaust gas cleaning (hybrid scrubber).

The deck is reinforced to carry gas up to 3000 tons at fore and OCCS equipment at the aft. The bridge is being lifted by one accommodation deck to secure sightline above the projected CO2 tanks at fore. The first VLGCs are scheduled for delivery in 2026, the last in 2027.

things which we submitted for class approval», Mr. Sirevåg recounts.

### VLGC modifications

After a full 3D scanning of Clipper Eris, an OCCS was installed at year-end -24. This meant real-time testing could start delivering operational data. At the same time, the Hyundai HHI shipyard commenced structural preparations for OCCS on Solvang's VLGC newbuilding project.

«The success of the pilot is a critical element in the OCCS-ready project on the VLGC newbuildings», Mr. Sirevåg admits.

The seven identical VLGC newbuildings will feature exhaust gas recirculation (EGR), exhaust gas cleaning

#### GRI references

305-1 Direct (Scope 1) GHG emissions  
305-5 Reduction of GHG emissions

#### ESRS/CSRD references

E1 2.3 Energy use and efficiency  
E1 2.3.1 Energy Consumption Data  
E1 2.3.3 Energy Efficiency Measures



«The success of the pilot is a critical element in the OCCS-ready project on the VLGC newbuildings»

Kai Heine Sirevåg, Solvang's manager for the newbuilding and OCCS preparations project.



(hybrid scrubber), plus the WESP (electrostatic particle filter). Together these processes prepare the exhaust gas stream for the CO2 capturing system, which requires substantial preparations of the VLGCs.

«The deck is being heavily reinforced to carry gas tanks weighing up to 3000 tons at fore and to carry OCCS equipment at the aft. The whole bridge is being lifted by one accommodation deck to secure the necessary sightline above the projected CO2 tanks. The steam generation plant and auxiliary engines are dimensioned for a future OCCS retrofit», Mr. Sirevåg explains.

### Future-proof design

With the OCCS project, Solvang has anticipated that IMO and other regulators will make CO2 emissions increasingly costly for shipping, which is the current trend. In the unlikely case that CCS operation will not be preferred, the extra CO2 tanks can be used for other fuel or cargo, such as LPG or ammonia. Which proves the design for several



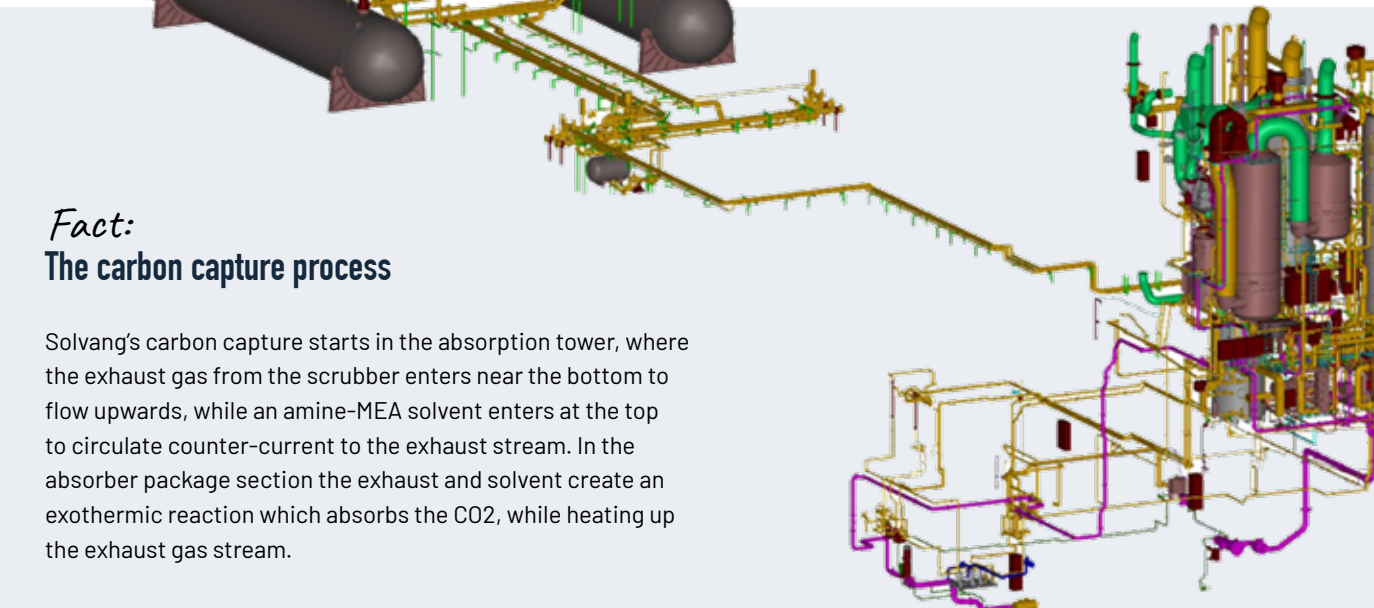
future regulation scenarios.

«We venture as far as we responsibly can in arranging for a full OCCS retrofit without actually performing it», Mr. Sirevåg comments. The optimal scenario for 2026, when the first two VLGC newbuildings are scheduled to leave the shipyard, is to have all data and preparations ready for an immediate OCCS retrofit.

«We realize this is very optimistic, also because retrofit engineering and procurement takes time. But we hope that the commercial and regulatory circumstances will contribute to speed up the OCCS installation on board our newbuilding VLGCs», Mr. Sirevåg concludes.

«The sheer possibility of onboard carbon capture was unthinkable five-six years ago, but now we run the technology on board Clipper Eris. Given the adoption of GHG regulations as expected, OCCS is short to medium term one of the most realistic strategies for cost-effective fuel in deep-sea shipping», fleet director Tor Øyvind Ask says.





**Fact:**  
**The carbon capture process**

Solvang's carbon capture starts in the absorption tower, where the exhaust gas from the scrubber enters near the bottom to flow upwards, while an amine-MEA solvent enters at the top to circulate counter-current to the exhaust stream. In the absorber package section the exhaust and solvent create an exothermic reaction which absorbs the CO2, while heating up the exhaust gas stream.

The de-carbonized exhaust gas flows to a separate washing section, then passes through a separator to minimize droplet entrainment and carry-over before being released. The absorbed CO2 is being transferred to the stripper tower, where the enriched solvent gets heated to the point of releasing the CO2. The following drying and liquefaction involves several stages, a.o. the drying filtration, pre-cooling, compression and so-called subcooling of CO2. Finally, the pressurized CO2 is refrigerated by use of ammonia, into full condensation and liquefaction suitable for transfer to tank storage at the fore deck.

**The IMO timeline of emission regulations in shipping:**

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

1997

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.

2008

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

2018

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.

2023

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

2005

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.


2013

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

2021

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

2050



**EU ETS and FuelEU Maritime**

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

EU ETS issues a decreasing number of EU Allowances (1 EUA = 1 tonne CO2 eq.) annually, available for trading. 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**

	2023	2024	2025	2026	2027	2028 onwards
<b>Ship sizes and type</b>						
Cargo/passenger ship (5000+ GT)	[Reporting only bar]					
Offshore ships (5000+ GT)			[Reporting only bar]			
Offshore and general cargo ships (400 5000+ GT)			[Reporting only bar] To be decided			
<b>Greenhouse gasses</b>						
Carbone dioxide (CO2)	[Reporting only bar]					
Methane (CH4) & Nitrous Oxide (N2O)		[Reporting only bar]				
<b>Phase-in</b>						
% of emissions included in ETS scope		40 %	70 %	100 %	100 %	100 %
		[Reporting only bar]	[Reporting only bar]	[Included in ETS scope bar]	[Included in ETS scope bar]	[Included in ETS scope bar]

**Fact:**  
**FuelEU Maritime vessel obligations**

- GHG intensity reduction: Reduction targets of annual GHG intensity of energy used, set in 5-year steps, from 2 % in 2025 to 80 % in 2050. Measure is GHG per energy unit, gCO2e/MJ.
- Fuel type reporting: Conventional fuels (LNG, LPG, VLSFO, MGO...), renewable and low-carbon fuels (biofuels, e-fuels, hydrogen...)
- Mandatory use of alternative power sources in ports:

On-shore power supply (OPS) or zero-emission technologies.

- Methodology alignment with IMO DCS (Data Collection System) and EU MRV – Monitoring, Reporting, and Verification requirements.
- Verification by an accredited verifier (i.e. DNV) for accuracy and compliance.

<b>SDG references</b> SDG 13: Climate action SDG 7: Affordable and clean energy SDG 9: Industry, innovation and infrastructure SDG 12: Responsible consumption and production	<b>GRI references</b> 302-1 Energy consumption within the organization 302-3 Energy intensity 302-4 Reduction of energy consumption 301-2 Recycled input materials used	<b>ESRS/CSRD references</b> E1 2.3 Energy use and efficiency E1 2.3.1 Energy Consumption Data E1 2.3.3 Energy Efficiency Measures E1 2.1 Climate change mitigation E1 2.1.1 SCOPE 1: Direct GHG Emissions E1 2.2.5 Monitoring and Review	E1 2.3.2 Energy Intensity E1 2.3.6 Energy Management Systems E1 2.3.9 Regulatory Compliance and Incentives E1 2.3.8 Innovation in Energy Use E1 2.3.5 Goals and Performance
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Onboard CCS:  
**THE CARBON CAPTURE IS RUNNING**

After years of research, development and testing, Solvang’s carbon capture pilot was launched on Clipper Eris at the Seatrium Admiralty in Singapore.

At the end of 2024, Solvang gas carrier Clipper Eris had completed the retrofit of a full-scale carbon capture and storage facility to serve the main and auxiliary engines, and boilers. The project is a joint effort between Solvang, Seatrium Admiralty Yards, Wärtsilä, M.A.N. and SINTEF, a Norwegian research institute. The Clipper Eris installation has been scheduled to run the first year as a pilot, capturing CO2 after combustion before the exhaust passes through the outlets. The carbon gas is being separated inside the smokestack, then refrigerated into liquefaction and transferred to deck storage for

offloading at port. As much as 80 percent of the carbon outlets will be removed from the exhaust, according to laboratory tests at Wärtsilä’s facility in Moss, Norway. As a result, conventional fuel oil operation will stay within stricter GHG regulations. This gives global shipping a better chance to offer affordable transportation to clients.

**Call for infrastructure**

For OCCS to be a success on a growing scale, more shipping companies and industry stakeholders must see the benefits and join in. Solvang CEO Mr. Edvin Endresen,



*CO2 can be recycled for use in land-based industries, but we need a global infrastructure to offload the product for delivery to end-users. In addition, IMO must implement global regulations with benefits and penalty schemes for achieving the set goals. Predictability is necessary for the industry to invest in solutions for reducing CO2 emissions*



CEO Edvin Endresen

who has championed the CCS project since its start in 2021, points out two key factors for the OCCS technology to succeed in shipping: Infrastructure and global regulations.

«CO2 can be recycled for use in land-based industries, but we need a global infrastructure to offload the product for delivery to end-users. In addition, IMO must implement global regulations with benefits and penalty schemes for achieving the set goals. Predictability is necessary for the industry to invest in solutions for reducing CO2 emissions» Mr. Endresen states.

He predicts a long-term effect on the deep-sea fleet’s climate footprint.

«Onboard carbon capture combined with existing cleaning technology is a significant shortcut to decarbonization of the world’s deep-sea fleet», Mr. Endresen says.

**International innovation**

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. In 2023, Solvang’s OCCS project was acknowledged nationally and internationally upon receiving a grant of MNOK 80 from the Norwegian Climate and Energy Fund, for the practical application of the technology in offshore operation.

“The continuous efforts to reduce our climate footprint will continue unabated into the future”, CEO Edvin Endresen says.



**GRI references**  
305-1 Direct (Scope 1) GHG emissions  
305-5 Reduction of GHG emissions

**ESRS/CSRD references**  
E1 2.3 Energy use and efficiency  
E1 2.3.1 Energy Consumption Data  
E1 2.3.3 Energy Efficiency Measures



Our impact:  
LIFE BELOW SEA AND ON LAND

Global warming  
Cloud formation and acid rain  
Ground level ozone  
Health risk/visible smoke

CO<sub>2</sub>  
SO<sub>x</sub>  
NO<sub>x</sub>  
PM/HC/CO

Noise  
Lights  
Waves

Garbage/waste

- Ballast water
- Biofouling
- Anti-fouling release
- Scrubber washwater
- Bilge water
- Sewage

Solvang deploys a complete range of procedures to mitigate any risk of harming the marine environment, in compliance with international regulations and the UN development goals.

Solvang recognizes that the state of our oceans are declining due to climate change and human behaviour. In accordance with the UN SDG 14, to conserve and sustainably use the oceans, seas and marine resources, Solvang adheres to the swift and coordinated global action called by the UN.

The seawater scrubber

A key instrument in Solvang's protection of the marine environment is our seawater scrubber, which utilises calcium carbonate to convert sulphur oxides from the exhaust into sea salt. More than 98 percent efficient, the process yields no by-products. In 2024, Solvang submitted to the IMO documentation verified by SINTEF containing five years of wash water sampling data from EGC systems on board 13 vessels. The documents discussed all elements measured in the washwater together with a detailed description of the complete water system, from the sea chest to overboard.

Ballast water treatment

Ballast water is regarded as a high-risk emission source, as the ballast water contains marine sediments and organisms. When ships carry ballast water across the seas, the risk arises that species are transferred into waters where they do not belong. There, they might

impose severe consequences on the local ecosystem. To mitigate this risk, Solvang installed ballast water treatment systems on board all vessels, deploying advanced UV filtration to eliminate microorganisms.

Biofouling

A multitude of marine species, carried on ships' hulls, may survive to establish a reproductive population in new environments, where it might threaten to out-compete native species and multiply into pest proportions. To mitigate this risk towards the world's oceans and the conservation of biodiversity, Solvang uses the highest standard of antifoulings, and we monitor hull resistance to marine growth. In case of marine growth, this is removed by hull cleaning at the first opportunity.

TBT-free coatings

Leaches of organotin compounds like the biocide TBT (tributyltin) from ship hulls' antifouling systems have proved to harm the marine environment. In 2008, such compounds were included in the Rotterdam Convention, and consequently banned by IMO in the International Convention on the Control of Harmful Anti-fouling Systems on Ships. All of Solvang's vessels have since applied TBT-free coatings. Solvang collaborates with our suppliers to identify and use antifouling solutions which maintain the

hull's environmental efficiency throughout the docking period.

Garbage/waste handling

A garbage management plan covering all waste has been stated for all vessels. In accordance with the plan, our vessels segregate waste to shore, waste to sea, and waste to be incinerated on board for the residues to be delivered to shore for further handling.

Bilge water

All bilge water from our fleet runs through a separator and each run is registered in the oil record book. These discharges are covered by MARPOL 73/78 Annex 1. All waste oil and sludge is burned in the incinerator or delivered to an approved processing plant onshore.

Sewage

MARPOL 73/78 defines sewage as discharges from toilets, urinals and holding tanks on board vessels. Sewage dumping to sea is allowed for ships in motion beyond 12 nautical miles from the shoreline, or four nautical miles for disinfected or finely dispersed sewage. Despite the minimal sewage volume from Solvang's crews of maximum 25 people per vessel, we maintain urinals and holding

SDG references

SDG 14: Life below water  
SDG 15: Life on land

GRI references

303-4 Water discharge  
303-1 Interactions with water as a shared resource  
303-2 Management of water discharge-related impacts

ESRS/CSRD references

E2 POLLUTION, 4.2 Pollution of water  
4.5 Substances of concern  
E3 WATER AND MARINE RESOURCES,  
5.3 Impact on aquatic ecosystems

Facts  
EGC wash water samples

In 2024, a discussion arose about negative impacts from open loop EGCS (seawater scrubber) in port and special areas. IMO subsequently requested validated data to qualify the risk assessment, and Solvang compiled five years of wash water sampling results from 13 vessels. The dataset and methodology have been validated by research institute SINTEF. The submissions to IMO are as follows:



Data sheet for verified samples and analyses from 13 vessels, data series 2020-2024

PPR 12-7-2 - Substances contained in discharge water from exhaust gas



cleaning systems (Norway)  
PPR 12-7-1 - Data to be used for the calculation of representative emission factors of discharge water... (Norway)

PPR 12-INF.11 - Quality Assurance (QA) of the data presented in document PPR 1271 (Norway)



tanks in compliance with international regulations for all vessels.

Oil leakages

The risk of oil leakages from vessels into the sea is minimal. The possibility of oil spills from propeller shafts are eliminated by air seals and may discharge only from thrusters. To mitigate this risk, maintenance schedules are followed meticulously and the oil consumption is precisely monitored. Bio-oil is used wherever approved by the thruster manufacturer.

R&D highlights 2024

# SHARING SAMPLES OF KNOWLEDGE

Solvang develops research-based maritime solutions with our partners. Every new sample of knowledge we share publicly to promote sustainable shipping.

Since 2008, Solvang has invested materially in developing new knowledge, making science and technology an integral part of our portfolio. Access to operations and data has been granted to research institutions and research fellows. Together we have published peer-reviewed findings. Being an active part in technology collaboration has paid off. Among several achievements, our onboard carbon capture and storage project was spun into a full-scale pilot on board Clipper Eris in 2024. Another landmark this year was the 3rd-party scientific verification of our open-loop mode exhaust gas cleaning system, the scrubber which runs on four ethylene carriers and four VLGCs.

## Well-to-wake perspective

The strategy of Solvang's R&D projects is a long-term environmental and operational sustainability in a well-to-wake perspective. Meaning all emissions from the extraction of the fuel from the well to the propulsion delivered at the wake of the vessel, all must be counted for. At the starting point, our vessels emit a substantial amount of greenhouse gas, making them a target for efficiency measures to cut energy consumption. Another environmental task is to reduce the emission of unburnt fuel, NOx and other pollutants from the exhaust, as well as removing harmful substances from discharges to water. All these tasks have been systematically handled by our total emission control programme, which comprises a series of tech solutions.

## Maritime research collaboration

Over the years, Solvang has built a close relationship with the Norwegian maritime research environment, of which many institutions have merged into SINTEF Ocean in

Trondheim. In 2024, Solvang's long-term membership of Smart Maritime national research center was transferred to SINTEF Ocean. In 2024, Solvang joined the International KSP WIND Association, which promotes wind-assisted propulsion and hull design in commercial shipping. We also joined the Norway-based research center FME Maritime Energy Transition (MarTrans), an 8-year project with 65 partners from the maritime industry and research environment. The center performs research, innovation and education in order to accelerate the energy transition in shipping, while at the same time increasing commercial output for the maritime industry. «KSP WIND and MarTrans offer Solvang access to verified objective information, we get to exert influence, we receive attention as a technology user, and our own efforts are made useful to others», Mr. Ask concludes.

## Tech partnerships

In addition to independent science and research projects, Solvang maintains an extensive portfolio of R&D activities with our commercial partners and suppliers. Technology manufacturer Wärtsilä plays a big part in the OCCS project. They also host the Wärtsilä 2-stroke Part Load Optimization (WPL0) programme, which combines modifications of turbocharger components and tuning of the engine to shift the optimal load to a lower range. While preserving commercial speed, the testing shows fuel savings of 3-4 percent delivered on the engine, and much higher savings of combined fuel consumption. In the upcoming period, Solvang will intensify our part load optimization activities, in the search for additional efficiency gains. «The result so far has been even better than we expected,» Mr. Tor Øyvind Ask comments.

Scan to read more  
about MarTrans on  
martrans.no



Scan to read more  
about KSP WIND on  
Sintef.no



For details on Solvang's R&D projects, please visit  
[www.solvangship.no](http://www.solvangship.no)



## WESP: Cutting 95%\* of particle mass

In 2024, Solvang completed the installation of wet electrostatic precipitators (WESPs) on five vessels; Clipper Eris, Clipper Eirene, Clipper Enyo, Clipper Eos, and Clipper Wilma.

«In spite of some initial adjustment needs for the WESP to be able to tackle high sea conditions, as well as some challenges in processing the particle sludge and flush water, we are very satisfied with the concept,» says Mr. Tor Øyvind Ask, fleet director of Solvang. The WESP technology is manufactured by Wärtsilä and it

plays an important role in pre-treating the exhaust stream for onboard carbon capture and storage (OCCS), which is already installed on Clipper Eris. The setup provides enough technical data to prove for operation very soon. «I expect the final design and final operation decision to be concluded by mid-2025», Mr. Ask says.

\* In laboratory tests



**SDG references**  
SDG 9: Industry, innovation and infrastructure  
SDG 17: Partnerships for the goals

**GRI references**  
11.2 Climate adaptation, resilience, and transition  
302-5 Reductions in energy requirements of products and services  
305-5 Reduction of GHG emissions

**ESRS/CSRD references**  
E1-2.2: Climate change adaptation  
E1-2.2.1: Risk Assessment  
E1-2.2.2: Impact Evaluation  
E1-2.2.3: Adaptation Strategies  
E1-2.2.4: Investment in Adaptation  
E1-2.3.3: Energy Efficiency Measures



# Dropping observation numbers

Solvang’s Quality Award celebrates the crews achieving the lowest number of observations. For 2024, the fleet averaged 1.73 observations per inspection.

The annual Quality Award weighs and compares the number of observations made during Port State controls, OCIMF SIRE inspections (Ship Inspection Report Programme), CDI inspections and DNV class inspections.

### The champion

With a weighted score of 1.1, Clipper Eris ranked number one in 2024. The number comprises one observation in one SIRE inspection (50 % weight), three observations in one CDI inspection (20 % weight), and no observations in two Port State controls and one DNV class inspection (20 % weight each). Second came Clipper Enyo, with a weighted score of 1.15, including three observations in two SIRE inspections, and two observations in one CDI inspection. Number three in 2024 was Clipper Vanguard, which had five observations in two SIRE inspections, and no other observations.

«Getting a place on the podium is very impressive. Well done by our three winning vessels,» states Fleet Director Tor Øyvind Ask in Solvang.

### Fewer observations in 2024

The overall quality figures for the fleet show a very good average score of 2.08 for 2024, down from 2.35 in the previous year. Several vessels made remarkable achievements; Clipper Quito matched its 2023 bronze medal score with 1.3, while Clipper Freeport landed 1.4, and Clipper Orion got 1.47. Many others also performed excellently. According to the fleet director, some individual increases in observations compared to previous years can be ascribed to the gradual implementation of SIRE 2.0



## Quality award 2024

inspection principles (see article page 64). «I commend the crew across our fleet for the extraordinarily low number of observations in 2024. It is a result of hard work, determination and focus onboard our vessels every day. It also takes mutual trust to report all incidents over time to get better,» says Mr. Tor Øyvind Ask, fleet director at Solvang.

# A new energy efficiency champion

For 2024, Solvang’s Energy Efficiency Award went to Clipper Eirene – in a tight race towards excellent AER performers across the fleet.

«The jury commends excellent performance across the fleet. The winner Clipper Eirene has managed to keep up an exemplary SEEMP poster, showing good reflection, and they maintained the A rating. Our congratulations go to the Captain and his crew», states Irene Ringen, Performance and Sustainability Engineer in Solvang.

Solvang has established a healthy competition between the vessels. The crews are challenged to pit themselves against each other in terms of seamanship, operation and proficiency. The jury evaluates not only AER, but the work on board, the SEEMP (Ship Energy Efficiency Management Plan) poster to save energy, and the awareness of their SEEMP goals. Who can outperform the others and achieve the best SEEMP results? The rules of the competition are adjusted for each vessel’s SEEMP.

### The competition

- The Energy Efficiency Award measures performance on the following:
- Who picks the best routes?
  - Who navigates the weather better?
  - Who hits the optimal trim of the vessel?
  - Who operates the engines best?
  - Who has the best engine maintenance/performance?
  - Who thinks out the best power-saving plan?

### Point scores: SEEMP

The SEEMP is updated annually. Each vessel gets a SEEMP score between 1 and 5, where 5 shows strong efforts and highly relevant plans for each department: Bridge/deck, engine, and galley.



## Energy Efficiency Award 2024

In addition, the crews deliver a report on their own efforts and performance, how the AER was monitored, and what they can improve the next year.

### Point scores: AER performance

The official AER value/rating for 2024 is compared to 2023. Additionally, an AER at sea is calculated to provide a more accurate picture of the crew’s and vessel’s performance during operation. Other parameters 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.

**SDG references**  
SDG 13: Climate action  
SDG 4: Quality education  
SDG 8: Decent work and economic growth

**GRI references**  
302-1 Energy consumption within the organization  
302-3 Energy intensity  
302-4 Reduction of energy consumption

**ESRS/CSRD references**  
E1 2.3 Energy use and efficiency  
E1 2.3.3 Energy Efficiency Measures  
E1 2.2.5 Monitoring and Review  
E1 2.3.6 Energy Management Systems  
E1 2.3.9 Regulatory Compliance and Incentives  
E1 2.3.8 Innovation in Energy Use  
E1 2.3.5 Goals and Performance

# SOCIAL

“Solvang’s ambition is to make the core values of mutual respect, team spirit and quality benefit all our stakeholders, from colleagues to customers, owners, competitors and the public sphere”

Solvang ASA

**SDG references**  
SDG 3: Good health and well-being, SDG 4: Quality education, SDG 5: Gender equality, SDG 8: Decent work and economic growth, SDG 2: Zero hunger

**GRI references**  
401-1 New employee hires and employee turnover, 403-1 Occupational health and safety management system, 403-3 Occupational health services, 403-9 Work-related injuries, 403-10 Work-related ill health, 412-1 Human rights assessment 102-8 Information on employees and other workers

**ESRS/CSRD references**  
S1-7: Own workforce  
S1-8: Workers in the value chain  
S4: Consumers and end-users  
SBM-1: Total number of employees

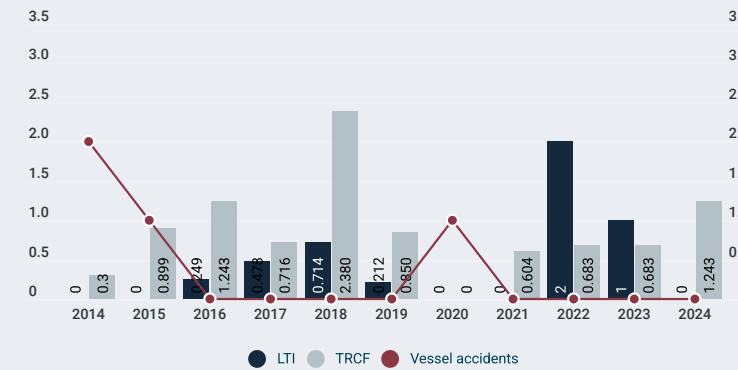
## Employee turnover



## Turnover + retention rate

Year	Sea retention rate	Office turnover
2024	95,50%	0.00%
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%

## Safety Continuous HSEQ programme since 2009

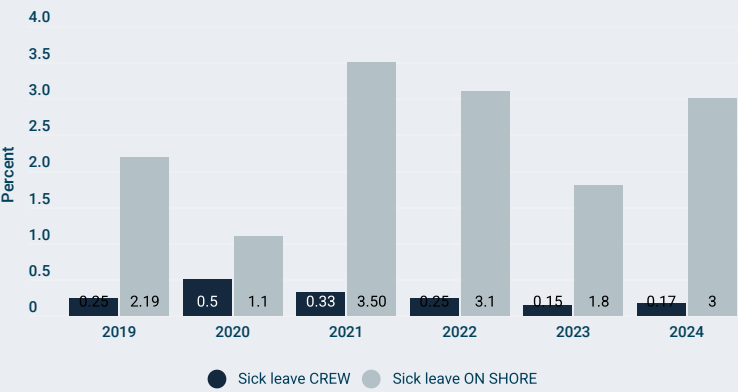


24 cadets in school  
- 19 male  
- 5 female

2 fixed support organisations  
- SOS Childrens Villages in Cebu  
- The Norwegian Church Abroad  
+ local support projects in the Philippines.

100 % pension and insurance coverage  
for all employees

## Sick leave



## Sick leave in Solvang

Year	Sea	Office
2024	0.17%	3%
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%

## Fitness status of Solvang seafarers’ pre-departure health examination

Condition	2024	2023	2022	2021	2020	2019
FIT	98.00%	94.00%	98.00%	99.30%	96.39%	96.70%
UNFIT	1.00%	1.00%	1.00%	0.60%	2.86%	2.60%
EXPIRED	1.00%	5.00%	1.00%	0.10%	0.75%	0.70%



EMPLOYEE RELATIONS		
2025 target	2024 progress	2024 targets
High focus on diversity and gender equality in recruitment and under service	Continued focus on diversity and gender equality during crew seminars and in our internal policies	High focus on diversity and gender equality in recruitment and under service
Secure recruitment for existing fleet as well as new vessels for delivery 2026, Secure a strategical platform for growth	Done by keeping focus on quality training and maintaining good working conditions	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
Secure a working atmosphere where our core values Mutual Respect-Team Spirit and Quality are well understood and recognized by all employees onshore and offshore	Continued during seminars, dialogue with vessel, HOP training etc.	Implement a good understanding of revised values (Mutual Respect, Quality and Team Spirit)
Continue to develop highly skilled crew in all ranks to maintain existing fleet as well as handle growth	Continued by focusing on quality training as pr company & vessel need	Increase focus on job specific training / competency enhancement
Continue focus on developing own officers in all ranks from cadet level when possible to secure a good loyalty and understanding of company culture and processes	Implemented by HOP training during the year for ship and shore as well as other training	Career development, communication/ leadership development
Use trainee positions on all possible vessels to secure internal growth. This being cadets of various ranks, trainee officers etc to secure future need.	Due to sale of vessel and maintenance need we had cadets on appr 90 % of our vessels	Use trainee positions on all vessels /cadets/ junior officers/trainees to secure future recruitment need
DIVERSITY AND INCLUSION		
2025 target	2024 progress	2024 targets
Select minimum 20% female cadets deck and engine as well as focus on gender equality and diversity in recruitment of other ranks also	15 % strictly due to available candidates in our selection	Select 20-30 % female cadets during our initial selection
Actively promote diversity in our recruitment and rotation	Done	Actively promote diversity in our recruitment and rotation
Target minimum 2 female per vessel when using femal crew	Done, with some exemptions due to sudden changes in rotation due to medical and other reasons	Target minimum 2 female pr vessel when using femal crew

UN SDG: United Nations Sustainable Development Goals  
SDG 3: Good health and well-being  
SDG 4: Quality education  
SDG 5: Gender equality  
SDG 7: Affordable and clean energy  
SDG 8: Decent work and economic growth

GRI: Global Reporting Index  
403-6 Promotion of worker health  
403-7 Prevention and mitigation of occupational health.  
403-2 Hazard identification, risk assessment, and incident  
401-1 New employee hires and employee turnover

COMMUNITY ENGAGEMENT		
2025 target	2024 progress	2024 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
Continue our support to local communities where we operate , select new CSR partners for more hands on effect on our support	Done, we supported various projects and organizations in 2024	Support the communities where we operate
Arrange officer and crew conferences in Stavanger and Manila	Done spring 2024 and Nov 2024	Officer and crew conferences in Stavanger and Manila
100 % compliance in Living the Vision programme	Done	100 % compliance in Living the Vision programme
Live up to our mission statement	Done	Live up to our mission statement
HEALTH AND SAFETY		
2025 target	2024 progress	2024 targets
Work systematically to ensure the health, fitness and safety for all crew and employees, both at work and home, in cooperation with external partners	Done via various projects such as Re-Start and other health initiatives	Work systematically to ensure the health, fitness and safety for all crew and employees, both at work and home
Zero LTI	Zero LTI	Zero LTI
Sick leave Solvang; Sea less than 1 %, shore less than 3 %	0.17 % sea and 3 % shore. Shore high due to a few long-term sickness cases	Sick leave Solvang; Sea less than 1 %, shore less than 3 %
100 % compliance in Living the Vision program	Done	100 % compliance in Living the Vision program
Keep systematic training of galley personnel to secure a healthy and nutritious diet onboard.	Done by introducing O-Serv as partner in galley training and victualing for all vessels	Secure common platform for competence for galley personnel handling food/nutrition
Keep focus on securing a good health prior to joining by using strict requirements in line with P&I club standards and NIS Flag. As well as securing good health while onboard via internal initiatives	Done by having high standards on medical before joining	Continue strict focus on premedical screeing before serving onboard for all nationalities
Secure a good platform for health insurance and pension plan for all seafarers	Done	Health insurance and pension for all seafarers
Participate in Shell safety program	Done	Participate in Shell safety program

ESRS/CSRD references  
S2 8.1 Working conditions  
S2 8.2 Equal treatment and opportunities for all  
S2 8.3 Other work-related rights  
S3 9.1 Communities' economic, social and cultural rights  
S3 9.2 Communities' civil and political rights  
S3 9.3 Particular rights of indigenous communities



## United by the team spirit

Solvang's crew are bridging the national, ethnic and religious division lines of a turbulent world. On board, it's all about mutual respect and team spirit.

«We deploy seafarers from many different nationalities and backgrounds on the same vessel. What can initially look like opposing forces, is turned into a well functioning crew by Solvang's core values; mutual respect and team spirit,» says Mr. Kjetil Meling, HR Director at Solvang. He describes a fleet-spanning culture of overcoming fundamental differences of nationality, culture, religion, politics, or sexual orientation. «Every single crew member enjoys the advantages of mutual respect, and we practice zero tolerance for breaching with Solvang's core values,» Mr. Meling states.

### Reporting and whistleblowing

Solvang has a policy of never putting a lid on facts. To have all incidents reported in reality takes an amnesty for all individuals involved in a mistake. According to HR Director Kjetil Meling, it is more important for Solvang to have a report than to penalize the guilty. «A report provides us with information to make improvements,» Mr. Meling asserts. After Solvang stated the policy to trust every employee equally – from the master to the cadet – the staff retention rates increased to nearly 100 percent. The number of incidents simultaneously dropped. «If you experience a bad day at work, whether you are the cadet or the captain, there is one thing we expect

from you: Speak out confidently, for the sake of our common safety!» says Mr. Meling. He is crystal clear on the protection of anyone who opens his mouth: «There is no way Solvang will punish you for telling the truth.»

### Turn the mirror

As a fully integrated shipping company Solvang manages the sailing personnel through the Solvang Philipps Ltd., which makes all hiring in-house. Onshore in Norway, the employees are hired directly with Solvang's Norwegian mother company, while a number of European crew are hired with Solvang Maritime. The company applies pension plans and insurance policies for crew and families across all divisions to build a good retention rate. «This helps us create the sense of ownership and loyalty which is needed for a structure that can sustain the quality we want within our pool of colleagues ashore», Mr. Meling states. By recognizing the sailing crew as individuals, Solvang makes people carry their workwear with pride, secure a good dialogue with customers, as well as getting a good reputation among seafarers. «It is all about meeting people. Just turn the mirror and think for yourself how you would like to be met by others,» Mr Meling says.

**UN SDG: United Nations Sustainable Development Goals**  
SDG 3: Good health and well-being  
SDG 4: Quality education  
SDG 5: Gender equality  
SDG 7: Affordable and clean energy  
SDG 8: Decent work and economic growth

**GRI: Global Reporting Index**  
403-6 Promotion of worker health  
403-7 Prevention and mitigation of occupational health.  
403-2 Hazard identification, risk assessment, and incident  
401-1 New employee hires and employee turnover

## Values BRIDGING THE GAP

The unavoidable gap between vessel sales and delivery of newbuildings tests the flexibility of the whole of Solvang's organization.



«Our commitment to provide secure employment for our crew is unwavering,» Mr. Kjetil Meling, HR Director at Solvang states. During the last years, Solvang sold several vessels, temporarily reducing the fleet from 27 to 20 vessels. In the same period, Solvang had seven newbuilding Panamax VLGCs in order for delivery in 2026-27. The gap has caused a temporary fall in the number of sailing crew.

«To Solvang, and to me personally, the situation is extraordinary. Solvang has seen continual growth in crew mobilization for as long as anyone can remember,» Mr. Meling admits.

The extraordinary aspect of the situation is the fact that Solvang soon needs more competent crew than ever before.

### Temporary bottleneck

Retaining the crew is an utmost priority for Solvang, which has moved to offer benefits and adjustments for the crew during the waiting time:

«We have prolonged our insurance policies for our sailing crew and families, compensating for extended vacations for those who are willing to wait for their next contract. This will secure them at least the assurance that their families are safe while waiting,» Mr. Meling assures.

A perhaps more important concession from Solvang to the seafarers losing shipboard service time and thus income,

is to endorse them working for alternative employers during the period of lower demand, when possible. This means Solvang maintains the obligation to take back the employee at existing terms once they come back.

«It is tough to let loyal people go, but we face a temporary bottleneck situation which we intend to solve by our core values of mutual respect and team spirit. Within a year all are most welcome back, and they should bring some qualified friends because we need many more crew,» Mr. Meling says.

### Early retirement

A third offer from Solvang is premature retirement, which gives senior crew members the privilege of stepping down from active work. Mr. Meling acknowledges that few employees so far have opted for the latter two arrangements.

«Solvang is undoubtedly a popular organization with low turnover among our people. We deal with challenges like a team. I want to honor every single employee who has agreed to reduce shipboard time in order for the company to bridge the gap. Together we will receive the newbuildings with an enormous relieve and appetite for success,» Mr. Meling concludes.

**ESRS/CSRD references**  
S2 8.1 Working conditions  
S2 8.2 Equal treatment and opportunities for all  
S2 8.3 Other work-related rights  
S3 9.1 Communities' economic, social and cultural rights  
S3 9.2 Communities' civil and political rights  
S3 9.3 Particular rights of indigenous communities



# The open-book manager

Captain Christian Gonzaga was granted a lightning career in Solvang. By returning the trust to his crew, he got a culture of openness and quality on board Clipper Eris.

«I am committed to stay with Solvang for the rest of my working career», the 38 year-old captain Christian Gonzaga announces. Every time he arrives home to see his children Ember Candice and Christian Emyr, he brings stories from the high seas. As one of three cadet students in his class he got recruited by Solvang more than 20 years ago. Since then, he has acquired experience from the bridge of all vessel classes in the fleet.

Christian's fascination for seafaring started when he was a boy, on board a small boat together with his parents. Twice a month, they crossed the Iloilo Strait to get from their home on Guimaras Island to the shopping mall on Panay Island, Philippines. The strait was busy with ships of all sizes.

«I watched the large ships passing by, and I wondered what it would be like to control such a giant, like my seafarer uncles did», Christian remembers. When his parents' family business later failed, the boy decided to become a seafarer himself to support his parents.

«I entered the maritime university in 2003. There, I was approached by Solvang's people from Manila, who made a strong impression on me».

## The ultimate promotion

Christian got drafted as a cadet on board one of Solvang's oldest vessels. On board Clipper Lady from 1979 he learnt seafaring the old way.

«We had to plot paper maps, navigate and do other tasks manually. It all gave me a strong foundation of principles. Today, all our technology is very useful, but a backup plan must be in place. I entered shipping just in time to get a real sense of how this is done», says Christian.

After cadetship, Solvang fast-tracked him to the grade of officer. Later, as a 2nd and 3rd mate, Christian caught up with all tasks on board. Out of pure interest, he pursued work on board ethylene, LPG and ammonia carriers, unknowingly qualifying himself for the ultimate promotion.

«When I was offered a position as master, I told Solvang that I may need more time to prepare for all aspects of the role. I remember Kjetil Meling replying that something would be wrong if I was not nervous. He then encouraged me to accept the challenge», Christian says.

## Make or break

The promoted Captain Gonzaga was called to Clipper Eris, which was about to receive the world's first onboard carbon capture facility, a tremendously prestigious project. At that point he realized just how much trust he had been granted by Solvang.

«Being in the spotlight all the time means a lot of pressure, but I willingly accepted. In the Philippines we have a saying that goes "what doesn't break you will make you instead." And it definitely made me and every crew member on Clipper Eris!»

Captain Gonzaga knows the old-style hierarchy on board a ship, where the captain can't be approached except through the line of command. Gonzaga himself has decided to pass on to his crew the trust he receives from



Captain Christian Gonzaga on board Clipper Eris flanked by (from the left) 3rd mate Terrence Jay Piola, 2nd engineer Ronie Abig, 3rd mate Juan Miguel Flores, able seaman Gildo Paa, 2nd mate John Geoex Valenciano, commanding officer Siegfried Molina, cargo engineer Seginando Concepcion, Capt. Gonzaga, fitter Fiel Catagcatag, Jonald Elec Soriano, 3rd engineer Edwin Buela, able seaman Gerry Lomboy, BSN Eddie Buayaban, 4th junior engineer Jay Rowell Camense. Sitting from the left chief cook Benjamin Dulay, OS Adrian Voltaire Ladrangan, WPR Arnold Mijares, and able seaman John Rey Magamay.

Solvang.

«As a captain, you align yourself with the mindset of the crew. Lead with an open style, and the crew will tell you immediately when something happens. Don't blame individuals when something goes wrong, and you'll have a team fixing the problems together», Captain Gonzaga concludes.



*I watched the large ships passing by, and I wondered what it would be like to control such a giant, like my seafarer uncles did*





# A fighter on the bridge

Nothing in life came easy for Ruth Olimba. The more so, she appreciates being part of Solvang as a chief officer.

«After all the opportunities that came my way, my stint at Solvang is the most remarkable. I felt that my abilities and performance were truly recognized here.» Ruth Olimba virtually shines when she talks about the long path to where she is now, being a chief officer on Clipper Vanguard and occasionally on Clipper Enyo. Growing up in poverty in the town of Aurora on Mindanao island, Philippines, has taught her to endure hardships in order to provide for her family.

«As a girl I decided to carve out a better life for myself and my family, so I juggled multiple jobs to make the ends meet while pursuing my studies. Being a woman, the struggles to overcome obstacles in life are multiplied. But my parents inspired me to go beyond my limits and my motivation was to give them a comfortable life,» Ruth reveals.

## Climbing the ladder

Ruth Olimba has been passionate about work since her early days. Starting out as a lady guard and domestic worker for different families, she met people who helped her enroll at university. There, she started with educational studies, then shifted to Marine Transportation. After qualifying for scholarship from the College of Maritime Education/Shipboard Training Office, she completed her three-year studies in BS Marine Transportation. Her success from university nonetheless presented Ruth with more challenges.

«The struggles didn't stop after I graduated. Competition is stiff in the job market, and gender inequalities brought challenges for me in the workplace,» Ruth says. But she didn't only survive the following hardships – Ruth went beyond expectations and proved that women are equally capable for a maritime position.

«I received an apprenticeship with Montenegro Shipping Lines on an intra-island vessel, where I processed my maritime degree. After failing on my first attempt, I then passed the PRC Licensure Board Exam for deck officers,» Ruth says.

With her officer's licence secured, Ruth got to be the first female chief officer on M/V Maria Diana, a combined passenger/Ro-Ro cargo ship sailing in the Philippines.

## Meeting with Solvang

Her time as an officer not only sharpened Ruth Olimba's skills but also fuelled her passion for maritime leadership. «Thanks to the people who believed in my potential, I developed the confidence to start venturing internationally,» Ruth says. Her next step was to complete the CES (crew evaluation system) exam. That's when it happened.

«Just as I was leaving the building after the examination, a guard approached me and suggested I try Solvang. And that's how my adventure with Solvang began – thanks to that guard!» Ruth says.

The summer of 2009 she officially joined Solvang. After two months of intense training, she boarded Clipper Mars under Captain Virgilio "Jojo" Lopez, now the President of Solvang Philippines.

«He taught me what it means to be a good leader. After working hard with determination and dedication, I was promoted from jr. 3rd mate to 3rd mate, and then to 2nd mate. My officers and crewmates supported me all the way,» Ruth tells.

## Advocating women

The exploration of various waters and cultures on board Clipper Mars broadened Ruth Olimba's horizons and

### SDG references

SDG 3: Good health and well-being  
SDG 8: Decent work and economic growth  
SDG 4: Quality education  
SDG 5: Gender equality

### GRI: Global Reporting Index

403-4 Worker participation, consultation, and communication on occupational health and safety  
403-5 Worker training on occupational health and safety  
403-6 Promotion of worker health  
404-2 Programs for upgrading employee skills and transition assistance programs



provided her with resilience to face challenges, setbacks and criticism. It also provided her with a special mission. «As I navigated the different hurdles, I found myself becoming an advocate for women in the maritime industry. I wanted to inspire women to break down barriers and chase their dreams, no matter what society might say.» The VP of Solvang Philippines, Captain Iriz Paiton, noticed Ruth's qualities and suggested she aim for an even higher position. «Captain Paiton helped me realize my full potential and strive for more. January 2021, I became Chief Officer

at Clipper Victory,» Ruth says. Now, her tasks revolve around the safety and well-being of the crew on Vanguard and Enyo, motivating them in all aspects of the vessel operation. The values of mutual respect, team spirit, and quality serve as a framework for the crew and the ship. «Those values create a work environment which truly supports work-life balance. Solvang provides the crew with time and resources to stay connected with our loved ones, along with wellness programs which support our personal life. For myself, this no doubt boosts my productivity at work,» Ruth Olimba concludes.

### ESRS/CSRD references

S3 9.1 Communities' economic, social and cultural rights  
S3 9.2 Communities' civil and political rights  
S3 9.3 Particular rights of indigenous communities





30 years of happy sailing with Solvang

After sailing for 30 years with Solvang, Seginando Concepcion is closing in on his ultimate destination: Seeing his kids embark on their own voyages.

«Every single morning and every night at the cabin I send my prayers and thanks to God,» says Mr. Seginando Concepcion, cargo engineer on Clipper Eris. For 30 years, he has been sailing for Solvang, building one of the longest careers in the company.

«I started sailing back in 1990, first as a wiper, then motorman, before I was promoted to fitter on board Hera, Clipper Victoria and Clipper Eris», Seginando says. Having graduated as an associate marine engineer a few years earlier, the young fitter found himself captivated by the intricate gas systems onboard Solvang's carriers.

«I developed a strong desire to learn the process of cargo operation and maintenance. Luckily, the cargo engineer was willing to assist, as was my Norwegian captain and the chief engineer on board Clipper Eris. They all let me participate in cargo operations, and I learned as much as I could», Seginando says.

### Dream coming true

The young Seginando Concepcion's eagerness to develop as a seafarer was noticed by his superiors. Before the end of his contract as a fitter, Seginando was told by the

**SDG references**  
SDG 3: Good health and well-being  
SDG 8: Decent work and economic growth  
SDG 4: Quality education

**GRI: Global Reporting Index**  
403-4 Worker participation, consultation, and communication on occupational health and safety  
403-5 Worker training on occupational health and safety  
403-6 Promotion of worker health  
404-2 Programs for upgrading employee skills and transition assistance programs



*I got the job of my dreams. My long stay in Solvang has made a big impact on my life and my family, granting us a strong sense of purpose, as well as stability and security*

Seginando Concepcion

captain to go and complete his formal papers for the cargo engineer position, then return to Heros.

«I was emotionally overwhelmed when I rejoined Heros for the third time in 2001, as a cargo engineer. I will forever be grateful for that opportunity», Seginando admits.

The following two decades tell a story of ever deepening relations between the committed cargo engineer and his crew at Solvang.

«I got the job of my dreams. My long stay in Solvang has made a big impact on my life and my family, granting us a strong sense of purpose, as well as stability and security», Seginando says.

### Team efforts

As a cargo engineer on board Clipper Eris, Seginando ensures the operation of the cargo plant systems as well as the maintenance of the cargo cooling plant system on board one of the world's most sophisticated gas carriers. Reporting goes to the chief engineer for technical issues

and to the chief officer for operations. Seginando explains:

«A team working together and sharing the awareness will improve the efficiency of the vessel, as well as securing the environment due to less errors».

### Boarding the offspring

After sailing for 30 years with Solvang, Mr. Seginando Concepcion reckons that loyalty and hard work has paid off. If everything goes according to plan, he can look forward to retirement already in 2026.

«We feel like a family on the vessel, supporting each other. But at my real home, I will be surrounded by a loving wife, two sons and a daughter who has just graduated from university», the proud father says. He has good reason to enjoy, as his ultimate goals in life are being realized this year:

«My two sons have received contracts as sailors, and they are about to board their vessels for international routes».

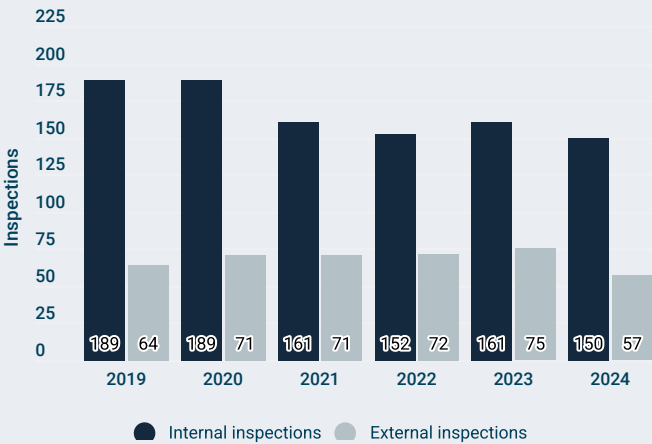
**ESRS/CSRD references**  
S3 9.1 Communities' economic, social and cultural rights  
S3 9.2 Communities' civil and political rights  
S3 9.3 Particular rights of indigenous communities  
S1 7.1.7 Work-life balance  
S1 7.1.8 Health and safety

# GOVERNANCE

“Any shipowner would respond to a world in motion. But Solvang also rigs our values and behaviour in a way to control all processes ourselves.”

CEO Edvin Endresen, Solvang ASA

### Inspections 2024



### Flag & Port State control 2024

18 DNV inspections  
0.06 non conformities on average

39 port state controls  
0.36 observations on average

Internal inspections follow the fleet size (5 per vessel).

External inspections by DNV and flag states are done in 5 years interval (3 per vessel).

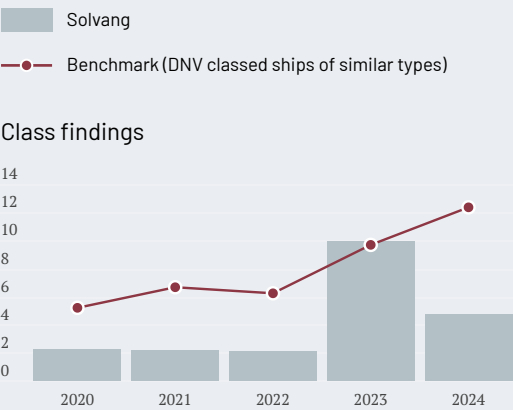
### Solvang procedure revisions 2024

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 2024.

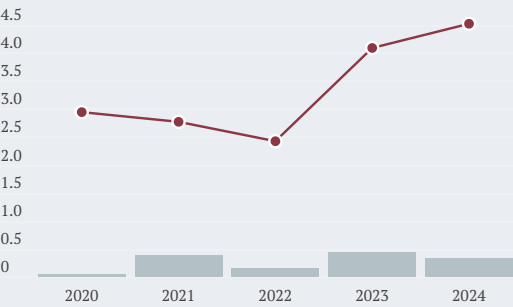
REASON	PROCEDURES
Periodical	6
Internal observations	13
External observations	3
New regulations	23
Comments from the crew	27
Comments from shore staff	40
Risk assessments	0
New procedure	11
TOTAL	123

SDG references  
SDG 16: Peace, justice and strong institutions  
SDG 17: Partnerships for the goals

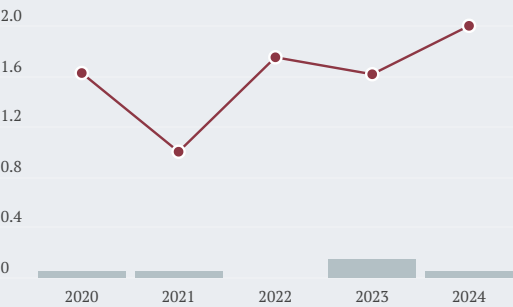
### Class benchmarks



### Class conditions



### Non-conformities



### PORT STATE CONTROL - DETENTIONS

	SOLVANG	BENCHMARK
2022	0	0,007
2023	0,023	0,023
2024	0	0,019

### PORT STATE CONTROL - DEFICIENCIES

	SELECTED FLEET	BENCHMARK
2022	0,592	0,678
2023	0,974	1,094
2024	0,289	1,245



# 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

**SDG references**  
SDG 8: Decent work and economic growth  
SDG 16: Peace, justice and strong institutions  
SDG 17: Partnerships for the goals

**GRI references**  
102-18 Governance structure  
102-22 Composition of the highest governance body and its committees  
102-23 Chair of the highest governance body

**ESRS/CSRD references**  
G1-11.1 Corporate culture  
G1-11.7 Stakeholder Engagement  
G1-11.91 Governance of Business Conduct  
G1-11.92 Reporting and transparency  
GOV-1: The role of the administrative, management and supervisory bodies

### Solvang ASA Executive Leadership



**Edvin Endresen**  
Chief Executive Officer



**Kim Larsen**  
Commercial Director



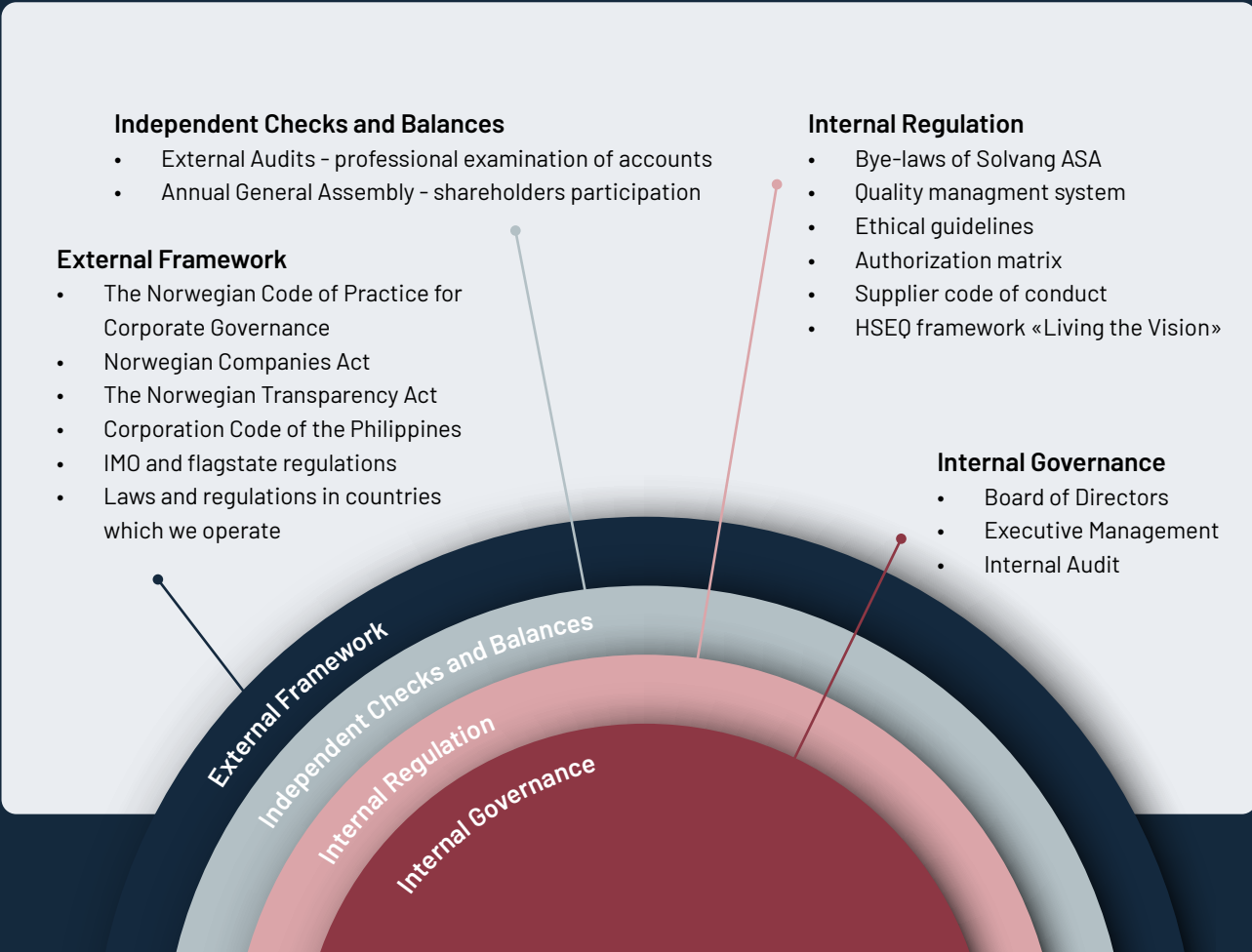
**Egil Fjogstad**  
Chief Financial Officer



**Tor Øyvind Ask**  
Fleet Director



**Kjetil Meling**  
HR Director





Corporate governance in Solvang

A BRAVE APPROACH

Solvang makes heavy eco investments without a regulatory clear path to return on the investment.

«Any shipowner would respond to a world in motion. But Solvang also rigs our values and behaviour in a way to control all processes ourselves. Values and behaviour which make it worthwhile to maintain a long-term relationship with us,» says Mr. Edvin Endresen, the CEO of Solvang.



Taking on climate risk

Being a long-term player, Solvang must constantly evaluate emerging risks and our own impact on the environment. In 2024, Solvang carried out a double materiality assessment (see page 22) following the EU’s corporate sustainability directive (CSRD). The assessment disclosed major climate risks connected to GHG emissions from fossil fuel operation.

«Nearly the entire world fleet operates on fossil fuels. Nobody is going to change for alternative fuels before the cost of harmful emissions forces them to change,» Mr. Endresen says.

Solvang currently invests around 500 MNOK to prepare seven newbuilding Panamax VLGCs for onboard carbon capture and storage (OCCS). In 2025, IMO may implement similar schemes for GHG intensity in shipping fuel, as the EU. In case such regulations are adopted, the value of alternative technology like the OCCS will be realized.

Quality and proper people

Solvang’s values of mutual respect, team spirit, and quality govern the organization onshore and offshore on the vessels. In times of uncertainty, the market has shown

commitment to Solvang’s stability, the all-encompassing quality, and the ensuing performance.

«We rarely start out discussions with our customers talking about the vessels. They’d rather want to know about the delivery, performance and transparency. They appreciate that we don’t make any shortcuts in delivering what we say. It means we have to prove our concept by staying focused every time – all the time» Mr. Endresen concludes.

**SDG references**  
SDG 9: Industry, innovation and infrastructure  
SDG 8: Decent work and economic growth

**GRI references**  
102-18 Governance structure  
102-22 Composition of the highest governance body and its committees  
102-23 Chair of the highest governance body

**ESRS/CSRD references**  
G1-11.1 Corporate culture  
G1-11.4 Political engagement and lobbying activities  
G1-11.5 Management of relationships with suppliers including payment practices  
G1-11.6.1 Prevention and detection including training, G1-11.6.2 Incidents

GOVERNANCE AND COMPLIANCE		
2025 target	2024 progress	2024 targets
42 technical inspections (FM) (2 per vessel)	40 technical inspections (FM)	44 technical inspections (FM) (2 per vessel)
105 internal audits (MS)[-] (5 per vessel)	110 internal audits (MS)[-] (5 per vessel)	110 internal audits (MS)[-] (5 per vessel)
Average number of observations Class 0	0,06	Average number of observations Class 0
Zero detention	0	Zero detention
Observation Port State < 0.3	0,36	Observation Port State < 0.5





Supply chain:

# REINFORCING OUR VALUES GLOBALLY

Solvang pays close attention to ethics and sustainability among our suppliers. This yielded solid results in 2024.



**TOOLS:** Two years ago, Solvang started developing our own tool for benchmarking and risk-management of supplier conduct. The tool contains a database which can cross-check companies, business conduct reports, contracts and other documentation. The system has been delivered by Profitbase and was operational throughout 2024. It has been able to provide Solvang with valuable insight into our supply chain. «We have identified supplier contracts as an area of focus, where Solvang can turn ethical requirements into real market behaviour», comments Supply Chain Manager Tanja Hunshamar at Solvang.

## Widened scope

Solvang is a member of Incentra, a Norwegian marine purchasing organization which promotes agreements with suppliers on behalf of ship and rig owners. In 2024, Mrs. Hunshamar at Solvang was appointed chair member of the organization's negotiation committee. «Solvang seizes the opportunity to advocate a wider scope for sustainability, ethics and transparency within the marine value chain», states Mrs. Hunshamar.

## Strategic importance

In 2024, Solvang reinforced our due diligence practices. Nearly 200 of Solvang's largest subcontractors in terms of sales were prompted to commit to Solvang's social

responsibility guidelines. «The digital survey is a quick task for our suppliers, and suppliers should by no means fear the consequences of not complying. In stead, it will pose an opportunity to improve - mutually», states Mrs. Hunshamar. One outcome of aligning suppliers with high standards of conduct is that Solvang attains strategic flexibility to actually improve the supply chain. One win has been to add human rights and environmental sustainability as key performance indicators.

## Supplier audits

As part of our corporate governance, Solvang carries out due diligence according to the Norwegian Transparency Act. This means auditing suppliers' actions within anti-bribery, responsible sourcing of minerals, ethical conduct in conflict areas or environmental performance. All documentation is being kept in the aforementioned database tool. Mandatory prequalification of third-party vendors ensures a fact-based, fair and consistent practice of evaluation at all times. Stakeholder dialogue is central to promoting Solvang's values of mutual respect, team spirit, and quality. «Solvang stands ready to assist all suppliers who share our objective of continuous improvement. This is all about mutually improving ourselves» states Mrs. Hunshamar.

**SDG references**  
SDG 16: Peace, justice and strong institutions  
SDG 17: Partnerships for the goals

**GRI references**  
308-1 New suppliers screened using environmental criteria  
307-1 Management approach  
204-1 Proportion of spending on local suppliers  
205-2 Communication and training about anti-corruption policies and procedures

**ESRS/CSRD references**  
G1-11.2 Protection of whistle-blowers  
G1-11.5 Management of relationships with suppliers including payment practices  
G1-11.6 Corruption and bribery  
G1-11.6.1 Prevention and detection including training  
G1-11.6.2 Incidents

## Facts: CSR guidelines

Solvang's ethical guidelines are based on the UN Global Compact, covering environment, corruption, workers rights and human rights. Aspiring suppliers should as a minimum have similar CSR targets and commit to the following:

### Human rights

- Support and respect the conservation of internationally recognized human rights.
- Ensure no complicity in the violation of human rights

### Working conditions

- Uphold freedom of association and ensure the right to collective bargaining (ref. ILO conv. 87+98)
- Abolish all forms of forced labour (ref. ILO conv. 29+105)
- Abolish child labour (ref. ILO conv. 138+182)
- Eliminate discrimination in the workplace (as per ILO conventions 100 and 111)

### Environment

- Support a precautionary approach to environmental challenges
- Promote increased environmental responsibility
- Promote eco-friendly technology

### Corruption

- Oppose all forms of corruption, including blackmail and bribery



EGYPT

NORWAY

U. K.

GIBRALTAR

ITALY

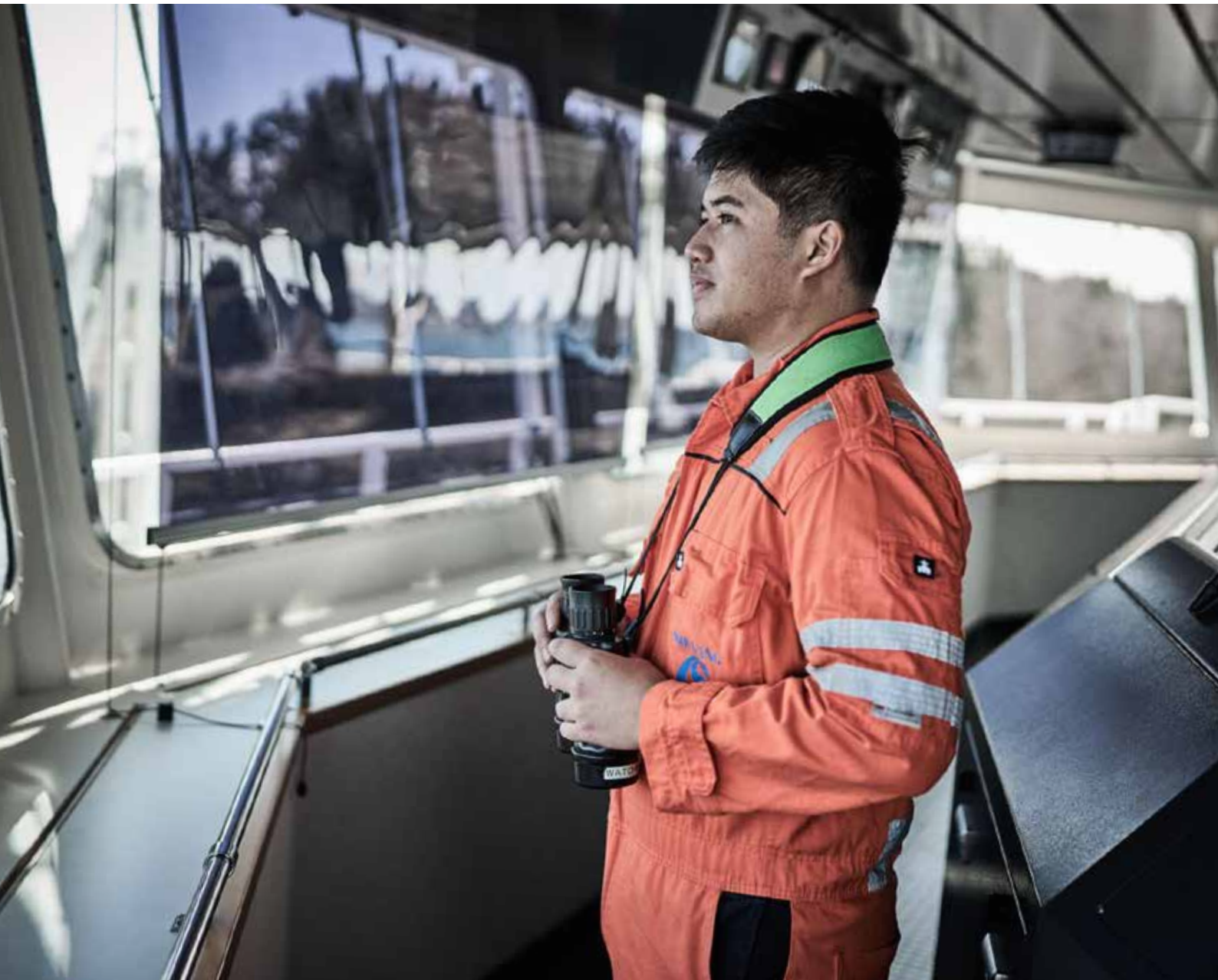
TAIWAN



SIRE 2.0 vetting:

# IT'S ALL ABOUT OUR PEOPLE

The first year of dynamic vessel inspections has demonstrated SIRE 2.0 as a game changer in building quality based on mutual trust between Solvang and the energy majors.



«Nobody hides the fact that we still have a way to go, onboard the vessels as well as onshore. But this is exactly the great advantage of SIRE 2.0: We get transparent about our improvement potentials and discover the opportunities to develop further», says Capt. Knut Vespestad, Vetting & Compliance Manager and Sr. Superintendent at Solvang.

OCIMF encourages operators to shift focus away from the number of observations and instead consider the overall assessment of the vessel and its crew. While Solvang supports this approach, we recognize the continued importance of performance measurement. With our participation in Intertanko, we have developed a benchmarking tool aimed at driving continuous improvement under the SIRE 2.0 regime

«Our internal event handling is being aligned with the oil companies' method and narrative as described in SIRE 2.0 or TMSA. As operators, we are being empowered to evaluate our own performance and identify areas of improvement. Our reply to observations will raise or lower the risk», the captain summarizes.

## New framework

SIRE 2.0 is the new framework for ship vetting managed by OCIMF, the Oil Companies International Marine Forum. SIRE 2.0 has replaced a previous paper checklist with a Compiled Vessel Inspection Questionnaire (CVIQ) - hooked up to the cloud from a tablet. During the inspection, the inspector raises observations live on site towards hardware, processes or humans involved. «The opportunity to add quality information in the form of explanations given from professionals to the inspector was not part of the old system. It adds a dynamic to SIRE 2.0 which builds trust between Solvang and the oil companies using the vetting institute», Mr. Vespestad asserts.

## «As expected»

SIRE 2.0 inspection applies a series of levels where the operator can be more or less in compliance with the extensive CVIQ regulations for the vessel. The inspector will judge «As expected» or «Exceeding expectations» when an inspection point is in due order, or he can write «Largely as expected» for a follow-up at a later inspection. If the observation falls into the category of «Not as expected», it clearly indicates where the vessel operator should shift his focus. «SIRE 2.0 is a game changer both for SIRE Submitting companies and inspectors, and for the vessel operators, and 2024 was a year of learning how to understand the new regime», Mr. Vespestad comments. Solvang considers SIRE 2.0 as a comprehensive and robust inspection system, well aligned with the objectives of mutual trust between operator, crew, inspectors and clients. «There is an increased focus on significant risks, and a recognition of the human element in comprehending and addressing safety on a ship», Capt. Vespestad asserts.

## Expanding regulations

Observations and certificates, photographs and other inspection material is being stored online at the OCIMF website, for access and collaboration by the parties. The inspection starts in the office where the Compiled Vessel Inspection Questionnaire (CVIQ) forms the basis of the onboard inspection. Transparency is high, and the risk of duplicate controls is lower. According to Capt. Vespestad, the development points in a clear direction. «Across our entire organization the element of trust and individual ownership is increasing. SIRE 2.0 is fundamentally about people. The period where inspections instilled anxiety in people, that time has ended.»



*There is an increased focus on significant risks, and a recognition of the human element in comprehending and addressing safety on a ship*

Capt. Knut Vespestad, Vetting & Compliance Manager and Sr. Superintendent at Solvang.



# PROACTIVE ANTI-CORRUPTION

Increased mutual trust and ethical conduct in global shipping are rewards from Solvang’s anti-corruption activities across ports and regions.

«Solvang has fostered a culture of reporting all incidents of attempted corruption, and to keep updated maps of high-risk areas», states Mr. Per-Øyvind Nedrebø, HSEQ and Performance Manager in Solvang.

The approach enhances transparency and allows Solvang to bring valuable documentation to the Maritime Anti-Corruption Network (MACN), where the company promotes mutual trust and ethical strategies in global shipping. According to Mr. Nedrebø, the culture of reporting and posting incidents serves as a training tool not only to the crew but the entire organization:

«Insight into concrete cases provides our crew with the skills and confidence to handle, prevent, and document corruption-related incidents effectively. To onshore staff, the proactive stance serves to enhance the company’s overall anti-corruption framework».

MACN’s global efforts aimed at reducing and eliminating corruption in the maritime industry match Solvang’s strategy. A cornerstone of this strategy is the principle that all stakeholders must collectively say “no” to corruptible demands. While this approach is highly effective when widely adopted, it requires industry-wide participation to truly succeed.

**Solvang’s membership of associations**  
Solvang is member of Norwegian Ship Owner Association, Maritimt Forum, MACN, Clean Shipping Alliance, Tidestalliansen, Incentra, and Intertanko.



*The culture of reporting and posting incidents serves as a training tool not only to the crew but the entire organization.*

Per-Øyvind Nedrebø, HSEQ and Performance Manager

## Solvang anti-corruption measures:

- Displaying anti-corruption posters in every captain’s office
- Training and awareness campaigns for crew and officers to handle corrupt demands
- Encouraging consistent reporting of corruption incidents
- Passing on observations data to the Maritime Anti-Corruption Network (MACN)

**SDG references**  
SDG 16: Peace, justice and strong institutions  
SDG 17: Partnerships for the goals

**GRI references**  
102-16 ETHICS&INTEGRITY: Values, principles, standards, and norms of behavior  
102-44 Key topics and concerns raised  
102-13 Membership of associations

**ESRS/CSRD references**  
G1-11.2 Protection of whistle-blowers  
G1-11.5 Management of relationships with suppliers including payment practices  
G1-11.6 Corruption and bribery  
G1-11.6.1 Prevention and detection including training  
G1-11.6.2 Incidents



## Sanctions policy

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.



# SOLVANG TOWARDS THE FUTURE

The IMO Net-zero Framework sets out mandatory emission limits and GHG pricing to establish a net-zero reality in shipping by 2050. Not legally binding yet, but the call is unmistakable.

Solvang's onboard carbon capture and well-to-wake GHG reduction is a good strategy, but it's not enough. The entire energy value chain must do their part of the job.





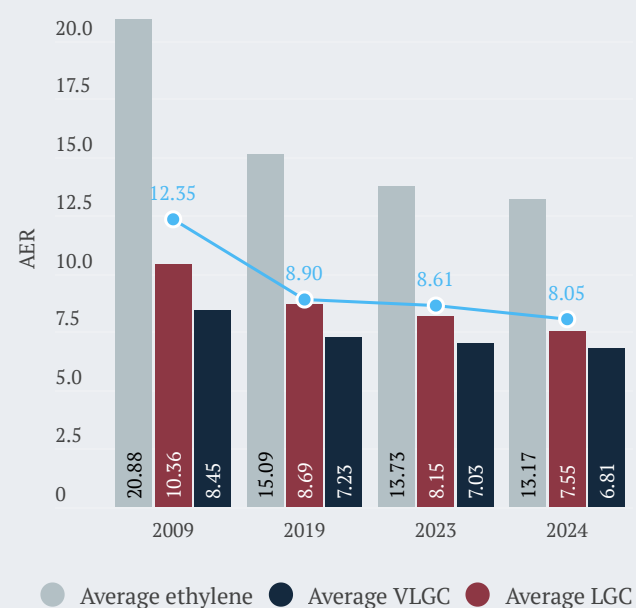
## PUSHING FOR GHG PENALTIES

The new GHG regulations from the EU and IMO announce a new era for global shipping. Solvang has carefully prepared for what is to come.

Solvang's fleet demonstrate the results of systematic environmental efforts through many years. This includes operations, design and technology. Our achievements in terms of reduced energy consumption and emissions correspond with the international strategy to mitigate climate changes. In 2023, IMO defined the targets to reduce emissions by 20 to 30 % by 2030, by 70 to 80 % by 2040, and to fully eliminate net greenhouse gas emissions by 2050. In the spring of 2025, IMO defined yearly limits of GHG intensity in shipping fuel. This is calculated well-to-wake, which is in according to Solvang approach to fuel an emissions. See "The well-to-wake principle", pages 36-37.

The fleet reduction in AER (annual efficiency ratio) from 2009 to 2024 is shown in the figure below, see page 32 for more details.

### Annual Efficiency Ratio development (AER)



### OCCS project

A central part of Solvang's future climate achievements is the innovative onboard carbon capture and storage technology. In 2024, an OCCS plant was installed on board Clipper Eris. See "From concept to reality", pages 38-39. Parties: Solvang ASA and Wärtsilä Norway AS, with support from MAN and SINTEF.

#### Goals:

- To demonstrate that CO<sub>2</sub> can be captured and stored as liquid CO<sub>2</sub> in deck tanks (achieved Q1, 2025);
- 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 CO<sub>2</sub>

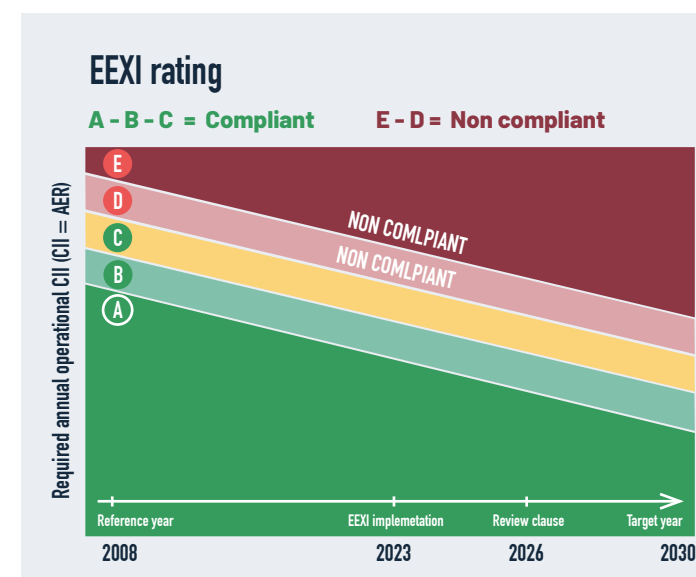
#### Scope:

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

- Testing of WESP unit (ongoing)
- Installing CO<sub>2</sub> absorber and stripper units and associated peripherals, (done Q4, 2024);
- Modifying the existing liquefaction system and deck tanks to accommodate liquefaction and storage of CO<sub>2</sub> (done Q4, 2024);
- Testing of the OCCS system to optimize the operation and gain operational experience (ongoing);
- Provide input to regulators for development of a coherent and practical set of rules for CCS onboard ships (ongoing).

## OUR TARGET FOR 2030

By 2030, Solvang will be fully compliant with AER for all vessels, while the GFI target level will depend on the availability of CCS and biofuel.



### Ethylene (E and H-class) vessels AER rating

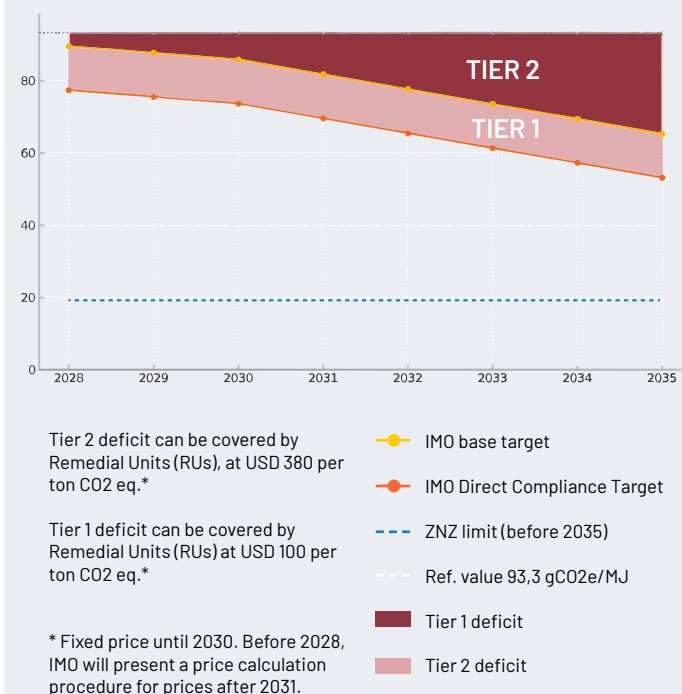
Solvang's average AER has improved from 13.73 in 2023 to 13.17 in 2024. This corresponds to an A/B. At sea the AER was 11.7 or an A rating, even for the two vessels that scored below CII compliance due to port operations. Five of eight vessels scored A or B, and one scored C. If corrected for port operations/idling, all vessels scored A or B.

Anticipating continuous 2 % reduction in target AER, and simulating E-class and modified H-class up to 2030, 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 8.1 to 7.5 from 2023 to 2024, or 7.1 if corrected for port operations and idling. Out of nine LGCs, three had a C rating, and six had B rating. The C-rating was due to planned dockings and trading patterns. Compared to the IMO 2019-2026 reduction target, the 7.5 value corresponds to a B-rating in 2025 and minimum compliance in 2030. Three vessels are scheduled for dry-docking in 2025, which will improve the AER rating. 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 modifications done on the LGC fleet, our LGC vessels will 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.

### GFI target levels



### VLGC fleet AER rating

The AER improves from 7.0 to 6.8 from 2023 to 2024, or 6.6 if corrected for port operations and idling. The results give a good C-rating for two vessels, and B rating for three vessels. Compared to the IMO 2019-2026 reduction target, the 6.8 value corresponds to a B/C. One VLGC was dry-docked in 2024, giving full effect in 2025. 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 2024 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 how IMO's new GHG regulations will play out, if finally adopted, both targets and limit values for all vessels would likely have to be re-calculated. Changes and amendments can be expected.

# OUTLOOK 2050

25 years from now, Solvang’s cargo operations will play a vital role for our clients worldwide. At the same time, net-zero GHG has moved from vision to reality by radical green measures in the 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 deliver in a well-to-wake perspective. All our newbuildings from 2013 on comply with our vision.

### Change of fuel

To comply with IMO GHG zero-emission regulations, we will not get around the need for a zero-carbon fuel. In a well-to-wake perspective, such a fuel is not available in 2025. Only tank-to-wake, where energy and cost intensive processing 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 other energy generation industries, such as oil or coal power plants.

### Electro-fuel

Artificial fuel processed from air, water, and renewable electricity. According to a recent study renewable electricity from clean sources will be limited for the next decades. In principle, the world’s deep sea shipping could use all the world’s renewable electricity to produce e-fuel with green ammonia. Without active contribution from other industries, it is hard to see how e-fuel could be available in amounts even close to sufficient.

### Biofuel

The availability of sustainable biofuel will be defining for the future fuel scenario in shipping. Biofuel is the only alternative able to compete effectively with a fully exhaust-cleaned fossil counterpart, combined with CCS.

### Carbon capture and storage

By 2050, Solvang holds necessary experience from onboard carbon capture and storage to effectively demonstrate a world-wide use of the technology. In combination with biofuel and/or electrofuel with CO2 permanently kept out of greenhouse gas systems, GHG output figures could turn negative. Another option is the aforementioned electro-fuel or e-fuel.

### The carbon offset scenario

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.

### Regulations prospect

The conditions for future ship design and fuels will be decided by rules and regulations not yet proposed or adopted. The industry expects tighter regulations on emissions to air other than CO2, particularly SOx, NOx, CO, THC, and particles. The future development will depend on a trade-off between fuel, engine and cleaning technology. There will be no fully clean fuel in a well-to-wake perspective, because all propellants require a form of processing. Also “clean fuel” will need cleaning.

### Clipper Future design

All newbuildings need the ability 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 a 100 % reduction by 2050 in a mixed scenario of carbon capture and e-fuel/biofuel, compared to 2008 annual GHG emissions. Solvang’s vessels will run OCCS,

## FUTURE FUEL SCENARIOS

### Example 1

<b>Today:</b> Conventional fuels	<b>Tomorrow:</b> Conventional fuels + CCS
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### Example 2

<b>Today:</b> Fuel oil/LSFO (SCR/EGR)	<b>Tomorrow:</b> Biofuel (fuel oil/MGO) or e-diesel
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### Example 3

<b>Today:</b> Dual fuel LPG/MGO (SCR/EGR)	<b>Tomorrow:</b> Biofuel (LPG/MGO) or E-LPG
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### Example 4

<b>Today:</b> Dual fuel LNG/MGO (catalyst + exhaust gas recirculation + LP-dual fuel)	<b>Tomorrow:</b> Bio-LNG/MGO or E-LNG
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### Example 5

<b>Today:</b> Dual fuel methanol / MGO (SCR/EGR/water in methanol)	<b>Tomorrow:</b> 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.



deliver fuel efficiency above 50 %, and have the option to modify for all fuels. The following examples illustrate that all foreseeable solutions today would be GHG-neutral when using biofuel or e-fuel, without modifications.

### Fuel specs

The specific choice of fuel for Clipper Future would be made upon evaluations of commercial operation, environment, technology, and operational expenses and revenues. More alternatives are expected to arrive, some radical, like wind assistance or air lubrication

of the hull. They should all be considered in due time. Currently, Solvang focuses on fuel optimization plus OCCS for optimal flexibility. In a 2050 positive scenario, given sufficient supply of GHG-free renewable electricity, we will deliver CO2 to the bunker barge, and in return receive e-fuel processed 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, optimal engine load and other measures.

<b>SDG references</b> SDG 9: Industry, innovation and infrastructure SDG 12: Responsible consumption and production SDG 17: Partnerships for the goals	<b>GRI references</b> 2-22 Statement on sustainable development strategy 2-23 Policy commitments 2-27 Compliance with laws and regulations	<b>ESRS/CSRD references</b> MDR-P: Policies adopted to manage material sustainability matters SBM-1: Disclosure of elements of strategy that relate to or impact sustainability matters
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# BOARD OF DIRECTOR'S REPORT



## 1. INTRODUCTION

2024 marks another strong financial year for the Solvang Group. With the drop in revenue and net earnings from 2023 mainly coming from fewer vessels in the fleet following sale of older tonnage. The market was good, although somewhat down from the record level seen during 2023 for the VLGC segment.

The Group recorded a profit before tax of USD 55.4 million against a profit of USD 74.7 million in 2023. Net Cash flow was negative USD 28 million compared to positive USD 34 million in 2023, where main difference is paid instalments to yard for newbuilds under construction. Tax expense was negative USD 0.3 million, and the Group had a profit after tax of USD 55.7 million against a profit of USD 75.3 million in 2023.

The board of directors proposes to pay dividends of NOK 2,- per share for 2024. The dividend level is based on strong results and a positive market outlook in the LPG segment, while also considering a significant capex commitment in 2025 for the new-build fleet on order.

## 2. OPERATIONS

The company's headquarter 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, are managed from the company's fully integrated shipping organisation.

The company operates and has ownership in 20 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 gases:

### 2.1 Semi-refrigerated / ethylene carriers

This segment includes semi-refrigerated ethylene carriers from 17,100 cbm – 21,000 cbm. The group has seven ships in this segment where the ships operate 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 – 60,000 cbm. The fleet consist of 8 LGC ships. All ships operate on TC of varying length.

### 2.3 VLGC

This segment is defined as fully refrigerated LPG ships of 78,000 – 84,000 cbm. Solvang has a total of 5 ships in this segment. The group has three Panamax VLGC ships with size between 78,000-80.000 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 Far East. All vessels are currently on contracts, three of the vessels on long term contract, while the other two are medium to short term contracts.

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

## 3. PROFIT

(Figures in parentheses refer to 2023)

Total income decreased from USD 255.6 million to USD 231.2 million. The decrease is mainly due to fewer vessels.

The group's result after tax was USD 55.7 million (USD 75.3 million). The result for the parent company was NOK 584.2 million whereof NOK 593.8 million was dividend received from subsidiary (NOK 491.9 million).

**GRI references**  
102-54 Claims of reporting in accordance with the GRI standards  
201-1 Direct economic value generated and distributed

3.1 Financial items

The group reported net financial items of USD -35.4 million (USD -36.0 million). The corresponding figure for the parent company was a result of NOK 600.1 million (NOK 486.7 million).

3.2 Liquidity and financial strength

At year-end, the group had liquidity consisting of cash totalling USD 41.8 million (USD 70.0 million). The corresponding figure for the parent company was NOK 361.5 million (NOK 602.7 million). For the group, total current assets at year-end were USD 72.8 million (USD 94.4 million), while current liabilities totalled USD 53.6 million (USD 120.9 million). Long-term liabilities and provisions totalled USD 459.9 million (USD 403.8 million). For the parent company, total current assets at year-end amounted to NOK 407.2 million (NOK 629.6 million), while short-term liabilities totalled NOK 355.9 million (NOK 875.5 million). The parent company’s long-term liabilities and obligations totalled NOK 2,964.2 million (NOK 2,537.6 million).

Net cash flow from operating activities was USD 94.9 million, compared to an operating profit of USD 145.9 million. The main difference between operating profit and cash flow from operating activities is due to interests and changes in working capital/accruals.

The group’s book equity totalled USD 528 million (USD 546 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 employed in a mix of long & short TC contracts as well as in the spot market. This is a result of a conscious 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 within the Ammonia market. Credit risk is considered to be limited. The company sees 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 position at the year-end.

4. ORGANISATION, HEALTH SAFETY AND THE ENVIRONMENT

4.1 Organisation

Both at sea and onshore, the company’s primary focus is to ensure continuity on the personnel side. The company strives to establish 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, 43% are women and 57% are men. 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’s qualifications, regardless of gender.

Solvang is an international company with 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 optimise the ships’ operations and to reduce emissions.

4.2 Health

The group has 47 onshore employees and around 750 sailing personnel. Working conditions on shore and on the ships are considered to be good. Sick leave on board the ships was 0.17%. The group had zero incidents that resulted in lost time in 2024. The target is always zero accidents, and the very low injury frequency can be attributed to a conscious attention to this area across the entire group.

Sick leave among the onshore employees was 3.0% in 2024. There were no incidents resulting in personal injury at the office in 2024.

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 in all relevant disciplines.

All of Solvang’s employees, including the Managing Director, have in 2024 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 in HSE, economic results and quality. The Incentive plan is set up with maximum achievement 25% of 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 that are 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 gases by sea entails little risk of emissions or leakage into the sea. Loading and unloading operations are conducted in closed systems, and strict quality and safety requirements reduce the risk of emissions to a minimum.

All 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 bunkers and lubricants and has through active measures been able to continue the positive trend achieved in recent years. We strive to be ahead of regulator’s implementation of new legislation for reducing all kind of emissions, among them CO2 and other threats to the environment. Our CCS project is an example of the latter. Please read more about this in the “Sustainability” section included in the annual report.

4.6 Safety

The company has strict quality and safety requirements, both on board the ships and within the onshore organisation. This is reflected in very good statistics for Lost Time Incident (LTI) injuries, with zero incidents in 2024 and only ten incidents in the entire period from 2014-2024, with around 4.2 million working hours per year the later years. This is further demonstrated in our good insurance statistics. In order to ensure that this positive development continues, the company invests significant resources in programmes for the continuous improvement of quality and safety on board and on land. Please read more about this in our “Sustainability in Solvang” section included in the annual 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 are within 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 report.

A statement regarding the Transparency Act is published on the company’s website. Please read more about the Transparency Act in the article “Reinforcing supply chain management” in our “Sustainability in Solvang” section included in the annual report.



5. FUTURE OUTLOOK

The segment for ethylene carriers remained strong during 2024 on record level of ethane export from US. The Solvang fleet is well employed on timecharter contracts, and the strong market was used to sell two of the 2007 built ethylene carries. The remaining six vessels have a good position and are attractive in the current ethylene and ethane market. The outlook seems positive in the short to medium term, but in petchem, the visibility of future levels is always difficult to predict. Particularly with regards to the large newbuild orderbook in the VLEC segment.

For the fully refrigerated vessels (VLGC and LGC), 2024 was another strong year, although a step down from the record levels seen in 2023. Into 2025 the underlying demand of the LPG market is still there, with the normal seasonal weakening during the first quarter. However, the trade war between US and China is not a normal situation, and with tariffs going to over 100%, the LPG flow from US to China has all but stopped. The shipping market dropped as an immediate consequence but has since bounced back to some degree. The need for LPG is the same, and the market is trying to find alternatives, and may have to move the product on different trade routes, increasing ton-mile for the global fleet. It is still to early to conclude, and Solvang is in a good position with high contract coverage and is not affected in any significant way by the current global trade disruptions.

The group had at year-end contract coverage of 86% for 2025 for the fully refrigerated fleet, with only three vessels coming open mid-2025.

Existing and future geopolitical risk in deep-sea shipping is always present, affecting shipping routes, supply chain and overall business operations. The unrest in the red sea makes for longer voyages on some of our vessels, and the ongoing trade war between US and China increase

uncertainty in the market. Although Solvang has good contract coverage, these events represent risks that are difficult to mitigate but are managed through good dialog with customers and making sure we are diversified in terms of trade areas.

6. ALLOCATION OF THE PARENT COMPANY’S PROFIT

Solvang ASA posted a result of KNOK 584,197

The Board of Directors proposes the following allocation:

Dividend:	KNOK	-186,291
To other equity:	KNOK	-397,906

At the year-end, the parent company’s equity amounted to KNOK 2,740,397 (KNOK 2,622,700).

7. SUBSEQUENT EVENTS

Clipper Hebe is agreed sold, and the vessel will be delivered to new owner during first quarter 2025.

The Group has purchased a 2019 built VLGC. The vessel was delivered late January 2025.

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

8. CONCLUSION

The Board of Directors and the management would like to thank all the employees, both at sea and on shore, 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 2024 and look forward to the same good cooperation in 2025.

Stavanger, 22nd May 2025

This document has been signed electronically.

Michael Steensland Brun  
Chairman

Ellen Solstad

Christian Frustøl

Edvin Endresen  
CEO

GRI references  
102-3 Location of headquarters  
102-4 Location of operations  
102-7 Scale of the organization  
102-20 Executive-level responsibility for economic, environmental, and social topics  
102-21 Consulting stakeholders on economic, environmental, and social topics  
102-6 Markets served



## CONSOLIDATED INCOME STATEMENT | SOLVANG GROUP

Amounts in USD 1 000

	Note	2024	2023
Operating revenue	5	229 953	263 062
Voyage expenses	5	-9 734	-21 672
Net gain from sale of fixed assets	15	10 985	14 148
Result from affiliated ship owning companies equity method	3,4	-452	-65
Management fee		407	99
<b>Total income</b>	5	<b>231 159</b>	<b>255 572</b>
Crewing expenses	10,12	42 772	43 665
Ship related operating expenses		33 012	33 644
Salaries and other personnel expenses onshore	10	7 821	7 922
Other operating expenses	10	1 683	1 948
<b>Total operating expenses</b>		<b>85 287</b>	<b>87 179</b>
<b>Operating result (EBITDA)</b>		<b>145 873</b>	<b>168 393</b>
Depreciation vessels	15	41 120	45 387
Depreciation other fixed assets	15	118	96
Depreciation right-of-use assets	16	371	371
Depreciation capitalized dry-docking	14	13 391	11 899
<b>Total depreciation and amortization</b>		<b>54 999</b>	<b>57 752</b>
<b>EBIT</b>		<b>90 873</b>	<b>110 641</b>
<b>Financial income and cost</b>			
Affiliated companies equity method	6	3	-16
Financial income	7,12	5 687	3 494
Financial expenses	8	-41 127	-39 444
<b>Net financial items</b>		<b>-35 438</b>	<b>-35 966</b>
<b>Ordinary result before tax</b>		<b>55 435</b>	<b>74 675</b>
Income tax expense	9	-248	-589
<b>Net profit / (loss) for the year</b>		<b>55 683</b>	<b>75 264</b>
<b>CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME/(LOSS)</b>			
<i>Profit / (loss) is attributable to:</i>			
Controlling Owners		52 469	69 534
Minority interest		3 214	5 729
Earnings of the period		55 683	75 264
<i>Items that will not be reclassified to profit or loss</i>			
Remeasurements pension liability		-89	-24
Tax effects of remeasurements pension liability		20	5
<i>Items that may be reclassified to profit or loss</i>			
Translation differences to presentation currency		-3 099	338
<b>Comprehensive income</b>		<b>52 515</b>	<b>75 583</b>
<i>Comprehensive income is attributable to:</i>			
Controlling Owners		49 301	69 854
Minority Interest		3 214	5 729
Total Comprehensive Income		52 515	75 583

## CONSOLIDATED BALANCE SHEET | SOLVANG GROUP

Amounts in USD 1 000

	Note	31.12.2024	31.12.2023
<b>ASSETS</b>			
<i>Fixed Assets</i>			
<b>Tangible fixed assets</b>			
Right-of-use assets	16	689	1 060
Vessels	15	792 551	900 499
Newbuild contracts	15	44 467	0
Capitalized dry-docking	14	52 134	48 635
Office equipment, furniture etc.	15	325	331
<b>Total tangible fixed assets</b>		<b>890 166</b>	<b>950 525</b>
<b>Financial fixed assets</b>			
Investments in affiliated ship owning companies equity method	3,4	31 667	15 970
Investments in other affiliated companies	6	25	23
Loan to affiliated ship owning companies equity method	12,17	21 392	10 696
Other shares		2	2
<b>Total financial fixed assets</b>		<b>53 085</b>	<b>26 691</b>
<b>Total fixed assets</b>		<b>943 251</b>	<b>977 216</b>
<i>Current Assets</i>			
<b>Bunkers / lubricant oil etc.</b>		<b>3 141</b>	<b>2 691</b>
<b>Receivables</b>			
Accounts receivable	17	4 234	10 306
Other short term receivables	12,13,17	23 539	11 393
<b>Total receivables</b>		<b>27 773</b>	<b>21 699</b>
Cash and bank deposits	13	41 837	69 969
<b>Total current assets</b>		<b>72 752</b>	<b>94 359</b>
Assets classified as held for sale	15,20	25 792	0
<b>TOTAL ASSETS</b>		<b>1 041 795</b>	<b>1 071 575</b>



CONSOLIDATED BALANCE SHEET | SOLVANG GROUP

Amounts in USD 1 000	Note	31.12.2024	31.12.2023
EQUITY AND LIABILITIES			
Equity			
Paid-in capital			
Share capital	19	40 942	45 815
Share premium reserve		182 525	204 252
Total paid-in capital		223 467	250 067
Retained earnings			
Other reserves		72 509	49 077
Retained earnings		210 506	206 931
Minority interest		21 756	39 909
Total retained earnings		304 771	295 917
Total equity		528 238	545 984
Liabilities			
Provisions			
Pension liabilities	11	176	530
Deferred tax	9	16	374
Total provisions		192	903
Long term liabilities			
Long term debt to financial institution	18	441 613	381 121
Lease liabilities	16	375	793
Other long term liabilities	18	17 745	21 898
Total long term liabilities		459 734	403 812
Current liabilities			
Accounts payable		7 917	11 792
Tax payable	9	172	222
Public duties payable		1 064	1 138
Current portion of long term debt incl accrued interest	18	24 433	89 924
Current portion of lease liabilities	16	418	398
Other short term liabilities	5, 12	19 627	17 401
Total current liabilities		53 631	120 875
Total liabilities		513 557	525 591
TOTAL EQUITY AND LIABILITIES		1 041 795	1 071 575

Stavanger, 22nd May 2025  
This document has been signed electronically.

Michael Steensland Brun  
Chairman

Ellen Solstad

Christian Frustøl

Edvin Endresen  
CEO

CONSOLIDATED STATEMENT OF SHAREHOLDERS' EQUITY

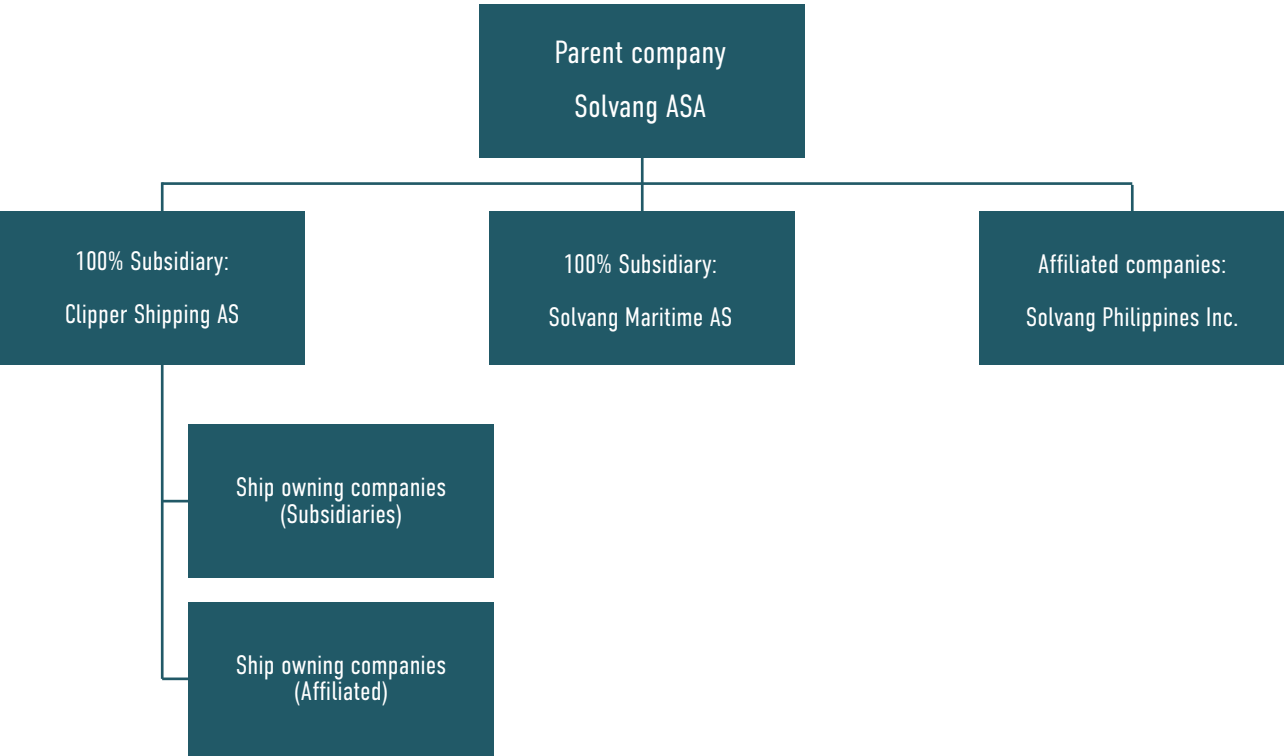
Amounts in USD 1 000	Share capital	Share premium reserve	Other reserves	Retained earnings	Minority interest	Total equity
2023						
Equity as of 31.12.2022	47 533	211 910	39 381	185 011	51 175	535 010
Profit/(loss) of the year				69 534	5 729	75 264
Remeasurements pension liabilities			-18			-18
Translation 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
2024						
Equity as of 31.12.2023	45 815	204 252	49 077	206 931	39 909	545 984
Profit/(loss) of the year				52 469	3 214	55 683
Remeasurements pension liabilities			-69			-69
Translation differences presentation currency	-4 874	-21 727	23 502			-3 099
Total comprehensive income	-4 874	-21 727	23 432	52 469	3 214	52 515
Paid dividend				-49 130		-49 130
Minority interest decrease of ownership				235	-23 722	-23 487
Minority share of capital increase in subsidiary					6 000	6 000
Minority share of capital decrease in subsidiary					-3 645	-3 645
Total changes in equity for the year	-4 874	-21 727	23 432	3 575	-18 153	-17 746
Equity as of 31.12.2024	40 942	182 525	72 509	210 506	21 756	528 238

CONSOLIDATED STATEMENT OF CASH FLOWS

Amounts in USD 1 000	Note	2024	2023
CASH FLOW FROM OPERATING ACTIVITIES			
Profit / (loss) before tax		55 435	74 675
Tax paid for the period	9	-147	-247
Loss/gain on sale of tangible fixed assets		-10 985	-14 148
Depreciation and amortisation	14,15,16	54 999	57 752
Difference between expensed pension and paid in/out	11	-442	-87
Result in affiliated ship owning companies	4	452	65
Result in other affiliated companies	6	-3	16
Changes in inventories, trade receivables and trade payables		1 746	3 525
Changes in other current balance sheet items		-10 609	4 773
Financial income - non cash	7	-1 153	-1 833
Financial expenses - non cash	8	5 557	3 070
Net cash flow from operating activities		94 851	127 562
CASH FLOW FROM INVESTING ACTIVITIES			
Purchase of tangible fixed assets	15,16	-1 850	-9 691
Proceeds from sale of tangible fixed assets	14,15	61 712	65 003
Payments newbuilding contracts	15	-44 467	0
Payments for capitalized periodic maintenance	14	-24 842	-43 450
Payments to ship owning affiliated companies	4,12	-26 844	-26 747
Net cash flow from investing activities		-36 291	-14 885
CASH FLOW FROM FINANCING ACTIVITIES			
Proceeds from other debt (long term)	18	109 500	67 500
Repayment of debt (long term)	18	-122 592	-80 725
Payments of lease liabilities	16	-449	-449
Payments for increased ownership in subsidiary		-23 487	-20 778
Minority interest share of capital changes in subsidiary		2 355	1 984
Dividend payment		-49 130	-45 815
Net cash flow from financing activities		-83 803	-78 284
Effect of exchange rate changes on cash and cash equivalents		-2 889	-152
Net change in cash and cash equivalents		-28 133	34 242
Cash and cash equivalents 01.01		69 969	35 728
Cash and cash equivalents 31.12		41 837	69 969

NOTES 2024 | 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 ship owning activities.

As of 31.12.24, Solvang’s fleet consists of 20 ships and seven newbuilding contracts for ships that carry liquid petrochemical gases, liquefied petroleum gases 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 2024.



The consolidated financial statement were 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 10th June 2025 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 exist 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 31 December 2024, Solvang ASA controls following subsidiaries:

- Solvang Maritime AS (100%)
- Clipper Shipping AS (100%)
  - PR Clipper Mars II DA (50%)
  - PR Clipper Sirius DA (99,375%)
  - PR VLGC DA (58,3%)
  - PR Clipper Neptun DA (60%)

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 ship owning 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 lease-back transaction**

When a sale and 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 and 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 and lease back 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 2024 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, 2024, 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 31.12.2024. For example:

- Amendments to IFRS 7 and 9 : Classification and measurement of Financial Instruments
- IFRS 18 : Presentation and disclosure in Financial Statements
- IFRS 19 : Subsidiaries without public accountability - Disclosures

Solvang is currently working to identify all impacts the IFRS 18 amendments will have on the primary financial statement and the notes to the financial statement.

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 2024.



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 31.12.2024 the liquidity reserves amounted to 4.0 % of the total balance sheet. The liquidity reserves inclusive of short term receivables amounted to 6.6 %. Current liabilities together with current portion of long term debt amounted to 8.4 % of the balance sheet. In addition the group has unused committed credit lines of USD 114,5 million. The liquidity risk is considered acceptable and is monitored continuously.

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	337
	10 % reduction of exchange rates	-337
Change of interest rates		Effect on profit or loss
Mortgage loans of vessels	100 basis points increase of interest rates	-4 660
	100 basis points reduction of interest rates	4 660

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 ITEMS

Company	Owner-ship % 31.12.24	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 31.12.2024
JustClipper AS (Group)	50,00 %	50,00 %	187	-265	-452	56 438	536	24 081	1 227	31 667
Total 2024			187	-265	-452	56 438	536	24 081	1 227	31 667
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

Company	Owner-ship % 31.12.24	Owner-ship % 31.12.23	2023					2024			
			Balance 01.01.2023	Share profit of the year	Other	Investments/ repayments/ sale	Balance 31.12.2023	Balance 01.01.2024	Share profit of the year	Investments/ repayments/ sale	Balance 31.12.2024
JustClipper AS (Group)	50.00 %	50.00 %	0	-65	-16	16,051	15,970	15,970	-452	16,148	31,667
Total				-65	-16	16,051	15,970	15,970	-452	16,148	31,667

JustClipper AS is located in Stavanger, Norway.  
Voting rights are according to pro rata ownership share.

Total payment to affiliated companies amounts to 26,8 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:  
Total income consist of operating revenue less voyage expenses.

	2024	2023
Ethylene	64,392	64,759
LGC	94,151	84,983
VLGC	61,676	91,648
<b>Total income</b>	<b>220,218</b>	<b>241,390</b>

As of 31.12.24 the Group had one vessel in the spot market. The other vessels are on shorter and longer Time Charter.

	2024	2023
Time charter contracts	225,593	230,967
Voyage contracts	4,360	32,096
<b>Total freight income</b>	<b>229,953</b>	<b>263,062</b>

### Largest customers

In 2024, Solvang Group had three customers which individually accounted for 10% or more of total revenues.  
The customers in 2024 individually contributing 10% or more of total revenues were:

- Geogas Trading SA
- Braskem Trading & Shipping B.V
- Philips66

### Expected future Time Charter revenues - undiscounted

Expected future time charter revenue from firm contracts from 1st January 2025 (undiscounted) has the maturity as follows:

	31/12/2024	31/12/2023
< 1 year	165,700	195,100
2 - 5 year	234,900	159,700
> 5 year	192,500	9,200
	<b>593,100</b>	<b>364,000</b>

The above table is based on the knowledge we had about market and contracts at year end 2024, 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 11.9 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 31.12.2023	Share profit of the year	Dividend	Translation	Outgoing balance 31.12.2024
Solvang Phillipines Inc	25 %	12	12	23	3	0	-1	25
<b>Total</b>		<b>12</b>	<b>12</b>	<b>23</b>	<b>3</b>	<b>0</b>	<b>-1</b>	<b>25</b>

Solvang Phillipines 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 2024, hence the amounts presented in this note is based on financial statement 2023.

## NOTE 7 – FINANCIAL INCOME

	2024	2023
Interest income	4 531	1 659
Currency gain	1 153	1 833
Other financial income	3	2
<b>Total</b>	<b>5 687</b>	<b>3 494</b>

## NOTE 8 – FINANCIAL EXPENSES

	2024	2023
Interest and banking expenses	35 375	36 183
Interest element of financial lease	1 015	1 138
Amortized borrowing cost	4 543	1 933
Other financial expenses	195	191
<b>Total</b>	<b>41 127</b>	<b>39 444</b>



## NOTE 9 – INCOME TAX EXPENSE

TAX EXPENSES FOR THE YEAR	2024	2023
Payable tax	64	90
Gross changes in deferred tax / deferred tax assets	-358	-747
Herof changes booked through other comprehensive income	20	5
Translation differences	26	64
<b>Total tax on income for the year</b>	<b>-248</b>	<b>-589</b>

SPECIFICATION OF TEMPORARY DIFFERENCES:	31.12.2024	31.12.2023
Long term temporary differences		
Tangible fixed asset	10	14
Pension liabilities	-176	-530
Gain-/loss account of entry into tonnage tax system	1,171	1,637
Other temporary differences	3,883	4,346
Tax loss carry-forward	-22,191	-14,030
<b>Total basis for deferred tax</b>	<b>-17,303</b>	<b>-8,563</b>

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

	31.12.2024	31.12.2023	Changes	
			2024	2023
Temporary differences				
Tangible fixed asset	2	3	-1	4
Pension liabilities	-39	-117	78	14
Gain-/loss account of entry into tonnage tax system	258	360	-103	-107
Other temporary differences	854	956	-102	-36
Tax loss carry-forward	-4,882	-3,087	-1,795	552
<b>Total deferred tax / tax asset (22%)</b>	<b>-3,807</b>	<b>-1,884</b>	<b>-1,923</b>	<b>427</b>
Deferred tax asset not recognised (22%)	-3,822	-2,257	-1,565	1,174
<b>Total recognised deferred tax (22%%)</b>	<b>16</b>	<b>374</b>	<b>-358</b>	<b>-747</b>
Change deferred tax recognized through profit and loss account			-338	-742
Other changes deferred tax (recognized through OCI)			-20	-5
<b>Total</b>			<b>-358</b>	<b>-747</b>

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	2024	%	2023	%
22% of ordinary income/loss before tax	12,196	22 %	16,428	22 %
22% effect of permanent differences related to shares	0	0 %	0	0 %
22% effect of other permanent differences	-12,455	-22 %	-17,020	-23 %
Translation differences	11	0 %	3	0 %
<b>Tax cost according to Profit &amp; Loss account</b>	<b>-248</b>	<b>0 %</b>	<b>-589</b>	<b>-1 %</b>

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 2024 under the tonnage tax regime, except for the tonnage tax itself which is reported as other operating expenses, 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:	2024	2023
Payable tax related to current year	64	90
Tonnage tax of current year	108	132
<b>Total payable tax</b>	<b>172</b>	<b>222</b>

## NOTE 10 – PAYROLL EXPENSES

PERSONNEL EXPENSES (Office only)	2024	2023
Salary	6 067	5 722
Employers tax	1 103	1 084
Pension cost	569	548
Other benefits	82	569
<b>Total personnel expenses onshore</b>	<b>7 821</b>	<b>7 922</b>

CREWING EXPENSES (European only)		
Salary	11 384	10 985
Other crew related expenses	700	619
<b>Total crew expenses (European only) *)</b>	<b>12 084</b>	<b>11 604</b>

\*) Crew expenses for Europeans are included in Crewing expenses in P&L.

Number of employees onshore	47	43
Number of crew (European only)	97	104

## REMUNERATION 2024 (in USD 1000)

KEY MANAGEMENT PERSONNEL	Salary	Bonuses	Pension costs	Other remuneration	Total remuneration
CEO	313	88	38	12	451

	2024	2023
<b>Board of Directors</b>		
Directors fee	42	38
<b>Total</b>	<b>42</b>	<b>38</b>

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 decided that all other employees should receive a bonus equal to one months salary. This bonus was paid out in December 2024.

Auditor	2024	2023
Remuneration to auditor consist of the following		
Audit mandatory by law	117	110
Other non-audit services	6	2
<b>Total</b>	<b>124</b>	<b>113</b>

## 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 2024 are MNOK 4.7.

### Non-funded plans

The company has an additional defined contribution plan for 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. In addition the company had a non-funded pension obligations for 1 pensioner which has been settled and paid out in Q2 2024.

### 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 assets are recognized in other comprehensive income.

The following Assumptions were used for non-funded plans:

	2024	2023
Discount rate	3,30 %	3,10 %
Expected salary increases	3,50 %	3,50 %
Rate of pension increases	1,90 %	2,25 %
Increase of National Insurance Basic amount (G)	3,25 %	3,25 %
Expected return on plan assets	3,30 %	3,10 %
Social Security Tax	14,10 %	14,10 %
Disability tariff	KU	KU
Mortality tariff	K2013	K2013

### Net periodic pension cost:

	Non-funded plans	
	2024	2023
Net interest expense /(income)	1	10
Social Security Tax		1
Net pension cost	1	11

### Present value of benefit obligation

	Non-funded plans	
	2024	2023
Present value of benefit obligation at January 1	338	403
Remeasurements	42	6
Net interest cost on benefit obligation	1	10
Pensions paid during the year	-381	-81
Present value of benefit obligation at December 31	0	338

### Status of pension plans reconciled to the balance sheet

	Non-funded plans	
	2024	2023
Present value of pension obligations	0	-338
Fair value of plan assets		
Funded status of plans at December 31.	0	-338
Social Security Tax	-176	-192
Net pension obligations as at December 31	-176	-530
	2024	2023
Total net pension liability non-funded and funded plans recognised at Dec. 31	-176	-530

### Expected payments related to the pension plans in 2025

The Group has no secured pension scheme. However, a payment of NOK 4.6 million is expected for the Defined-contribution Hybrid pension arrangement in 2025, 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 2025.

## 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	
	2024	2023	31.12.2024	31.12.2023
Management fee and technical fee (income)	407	99		
Interest income other related parties	2,597	196		
Crewing expenses other related parties	-24,701	-26,337		
Receivables other related parties			1,081	242
Long term receivables other related parties			21,392	10,696
Short term liabilities other related parties			-2	-468
Total	-21,696	-26,042	22,470	10,470

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

## NOTE 13 – BANK DEPOSIT

The group has the following restricted bank deposits

	2024	2023
Restricted bank deposit payroll withholding tax	484	506
Restricted bank deposit minimum liquidity	750	0
Restricted bank deposit pension liability (*)	0	386

(\*) 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:

	2024	2023
NOK	2 197	3 195
EUR	1 104	1 335
GBP	6	3
SGD	6	528
USD	38 469	64 758
Other	55	150
Total	41 837	69 969

### 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	
	2024	2023
Book value as of 01.01.	48 635	20 822
Additions during the year	24 842	43 450
Depreciation during the year	-13 391	-11 899
Reclassified as held for sale	-1 878	0
Book value sold/disposed asset	-6 074	-3 738
<b>Book value as of 31.12</b>	<b>52 134</b>	<b>48 635</b>

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 2025 for 4 vessels. 5 vessels completed their periodic maintenance in 2024.

## NOTE 15 – TANGIBLE FIXED ASSETS

	Vessels	Other fixed assets	2024	2023
Acquisition costs 01.01	1 071 958	1 513	1 073 471	1 126 173
Translation differences		-161	-161	-52
Additions during the year	1 709	140	1 850	9 691
Reclassified as held for sale	-33 722		-33 722	0
Disposals during the year	-63 770		-63 770	-62 341
<b>Acquisition costs 31.12</b>	<b>976 175</b>	<b>1 493</b>	<b>977 668</b>	<b>1 073 471</b>
Accumulated ordinary depreciation 01.01	171 459	1 182	172 641	142 486
Depreciation during the year	41 120	118	41 238	45 483
Accumulated depreciation sold/disposed assets	-19 147		-19 147	-15 291
Translation differences		-132	-132	-37
Reclassified as held for sale	-9 808		-9 808	0
Accumulated depreciation and write-off 31.12	183 623	1 167	184 791	172 641
<b>Book value as of 31.12</b>	<b>792 551</b>	<b>325</b>	<b>792 877</b>	<b>900 831</b>
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 two vessels during 2024. Net gain of the sale amounted to MUSD 11.

As of 31.12, one vessel are classified as held for sale in the balance sheet as the highly probable sale criteria of IFRS 5 was met. Ref also note 20.

**Newbuild contracts**

The group has two 88.000 cbm Panamax LPG carrier under construction at Hyundai Heavy Industries Co Ltd in Korea. The vessels are scheduled to be delivered in Q1 and Q2 2027.

Total contract value is USD 223.7 million.

	2024
Carrying value as of 01.01	0
Installment to Yard	44 732
Capitalized interest	0
Other additions during the year	-265
<b>Carrying value as of 31.12</b>	<b>44 467</b>

## 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 2024 amounts to KUSD 7.

**SPECIFICATION OF RIGHT-OF-USE ASSETS**

	2024	2023
Acquisition costs 01.01	2,914	2,914
<b>Acquisition costs 31.12</b>	<b>2,914</b>	<b>2,914</b>
Accumulated ordinary depreciation 01.01	1,854	1,483
Depreciations during the year	371	371
Accumulated depreciation and write-off 31.12	2,225	1,854
<b>Book value as of 31.12</b>	<b>689</b>	<b>1,060</b>

**SPECIFICATION OF LEASE LIABILITY**

	2024	2023
Book value as of 01.01.	-1,191	-1,570
Interest element of the lease liability	-51	-70
Payments for the principal portion of the lease liability	449	449
<b>Book value as of 31.12</b>	<b>-793</b>	<b>-1,191</b>

**Maturity of lease commitment as per 31.12**

	2024		2023	
	Minimum payment	Book value/ Net present value	Minimum payment	Book value/ Net present value
< 1 year	-429	-418	-468	-398
2 - 5 year	-368	-375	-870	-793
> 5 year				
	-797	-793	-1,337	-1,191

## 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:

	2024		2023	
	Non-current	Current	Non-current	Current
Financial assets at amortized cost				
Receivable related parties	21 392		10 696	
Financial assets at FVPL				
Deposit and guarantees				386 (ref note 13)
Prepayments and other assets				
Accounts receivable		4 234		10 306
VAT receivable		322		272
Accruals and prepayments		10 523		1 038
Insurance claim		2 083		4 398
Disputed tax claim		578		590
Other receivables		10 033		4 708
Total receivables	21 392	27 773	10 696	21 699

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 2024, 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, and has a final due date in May 2029.

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 378.4 million. Drawdown on loan is USD 263.8 million at 31.12.2024.

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.

	2024	2023
SECURED DEBT		
Long term debt to financial institution	446 743	386 157
Long term debt issuance cost	-5 129	-5 037
Long-term debt	441 613	381 121
Next year installment long term debt	16 853	81 870
Accrued interest long term debt	4 428	5 031
Current portion of long-term debt	21 280	86 900
<b>Total net debt as of 31.12</b>	<b>462 894</b>	<b>468 021</b>
Minority interest of book value as of 31.12.	41 858	63 311
COLLATERAL FOR DEBT	2024	2023
Vessels	792 551	900 499
Bank deposits	41 146	68 945
Bunkers, lubricant oil etc.	3 141	2 691
Accounts receivables	4 234	10 306
<b>Book value as of 31.12.</b>	<b>841 073</b>	<b>982 442</b>



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 01.01.23	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
<u>Non-cash changes</u>			
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
Proceeds from borrowings	109 500		109 500
Paid Long term debt issuance cost	-4 635		-4 635
Repayment of borrowings	-113 932	-4 025	-117 957
<u>Non-cash changes</u>			
Changes in accrued interests	-603		-603
Amortized debt issuance cost	4 543		4 543
Interest bearing debt as of 31.12.24	462 894	20 897	483 791

1) Other long term debt as of 31.12. consist of a failed sale-leaseback. Ref note 1. Imputed internal rate of return used is 4.25%.

Maturity overview of financial debt as of 31.12.

	Long term debt	Other long term debt	Total 2024	Total 2023
< 1 year	21 280	3 152	24 433	89 924
2 - 5 year	429 738	17 745	447 484	403 019
> 5 year	11 875		11 875	0
	462 894	20 897	483 791	492 943

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

NOTE 19 – EQUITY

The company's main shareholders as of 31.12.2024

Name of owner	31.12.2024		31.12.2023	
	# 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 %	17 459 350	18,74 %
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	5 698 741	6,12 %	4 242 523	4,55 %
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	0	0,00 %	1 456 218	1,56 %
Moredun Invest AS	1 364 320	1,46 %	1 364 320	1,46 %
Taif AS	1 308 608	1,40 %	1 308 608	1,40 %
Skagenkaien Eiendom 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 %	4 953 636	5,32 %
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 31.12.2024.  
The Chairman, Michael Steensland Brun, controls 1 364 320 shares in the company as of 31.12.2024.  
The CEO, Edvin Endresen, owns 142 299 shares in the company as of 31.12.2024.

Proposed dividend

The Board of Directors has proposed a dividend of NOK 2.00 per share for 2024. A total dividend of NOK 6 per share was paid in 2024 based on 2023 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 31.12.2024 Solvang ASA holds no treasury shares.

NOTE 20 – SUBSEQUENT EVENTS

Clipper Hebe is agreed sold, and the vessel will be delivered to new owner during first quarter 2025.  
  
The group has purchased a 2019 build VLGC. The vessel was delivered late January 2025. Price was MUSD 93.  
  
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	2024	2023
Management fee	2	89 492	86 739
<b>Total Operating income</b>		<b>89 492</b>	<b>86 739</b>
Salaries and other personnel expenses	3	84 019	83 695
Depreciation	4	1 264	1 009
Other operating expenses	3	22 827	25 240
<b>Total operating expenses</b>		<b>108 110</b>	<b>109 944</b>
<b>Operating result</b>		<b>-18 618</b>	<b>-23 205</b>
Recieved group contributions	2	1 671	1 060
Affiliated companies equity method	5	32	-165
Financial income	6,2	819 759	718 983
Financial expenses	7	-221 313	-233 229
<b>Net financial items</b>		<b>600 149</b>	<b>486 650</b>
<b>Ordinary result before tax</b>		<b>581 531</b>	<b>463 445</b>
Tax on ordinary result	8	-2 666	-6 218
<b>Net profit or loss for the year</b>		<b>584 197</b>	<b>469 663</b>
<b>Net profit or loss for the year is distributed as follows</b>			
Dividend		-186 291	-279 437
To/from other equity		-397 906	-190 226
<b>Total distributed</b>		<b>-584 197</b>	<b>-469 663</b>



BALANCE SHEET | SOLVANG ASA

Amounts in NOK 1 000	Note	31.12.2024	31.12.2023
ASSETS			
<i>Fixed Assets</i>			
<b>Intangible fixed assets</b>			
Deferred tax asset	8	12 471	9 583
<b>Total intangible fixed assets</b>		<b>12 471</b>	<b>9 583</b>
<b>Tangible fixed assets</b>			
Office equipment, furniture etc	4	3 700	3 369
<b>Total tangible fixed assets</b>		<b>3 700</b>	<b>3 369</b>
<b>Financial fixed assets</b>			
Investments in subsidiaries	9	2 860 869	2 860 869
Loans to group companies (Back-to-back)	2,10	2 964 236	2 537 613
Investments in affiliated companies	5	279	232
<b>Total financial fixed assets</b>		<b>5 825 384</b>	<b>5 398 714</b>
<b>Total fixed assets</b>		<b>5 841 555</b>	<b>5 411 666</b>
<i>Current Assets</i>			
<b>Inventories</b>			
		3 681	0
<b>Receivables</b>			
Accounts receivables	2	4 838	2 435
Short term receivables group companies	2,11	14 116	9 311
Other short term receivables	11	23 081	15 067
<b>Total receivables</b>		<b>42 035</b>	<b>26 813</b>
Cash and bank deposits	12	361 509	602 746
<b>Total current assets</b>		<b>407 225</b>	<b>629 559</b>
<b>TOTAL ASSETS</b>		<b>6 248 781</b>	<b>6 041 224</b>

BALANCE SHEET | SOLVANG ASA

Amounts in NOK 1 000	Note	31.12.2024	31.12.2023
EQUITY AND LIABILITIES			
<i>Equity</i>			
<b>Paid-in capital</b>			
Share capital	13	465 728	465 728
Share premium reserve		2 076 295	2 076 295
<b>Total paid-in capital</b>		<b>2 542 023</b>	<b>2 542 023</b>
<b>Retained earnings</b>			
Other equity		198 373	80 677
<b>Total retained earnings</b>		<b>198 373</b>	<b>80 677</b>
<b>Total equity</b>	13	<b>2 740 397</b>	<b>2 622 700</b>
<i>Liabilities</i>			
<b>Provisions</b>			
Pension liabilities	14	2 004	5 385
<b>Total provisions</b>		<b>2 004</b>	<b>5 385</b>
<b>Long term liabilities</b>			
Loan (back-to-back)	10	2 964 236	2 537 613
<b>Total long term liabilities</b>		<b>2 964 236</b>	<b>2 537 613</b>
<b>Current liabilities</b>			
Trade creditors		6 458	4 317
Current liabilities Group companies	2,12	323 542	569 570
Tax payable	8	0	0
Public duties payable		10 715	10 260
Dividend	13	186 291	279 437
Other short term liabilities		15 138	11 943
<b>Total current liabilities</b>		<b>542 145</b>	<b>875 526</b>
<b>Total liabilities</b>		<b>3 508 384</b>	<b>3 418 524</b>
<b>TOTAL EQUITY AND LIABILITIES</b>		<b>6 248 781</b>	<b>6 041 224</b>

Stavanger, 22nd May 2025  
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	2024	2023
CASH FLOW FROM OPERATING ACTIVITIES			
Profit / (loss) before tax		581 531	463 445
Taxes paid	8	0	0
Depreciation	4	1 264	1 009
Difference between expensed pension and paid in/out	14	-4 391	-665
Recieved group contributions		-1 671	-1 060
Result in other affiliated companies	5	-32	165
Changes in inventories, trade receivables and trade payables		-3 942	-3 776
Changes in other current balance sheet items		-7 499	33 608
Financial items		0	0
Net cash flow from operating activities		565 260	492 726
CASH FLOW FROM INVESTING ACTIVITIES			
Purchase of tangible fixed assets	4	-1 596	-1 251
Net cash flow from investing activities		-1 596	-1 251
CASH FLOW FROM FINANCING ACTIVITIES			
Change in outstanding accounts group companies		-246 028	303 570
Dividends paid	13	-558 874	-465 728
Net cash flow from financing activities		-804 901	-162 158
Net change in cash and cash equivalents		-241 237	329 316
Cash and cash equivalents 01.01		602 746	273 429
Cash and cash equivalents 31.12		361 509	602 746

NOTES 2024 | 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 2024.

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.

Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined using the first-in, first out (FIFO) method. Provisions for obsolescence is made. Net realizable value is the estimated selling price less applicable variable selling expenses.

Receivables

Receivables are valued 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 consists 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	
	2024	2023	31.12.2024	31.12.2023
Management fee (income)	89 492	86 739		
Interest subsidiaries (back-to-back)	220 682	225 751		
Dividend received from subsidiaries	593 762	491 946		
Group contribution received	1 671	1 060		
Receivables group companies			14 116	9 311
Liabilities group companies			-323 542	-569 570
Loan subsidiaries (back-to-back)			2 964 236	2 537 613
Net receivables other related parties			5 994	2 462
Liabilities other related parties			-28	-17
Total	905 606	805 498	2 660 776	1 979 799

NOTE 3 – PAYROLL EXPENSES

	2024	2023				
Personnel expenses						
Salary	65 180	60 454				
Employers tax	11 847	11 447				
Pension cost	6 110	5 785				
Other personnel expenses	882	6 009				
Total personnel expenses	84 019	83 695				
Number of employees	47	43				
Remuneration 2024						
	Director's fees	Salary	Bonuses	Pension costs	Other remuneration	Total remuneration
MANAGERS						
Edvin Endresen, CEO		3 364	944	411	127	4 845
BOARD OF DIRECTORS						
Michael Steensland Brun, Chairman	150					150
Jostein Devold, Board member (former)	52					52
Christian Frustøl, Board member	125					125
Ellen Solstad, Board member	125					125
Total remuneration	452	3 364	944	411	127	5 297

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 decided that all other employees should receive a bonus equal to one months salary. This bonus was paid out in December 2024.

AUDITOR		
Remuneration to auditor consist of the following	2024	2023
Audit mandatory by law	552	472
Other non-audit services	61	25
Total	613	498

NOTE 4 – TANGIBLE FIXED ASSETS

	Software and office equipment	Furniture and fixtures	Non depreciable assets	2024	2023
Acquisition costs 01.01	10 270	4 950	165	15 385	14 134
Additions during the year	734	862	0	1 596	1 251
Acquisition costs 31.12	11 004	5 812	165	16 981	15 385
Accumulated ordinary depreciation 01.01	7 476	4 540	0	12 017	11 007
Depreciation during the year	1 088	176	0	1 264	1 009
Accumulated depreciation and write-off 31.12	8 564	4 716	0	13 280	12 017
Book value as of 31.12	2 440	1 096	165	3 700	3 369
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 01.01.2024	Share of net profit	Dividend received	Translation differences	Closing balance 31.12.2024
Solvang Phillipines Inc	25 %	102	102	232	32	0	15	279
Total		102	102	232	32	0	15	279

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 2024, hence the amounts presented in this note is based on financial statement 2023.

NOTE 6 – FINANCIAL INCOME

	2024	2023
Interest income	1 731	1 280
Interest income back-to-back loan (ref note 10)	220 682	225 751
Dividend Norwegian shares (Subsidiary)	593 762	491 946
Currency gain	3 561	0
Other financial income	23	5
Total	819 759	718 983

NOTE 7 – FINANCIAL EXPENSES

	2024	2023
Interest and banking expenses	-6	156
Interest loan (back-to-back) ref note 10	220 682	225 751
Currency loss	0	6 992
Other financial expenses	637	329
Total	221 313	233 229



NOTE 8 – TAX

		2024	2023
Ordinary income/loss before tax		581 531	463 445
Permanent differences related to shares		-593 762	-491 946
Permanent differences		146	73
Differences related to equity method		-32	165
Changes in temporary differences		-4 368	-841
<b>Net taxable income/loss</b>		<b>-16 485</b>	<b>-29 105</b>
<b>Tax Payable</b>	<b>22 %</b>	<b>0</b>	<b>0</b>
<b>Tax expenses for the year</b>			
Tax Payable		0	0
Gross changes in deferred tax / deferred tax assets		-2 888	-6 271
Deferred tax of remeasurement pensions recognized in equity		222	53
<b>Total tax on income for the year</b>		<b>-2 666</b>	<b>-6 218</b>
<b>Specification of temporary differences:</b>			
<b>Long term temporary differences</b>			
Tangible fixed asset		117	140
Pension liabilities		-2 004	-5 385
Tax loss carry-forward		-54 800	-38 315
<b>Total</b>		<b>-56 687</b>	<b>-43 559</b>
<b>Deferred tax / deferred tax assets</b>	<b>22 %</b>	<b>-12 471</b>	<b>-9 583</b>
<b>Reconciliation tax expenses for the year</b>			
22% of ordinary income/loss before tax		127 937	101 958
Changes related to equity method		-7	36
22% effect of permanent differences related to shares		-130 628	-108 228
22% effect of other permanent differences		32	16
<b>Tax cost according to Profit &amp; Loss account</b>		<b>-2 666</b>	<b>-6 218</b>

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
<b>Total Subsidiaries</b>						<b>2 860 869 006</b>

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 31.12.2024 is MUSD 128.5. 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, and has a final due date in May 2029. 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 378.4 million. Drawdown on loan is USD 263.8 million at 31.12.2024. 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	3 001 378	-3 001 378
Capitalized borrowing costs	-37 143	37 143
Total	2 964 236	-2 964 236

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 5,344,114,-.

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 2024, Solvang ASA had a net deposit in the cash pool. Ref below.

Cash and bank deposits can be divided as follows:

	2024	2023
Company's own deposit in Cash pool	31 631	23 701
Subsidiaries deposit in cash pool (*)	323 092	569 570
Net deposits outside the cash pool	6 786	9 475
Total Cash and bank deposits	361 509	602 746

\* 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 31.12.2023	465 728	2 076 295	80 677	2 622 700
Profit / loss of the year			584 197	584 197
Translation differences (note 5)			15	15
Remeasurement pension liability (net after tax)			-788	-788
Additional dividend paid out current year			-279 437	-279 437
Dividend			-186 291	-186 291
Equity as of 31.12.2024	465 728	2 076 295	198 373	2 740 397

Treasury Shares

As of 31.12.2024 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 31.12.2024

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	5 698 741	6,12 %
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 %
Moredun Invest AS	1 364 320	1,46 %
Taif AS	1 308 608	1,40 %
Skagenkaien Eiendom 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 31.12.2024.

The Chairman, Michael Steensland Brun, controls 1,364,320 shares in the company as of 31.12.2024.

The CEO, Edvin Endresen, owns 142,299 shares in the company as of 31.12.2024.

Proposed dividend

The Board of Directors has proposed a dividend of NOK 2.00 per share for 2024. A total dividend of NOK 6,- per share was paid in 2024 based on 2023 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 2024 are 4,655,409, -.

### Non-funded plans

The company has an additional defined contribution plan for CEO, which are not covered by the general pension plan. In addition the company had a non-funded pension obligations for 1 pensioner which has been settled and paid out in Q2 2024.

### 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:

	2024	2023
Discount rate	3,30 %	3,10 %
Expected salary increases	3,50 %	3,50 %
Rate of pension increases	1,90 %	2,25 %
Increase of National Insurance Basic amount (G)	3,25 %	3,25 %
Expected return on plan assets	3,30 %	3,10 %
Social Security Tax	14,10 %	14,10 %

### Net periodic pension cost:

	Non-funded plans	
	2024	2023
Benefits earned during the year		
Interest cost	7	106
Social Security Tax	1	15
<b>Net periodic pension cost</b>	<b>8</b>	<b>121</b>

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

	2024	2023
Net actuarial gains/losses 01.01	-5 481	-5 294
Current year actuarial gains/losses	-1 010	-239
Tax	222	53
<b>Net actuarial gains/losses 31.12</b>	<b>-6 269</b>	<b>-5 481</b>

### Status of pension plans reconciled to the balance sheet

	Non-funded plans	
	2024	2023
Present value of pension obligations	0	-3 438
Fair value of plan assets	0	0
Funded status of plans at December 31.	0	-3 438
Social Security Tax	-2 004	-1 947
<b>Net pension liability recognised at December 31.</b>	<b>-2 004</b>	<b>-5 385</b>

## 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 2024, 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 2024, 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 2024, 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 2024, 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 appear 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.





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.

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, 22 May 2025  
PricewaterhouseCoopers AS

  
Gunnar Slettebø  
State Authorised Public Accountant

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<b>Recycling</b>	Vessel Recycling Policy	NIS Flag State requirements
<b>Community engagement</b>	How we contribute to social welfare, jobs and stability.	
<b>Health and safety</b>	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
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# GLOSSARY

Frequently used terms and abbreviations

## OPERATIONAL GLOSSARY

### AER

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

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

### Dry-docking

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

### EEXI

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

### GRI

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

### LTI

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

### CSR

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

### CSRD

Corporate Sustainability Reporting Directive is the EU's directive for ESG reporting and alignment of sustainability policies, actions and targets for European companies.

### EEDI

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

### ESG

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

### 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.

### HSEQ

Health, safety, environment and quality.

### (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.

### EEOI

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

### GHG

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

### KPI

Key Performance Indicator.

## 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.

### 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.

### 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.

## 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.

### SOFR

Secured overnight financing rate data (cash-borrowing cost measure)

### CoA

Contract of Affrayment. 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.

### Spot rate

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

### Freight rate

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

### 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.





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