

### Disclaimer

This presentation does not contain or constitute an offer of securities for sale or an invitation or inducement to invest in securities in France, the United States or any other jurisdiction.

It includes only summary information and does not purport to be comprehensive. No representation, warranty or undertaking, express or implied, is made as to, and no reliance should be placed on, the accuracy, completeness or correctness of the information or opinions contained in this presentation. None of GTT or any of its affiliates, directors, officers and employees shall bear any liability (in negligence or otherwise) for any loss arising from any use of this presentation or its contents. GTT is under no obligation to update the information contained in this presentation.

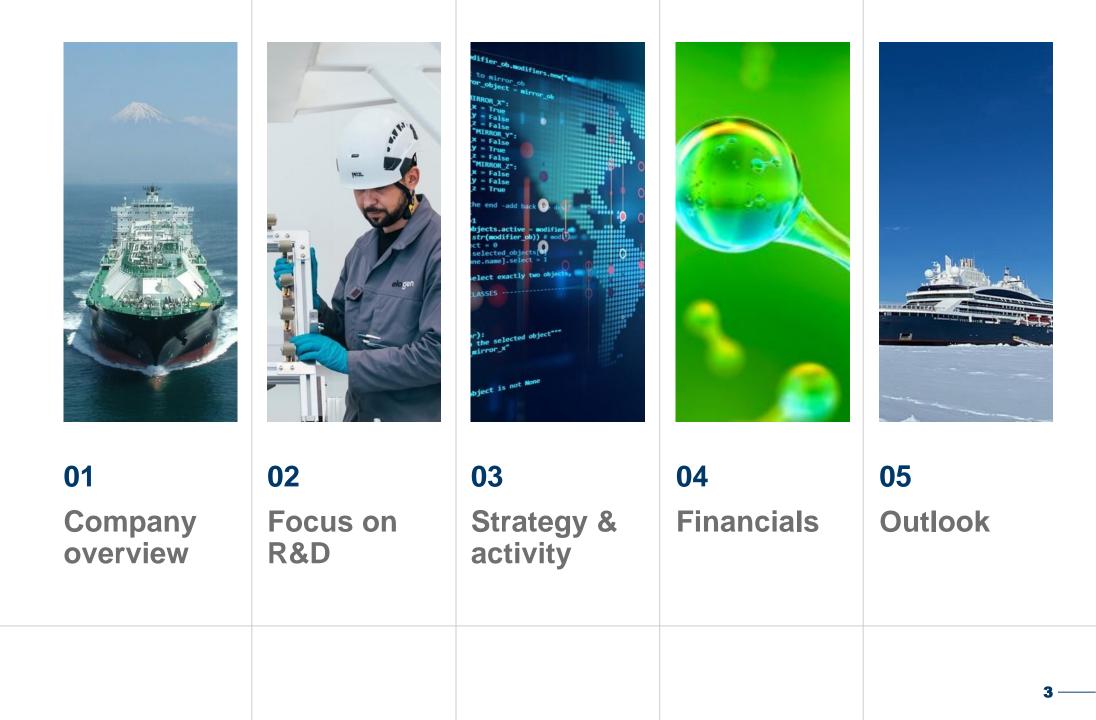
The market data and certain industry forecasts included in this presentation were obtained from internal surveys, estimates, reports and studies, where appropriate, as well as external market research, including Poten & Partners, Wood Mackenzie and Clarkson Research Services Limited, publicly available information and industry publications. GTT, its affiliates, shareholders, directors, officers, advisors and employees have not independently verified the accuracy of any such market data and industry forecasts and make no representations or warranties in relation thereto. Such data and forecasts are included herein for information purposes only.

Any forward-looking statements contained herein are based on current GTT's expectations, beliefs, objectives, assumptions and projections regarding present and future business strategies and the distribution environment in which GTT operates, and any other matters that are not historical fact. Forward-looking statements are not guarantees of future performances and are subject to various risks, uncertainties and other factors, many of which are difficult to predict and generally beyond the control of GTT and its shareholders. Actual results, performance or achievements, or industry results or other events, could materially differ from those expressed in, or implied or projected by, these forward-looking statements. For a detailed description of these risks and uncertainties, please refer to the section "Risk Factors" of the Document d'Enregistrement Universel ("Universal Registration Document") registered by GTT with the Autorité des Marchés Financiers ("AMF") on April 25, 2022 and the half-yearly financial report released on July 28, 2022, which are available on the AMF's website at www.amf-france.org and on GTT's website at www.gtt.fr . GTT does not undertake any obligation to review or confirm analysts' expectations or estimates or to release publicly any revisions to any forward-looking statements to reflect events that occur or circumstances that arise after the date of this document, unless required by law or any applicable regulation.

The forward-looking statements contained in this presentation are made as at the date of this presentation, unless another time is specified in relation to them. GTT disclaims any intent or obligation to update any forward-looking statements contained in this presentation. By attending this presentation and/or accepting this document you agree to be bound by the foregoing limitations.



GTT

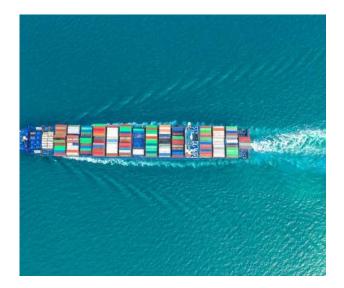


## Company overview

GTT



## GTT Group: Technology for a sustainable world



### **Our Conviction**

Technology is the most efficient enabler of the energy transition

- PEM electrolysers
- Carbon capture
- E-fuels, ...



### **Our Mission**

Conceive cutting-edge technological solutions to help building a sustainable world



### Our Key Assets

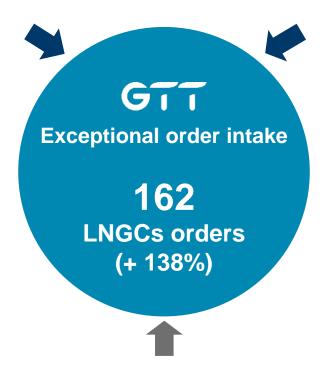
- Human capital: unique combination of skills (+600 employees)
- Intellectual capital: dynamic IP culture
- Financial strength



## GTT's excellence is central under the current energy crisis

### 2022 European energy crisis

- **Securing** energy supply in the short term (LNG eq.120 Mtpa to be replaced)
- Diversification of energy supply sources
- Ambition to achieve energy sovereignty



### A fast-evolving LNG eco-system

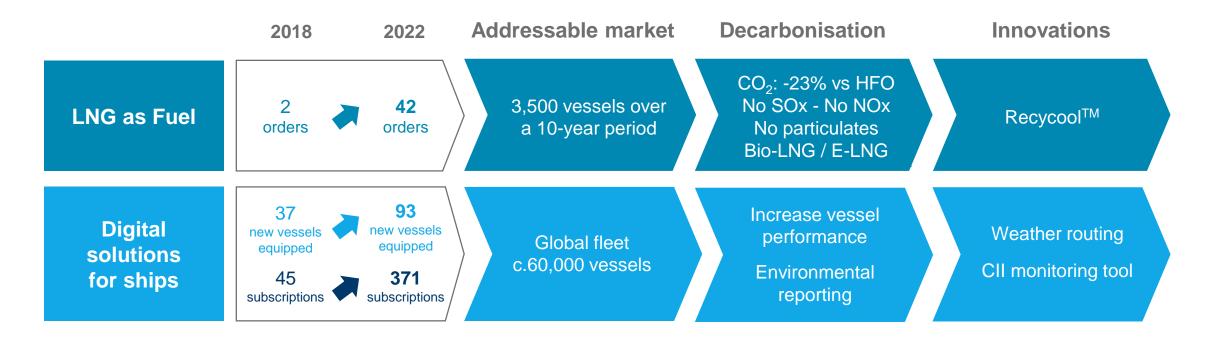
- **+45%** shipyards capacity
- 4 new active Chinese shipyards
- New LNG importing facilities in Europe (FSRUs)
- More FIDs to come in 2023

Know how / Zero default Reliability / Reactivity Full assistance & support to new shipyards



## Developing adjacent technological solutions for the acceleration of maritime industry's decarbonisation

#### LEVERAGING ON GTT'S TECHNOLOGICAL EXPERTISE





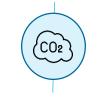
## Anticipating & enabling a net-carbon future





Elogen: designing the most efficient electrolyser and getting ready for mass production
LH<sub>2</sub> carrier project





Ammonia-ready containment systemsCarbon capture systems dedicated to vesselsAnd more, through minority stakes in innovative companies

GTT is getting ready for 2030 and beyond



## ESG: becoming a strong sustainability partner for our stakeholders

### A SUSTAINABILITY ROADMAP BASED ON THREE PILLARS



## 1. Sustainability starts with us

- Priority to safety
- Gender equality
- Retaining talent



### 2. Innovation opportunity R&D increasingly

focusing on zero carbon solutions

## C T

## 3. Responsible business

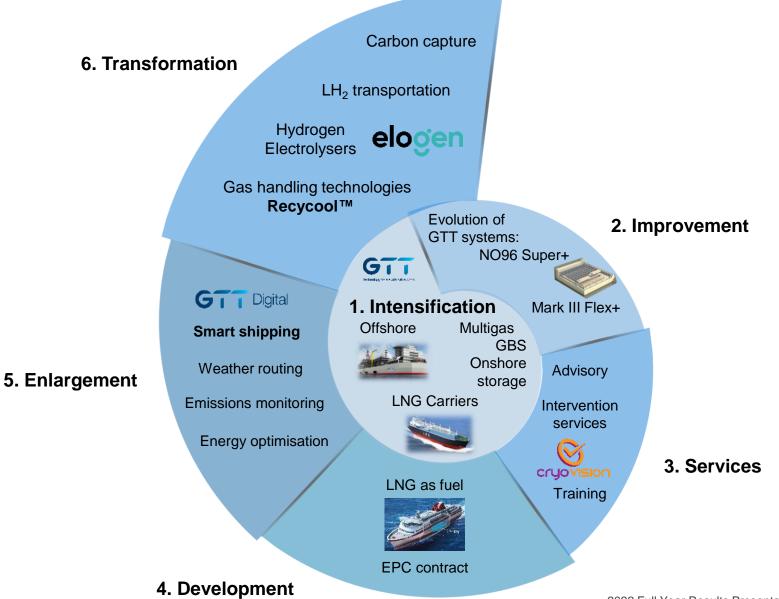
Approval to be requested from SBTi for GTT's **emission reduction targets** (Scope 1, 2 & 3)

## 2022 achievements: strengthening ESG Governance

- Strategic Committee supervising sustainability policy and targets
- Anti-corruption (renewal of ISO 37001 certification)
- CDP Recognition of GTT's climate efforts: B rating in 2022
- All GTT's indirect emissions (Scope 3) screened in 2022



## **GTT: Towards a zero-carbon future**

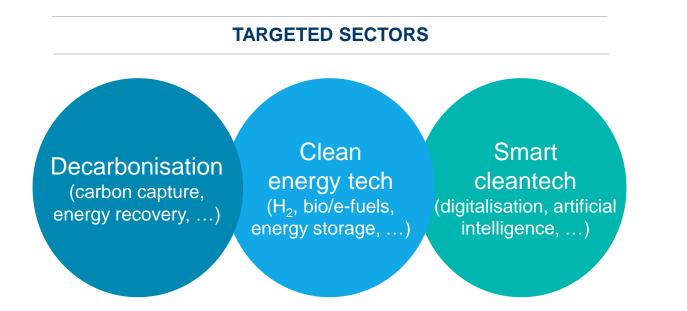


GTT

### **GTT Strategic Ventures**

Structure dedicated to **minority investments** in technology start-ups whose innovations have the potential to contribute to the Group's strategic roadmap

Named GTT Strategic Ventures, the structure has a budget of €25 million



### **First investments**

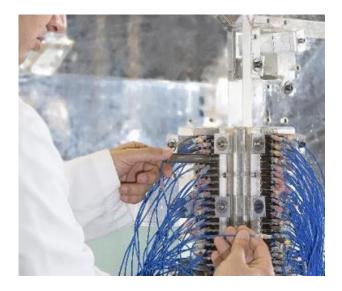
- GTT's minority investment in Tunable, a Norwegian specialist in multi-gas & emission analysers, announced in September 2022
- At the end of December 2022, GTT also took a minority position in Sarus, a French energy transition tech that has designed a system to recover and reuse energy

## Focus on R&D

Gīī



### R&D and Innovation At the core of the GTT group



~10% of revenues over the last 10 years on average
160+ employees focus on R&D



1<sup>st</sup> **place** of mid-size companies for patent applicants at the INPI, for the third consecutive year

**2 836 active patents**, 61 new patents in 2022



60+ ongoing R&D projects Involvement in innovation programs, GTT Group Innovation Challenge



## Core Business Innovation Focus on three-tank LNGC

#### AN INNOVATIVE DESIGN OFFERING KEY ADVANTAGES FOR STAKEHOLDERS COMPARED TO THE CONVENTIONAL FOUR-TANK DESIGN

### **Shipyards**

- Savings
- Building time reduction

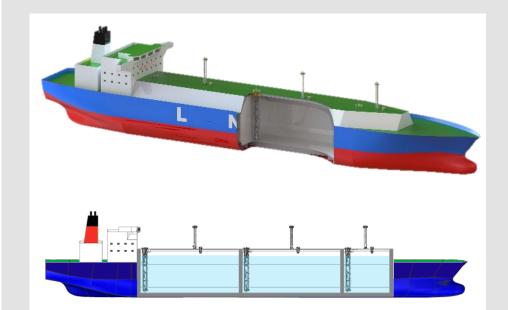
### Shipowners

- Savings
- Capex
- Delivery time reduction

### Charterers

 Improved BOR performance;
 i.e. lower opex and CO<sub>2</sub> emissions

DNV and BV have issued an Approval in Principle for this innovative LNG carrier design for the Mark III and NO96 technologies





## Zero-Carbon Solutions Innovation Important milestone in LH<sub>2</sub> transportation

**Cooperation agreement with Shell** 



### **DNV** has issued 2 Approvals in Principle for:

- the **design of a membrane** type containment system for liquefied hydrogen
- the preliminary concept design of a LH<sub>2</sub> carrier (10k)

Paving the way for the next stages of the project Development by GTT of a  $LH_2$  carrier design as well as an  $LH_2$  cargo containment system





## Zero-Carbon Solutions Onboard Carbon Capture: MERVENT 2025<sup>(1)</sup>

Project: design, build and operate, by 2025, the first commercial container ship with hybrid wind-assisted and synthetic fuel propulsion

### GTT contribution to the project:

- Conception of an innovative system for CO<sub>2</sub> capture with prototype and testing (on shore and at sea)
- Contribution of **OSE Engineering** for the optimisation of the various energy systems in real time

**Objective: reduce by 50% CO<sub>2</sub> emissions** compared with similar vessels with standard propulsion



Next generation of a low carbon container ship



## Zero-Carbon Solutions Development of hydrogen engine

HyMot consortium project: intensify research on the development of a hydrogen engine for lightweight utility vehicles with the support of ADEME<sup>(1)</sup>

### **OSE Engineering contribution to the project:**

- · Characterisation of users and uses of lightweight utility vehicles
- Simulation of a virtual fleet of vehicles
- Realisation of a synthesis of the polluting emissions and the calculation of the Total Cost of Ownership of the vehicle

Objective: offer an alternative to low-carbon mobility





## R&D and Innovation Roadmap

Core Business	<b>Further reducing LNGC CO<sub>2</sub> footprint</b> Enabling better energy efficiency and reducing vessel construction & operating costs	Improvement of containment system performance         3-tank design         GTT Next1
LNG as Fuel	Offering the best technologies for alternative fuels Enabling decarbonisation of the maritime industry, address new vessel segments	Recycool     Onboard Carbon Capture       VLCC     PCTC
<b>Digital</b> solutions	Designing new digital solutions dedicated to the maritime industry Offering cutting-edge monitoring & optimising solutions	Weather routing       Maintenance optimisation solution         Emission measurement       Turnkey solutions
Zero Carbon Solutions	<b>Preparing today the solutions</b> <b>of tomorrow</b> Enabling the evolution of the energy mix	LH2 carrier basic design       LH2 cargo containment system         NH3 containment systems

18 -

# Strategy and activity

LNG CARRIERS AND OTHER CORE APPLICATIONS

GTT



## A combination of growth drivers will boost LNG Carrier demand



**LNG Carriers** 

 Acceleration of replacement market due to environmental regulations

### LNG





- Coal-to-gas switch (environment)
- Complementarity to renewables (natural gas is a remedy for intermittency)



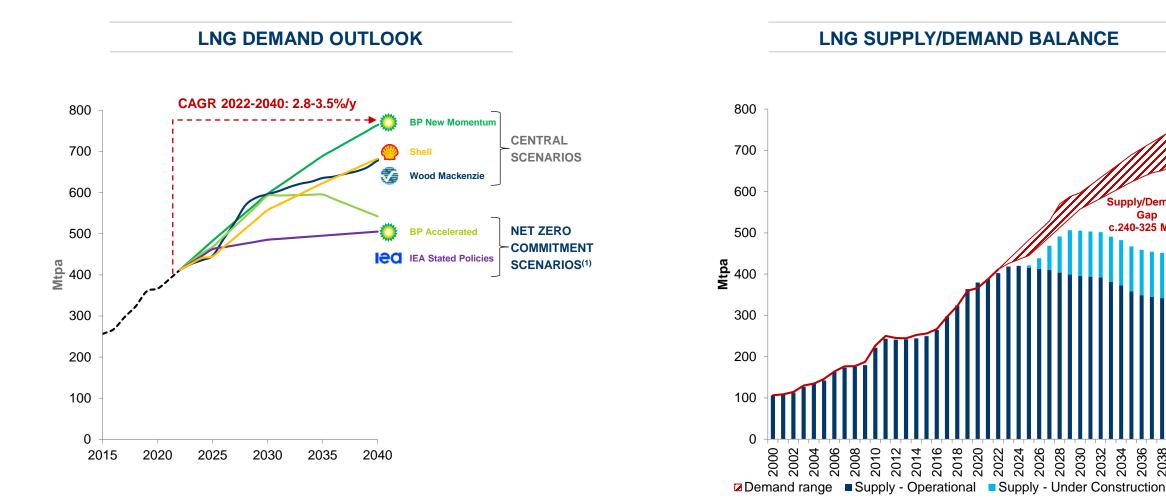
- Pipe-to-LNG switch: flexibility, security of supply and reduced dependency
- New markets for LNG (e.g. in shipping with LNG as fuel)

## Growth drivers

20

GTT

## LNG demand: strong growth expected by 2040



Source: Wood Mackenzie, Shell, BP, GTT Demand upper range: BP, lower range: Shell and Wood Mackenzie

2030

2032 2034

Supply/Demand Gap c.240-325 Mtpa

> 2036 2038

2040

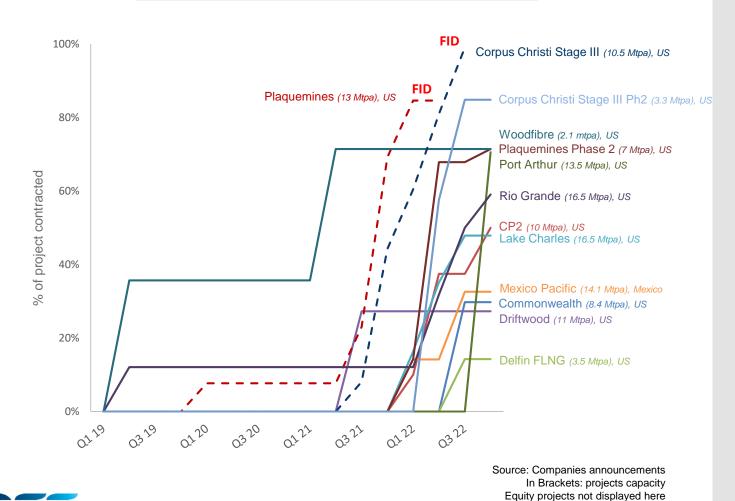
21

BP Q1 23, Shell Q1 22, Wood Mackenzie Q4 22, IEA Q4 22 (1) taking into account full commitment from EU, Japan, Korea by 2050 and China by 2060



## LNG supply: 2022 strong SPA expected to lead to FIDs in 2023

#### SPA PROJECT CONTRACTING



## 4 FIDs taken in 2022, representing c.28 Mtpa

- 2 onshore projects (SPA)
  - Corpus Christi Stage III (US), 10.5 Mtpa
  - Plaquemines Phase 1 (US), 13 Mtpa
- 2 FLNG (Equity)
  - ZLNG (Malaysia), 2 Mtpa
  - Marine XII (Congo), 2.5+0.5 Mtpa

### More FIDs expected in 2023

- 53 Mtpa SPA signed on pre FID projects in 2022 (13% of 2022 demand) of which 90% coming from US projects
  - Port Arthur, Plaquemines Phase 2, Rio Grande, Lake Charles, ...
  - Corpus Christi Stage III Ph2: Despite having secured 80%+ of its capacity, the project should not be sanctioned in the short term as FERC(1) approval is still pending
- Equity projects could also move forward in 2023
  - Northfield south expansion (Qatar), 16 Mtpa
  - Coral FLNG 2 (Mozambique), up to 3 Mtpa

- ...

SPA: Sales & Purchase Agreement

FID: Final Investment Decision (in a liquefaction project)

(1) Federal Energy Regulatory Commission

22 -

## New environmental regulation: accelerating fleet renewal and sustaining orders

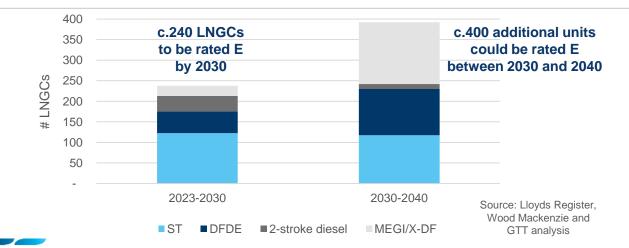
...MAINLY COMPOSED BY OLDER

**ENGINE TECHNOLOGIES...** 

Source: Sou

AN AGING FLEET OF LNGCS...

#### ...AND TO SOON BE EXPOSED TO AN "E" RATING ACCORDING TO CII REGULATION



CII regulation (IMO): from January 2023, a vessel rated E for 1 year can no longer be operated without corrective actions\*

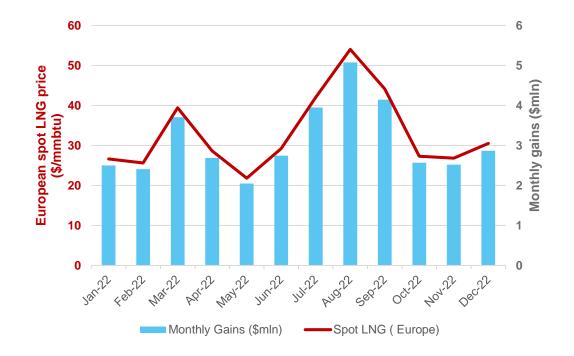
Among the 240 LNGCs to be rated E before 2030, **c.170 ST/DFDE are not equipped with reliquefaction systems** limiting their option to comply

LNGCs currently rated A, B or C to be potentially rated E post 2030 => **c.400 LNGCs concerned**.

\* corrective actions include engine power limitation, retrofitting a reliq, change fuel,...

## Latest GTT technologies enable higher savings than ever

#### BOIL OFF GAINS THANKS TO GTT EFFICIENT TECHNOLOGIES (MARK III FLEX+ VS MARK III)



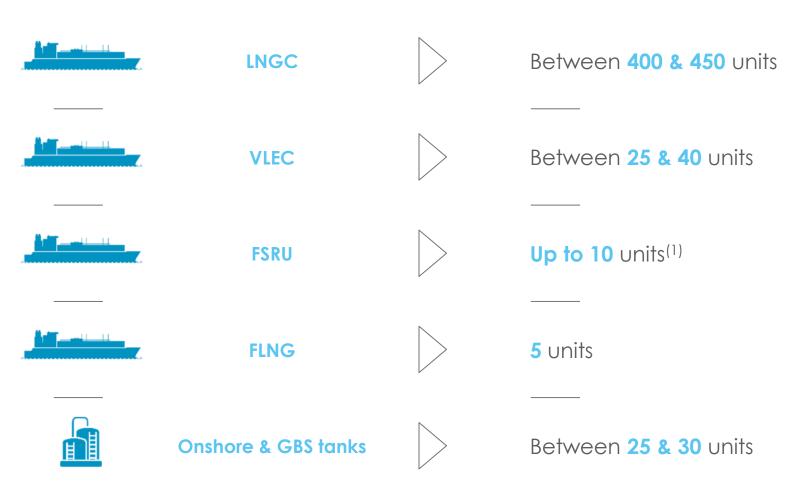
In 2022, owners with Mark III Flex+ and with no reliq have saved \$37m/y ⇔ \$100k/d

- High performing Containment Systems more important than ever in a high price environment
- In the sole month of August 22, savings have reached over \$150k/d for Mark III Flex+ LNG carriers



### Long term estimates for GTT orders





# Strategy and activity

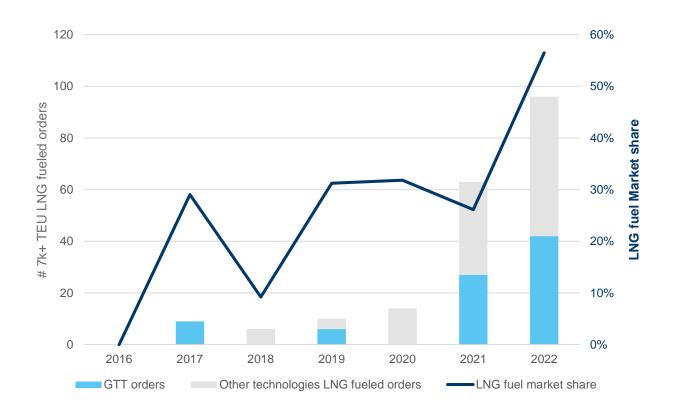
LNG AS FUEL

GTT



## LNG as a fuel: 2022 record orders for GTT

7K + TEU CONTAINERSHIPS ORDERS



## LNG as a fuel represented 56% of 7k+ TEU containerships in 2022

• Market share doubled vs 2021 (56% vs 26%)

## Record orders received by GTT in 2022 with 42 containerships

• 44% Market share (vs 43% in 2021)

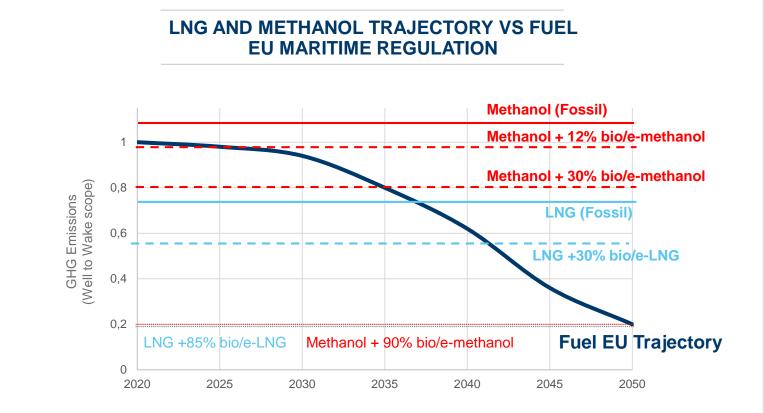
## 2 new yards building LNG as fuel for GTT, and confirmation from trusted partners

- 1 new yard in Korea (Hanjin)
- 1 new yard in China (Yangzijang)
- 4 active yards have chosen GTT technology for their orders

### Orders could slowdown in 2023 mainly due to highly cyclical containership markets

GTT

## LNG: best way to comply with new environmental regulation



### LNG compliant until 2035-2040

- Immediate 20-25% CO2 reduction vs Diesel
- This gain enables a reasonable and progressive incorporation of bio and e- LNG

### Methanol is not compliant today

- Fossil methanol (produced from coal & natural gas) is today not compliant with Fuel EU trajectory
- 12% of bio/e methanol must be incorporated to be compliant in 2025
- Due to lack of availability of bio/e methanol those vessels are expected to run on diesel
- More broadly, switching 10% of maritime fuel market to e-methanol would require the whole French power production

### A huge gap also in economics

 Extra expenses due to larger incorporation of bio & e methanol (to be as clean as LNG) could reach c.\$400m over the 25y lifetime of a large containership

# Strategy and activity

DIGITAL SOLUTIONS





## Digital solutions: Optimising energy efficiency & safety for sustainable ships

### Leveraging GTT's key assets...

- Naval architecture
- Marine engineering
- Unique LNG expertise
- Industrial-grade standards

### ...to develop state-of-the-art digital solutions...

#### MARORKA

- Vessel performance management
- On-board automatic data acquisition
- · Vessels' digital twin modelling



- Electronic fuel management
- Bunkering monitoring



### ...with strong goals and ambition

- Becoming a reference player
- Develop synergies to leverage GTT's core activities
- Actively participate in the decarbonisation of the shipping industry

### Digital Solutions Focus on key innovations









ExxonMobil approves Ascenz' Electronic Fuel Monitoring System solution (EFMS)

Lloyd's Register's AiP for the new "POWER" digital solution to optimize ship-toship operations

Lloyd's Register's AiP for LNG membrane tanks predictive maintenance solution

Launch of a new advanced Route Optimisation solution

New state-of-the-art solutions to address CO<sub>2</sub> reduction and improved ship efficiency



## Digital Solutions Focus on 2022 key commercial milestones



First contract with a major Mexican shipowner to equip a tanker with Ascenz' EFMS

Allowing to monitor and optimise the fuel consumption and bunkering



First contract in Europe with a major ferry owner to equip 2 vessels with its Smart Bunkering solution

Avoiding error in the bunkering process withpotentially significant economic impact



New contracts with a major player for more than 30 vessels and with Antartica21 to equip its modern expedition vessel Deployment of sensors, automatic data collection systems and intelligent software

# Strategy and activity

ELOGEN

GTT



## In 2022, Elogen successfully completed key milestones

### IPCEI

- Elogen has been awarded a €86m State support (IPCEI<sup>(1)</sup> scheme) kicking off its **industrial transformation**
- Massification : gigafactory will allow standardization, cost reduction and increased reliability
- In Les Ulis: enhanced R&D capabilities to develop innovative stacks for PEM electrolysers

### **Commercial momentum**

- Order intake multiplied by nearly 3 vs. 2021
- First double-digit contract : 10 MW for Enertrag (Germany)
- First offshore project : 2.5 MW for CrossWind (JV between Shell and Eneco) signed in 2023







## New flagship contracts signed by Elogen



### First double-digit project (10 MW)

- With Enertrag SE, the European specialist in renewable energy solutions (1,857 MW in operation), for the supply of a 10 MW PEM electrolyser
- Installation on a site near Magdeburg, in Germany, in 2024:
  - Production up to four tons of green hydrogen per day
  - Enabling the power system to compensate for wind and solar fluctuations
  - Main uses:
    - · decarbonise heavy industry and long-distance trucking,
    - produce electricity in the event of "dark-doldrums" and,
    - in the medium term, supply the 100% hydrogen pipelines of the gas transmission system operator.



### First offshore project (2.5 MW)

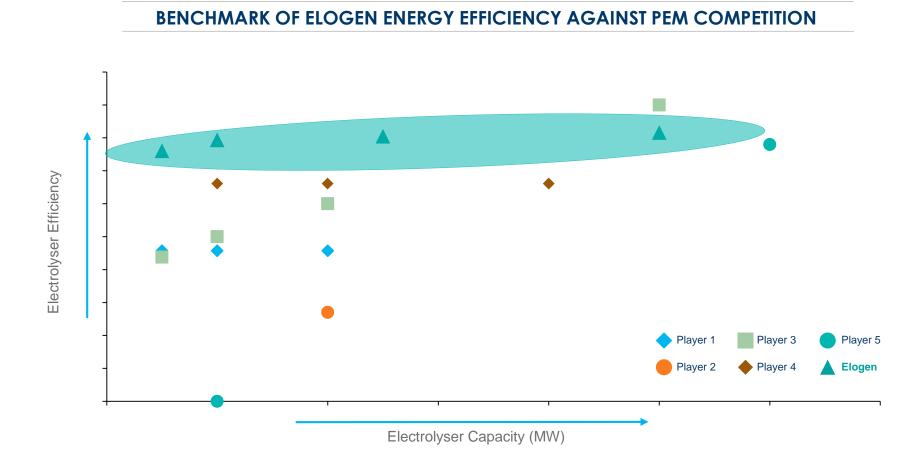
- With CrossWind, a joint venture between Shell and Eneco<sup>1</sup> for the supply of a 2.5 MW PEM electrolyser
  - The most powerful electrolyser ever installed in an offshore wind project

## Offshore installation in 2025, off the coast of the Netherlands

- To convert electricity produced on-site into green hydrogen
- **To store energy** during periods of high electricity generation from renewable sources and **release it** during periods of low generation.



## Elogen's electrolyser current efficiency is best-in-class



Continuous R&D on innovative components and system design will further enhance Elogen's electrolyser efficiency



# **Green hydrogen** expected growth to require additional production capacity

# A significant market potential for electrolysers in all scenarios

• Up to **300 GW of electrolysers required by 2030**\*, and up to 4,000 GW by 2050 (in BP Net Zero scenario)

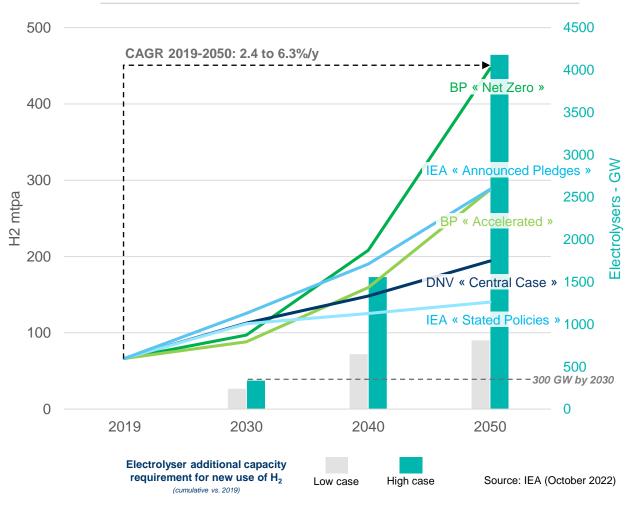
# Additional electrolyser production capacity will be required

- Current worldwide total production capacity estimated around 15 GW/y (source: BNEF)
  - Currently c. 4GW for PEM technology and c. 11GW/y for alkaline

# Elogen will contribute to expand production capacity thanks to its scale-up

- Les Ulis : development of quality control, assembly and test methods → industrialization excellence center
- From 2025 with the Gigafactory in Vendôme (>1GW/y)

#### **HYDROGEN DEMAND GROWTH SCENARII BY 2050**



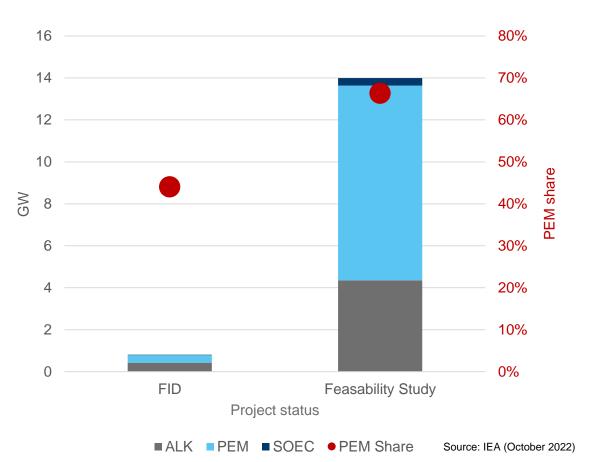


### Many projects currently under discussion select **PEM as the preferred** technology

# PEM technology is the most suitable to produce green $\rm H_2$ from renewables and target cost parity with grey $\rm H_2$

- Most suitable technology for renewable energy
  - Responsive technology adapted to intermittence
- High innovation potential
  - Expected decrease in CapEx
  - Room for efficiency improvement (power consumption is the main contributor to H<sub>2</sub> total cost)
- Small footprint
  - Ideal for "on-site" installation for small industry market
- · Safety: electrolysis process only requires water

#### ELECTROLYSER PROJECTS BY STATUS AND TECHNOLOGY



# Preparing for tomorrow while keeping its costs under control

#### Electrolyser market is still in investment phase

- All players in negative EBITDA area
- Elogen's EBITDA breakeven expected to be achieved from mid-decade

#### Elogen aims at limiting cash consumption by

- Selecting contracts
- Managing costs



**Be Efficient - Be Reliable - Be Ready** 

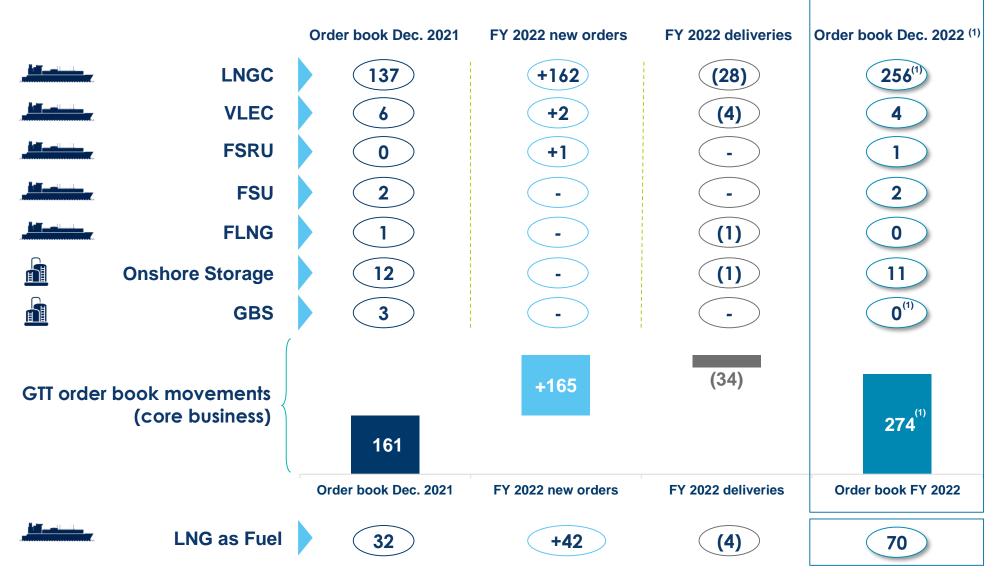


# Financials





### 2022 orderbook: a new record of orders





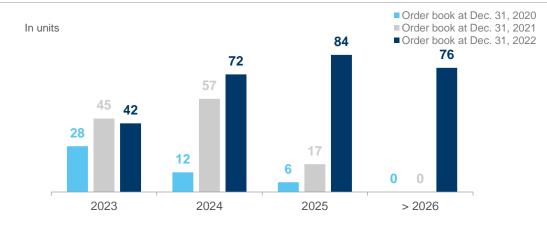
41

(1) exclude Russian projects (15 ice-breaking LNG carriers under construction by the Zvezda Shipbuilding Complex and 3 GBSs for Saren B.V.)

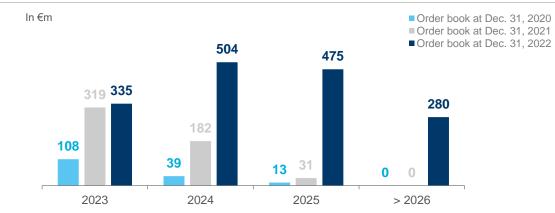
## 2022 core business<sup>(1)</sup> orderbook: a high visibility over the next 4 years

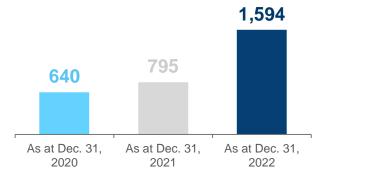


#### ORDER BOOK BY YEAR OF DELIVERY (UNITS PER YEAR)



#### **REVENUES EXPECTED FROM CURRENT ORDER BOOK**





Figures at 31/12/2022 exclude Russian projects (15 ice-breaking LNG carriers under construction by the Zvezda Shipbuilding Complex and the design of 3 GBSs for Saren B.V.) (1) Royalties from core business, i.e., excluding LNG as fuel, services activity and Elogen

## FY 2022 Consolidated Revenues

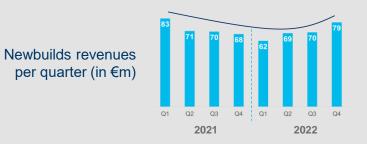
#### SUMMARY REVENUES

in €m	2021	2022	Change (%)
Total Revenues	314.7	307.3	-2.4%
Newbuilds	292.4	279.5	-4.4%
% of revenues	93%	91%	
LNG/Ethane carriers	254.9	242.3	-5.0%
FSU	13.3	16.2	+21.7%
FSRU	8.7	-	-
FLNG	2.9	1.2	-58.6%
Onshore storage	2.5	6.2	+150.0%
GBS	3.3	6.8	+108.6%
LNG as Fuel	6.8	6.8	+0.2%
Electrolysers	5.0	4.7	<b>-6.2%</b>
% of revenues	1%	1%	
Services	17.4	23.1	+33.1%
% of revenues	6%	8%	

#### **KEY HIGHLIGHTS**

# Revenues in line with expectations, Q4 22 revenue growth **(+14.1%** vs Q4 21)

- 2022 revenues from newbuilds (royalties):
  - €279.5 million, **-4.4%** vs 2021
  - H2 2021 strong orderflow starting materialising in Q4 22



#### 2022 revenues from Elogen: €5.3 million (vs €5.6 million in 2021)

• including €0.6 million of operating subsidies

#### 2022 revenues from Services:

- €23.1 million, +33.1% vs 2021
- Driven by growth in digital services and engineering studies

### FY 2022: Stable cost base

#### **GTT CONSOLIDATED OPERATIONAL COSTS**

in €m	2021	2022	Change (%)
Goods purchased	(12.7)	(13.5)	+6.3%
% of revenues	-4%	-4%	
Subcontracted Test and Studies	(27.6)	(26.9)	-2.5%
Rental and Insurance	(6.9)	(6.0)	-13.3%
Travel Expenditures	(6.9)	(10.1)	+46.8%
Other External Costs	(18.3)	(17.5)	-4.2%
Total External Costs	(59.7)	(60.5)	+1.4%
% of revenues	-19%	-20%	
Salaries and Social Charges	(56.7)	(56.5)	-0.2%
Share-based payments	(2.1)	(3.4)	+61.5%
Profit Sharing	(7.9)	(7.7)	-2.2%
Total Staff Costs	(66.6)	(67.6)	+1.5%
% of revenues	-21%	-22%	
Other (research tax credit)	3.9	5.4	+39.1%
% of revenues	1%	2%	

#### **KEY HIGHLIGHTS**

Goods purchased	(+€0.8 million vs 2021)		
€14M	Slight increase due to Elogen		

#### External costs (+€0.8 million vs 2021)

- Subcontractors: -2.5%, thanks to cost control
- Travel expenditures: +46.8% due to travel recovery post Covid

€68M

€61M

#### Staff costs (+€1.0 million vs 2021)

- Due to an increase in share-based payments charges; salaries and social charges remaining stable
- · Lean and fit management approach at GTT SA

# FY 2022: Financial performance in line with expectations

#### SUMMARY CONSOLIDATED ACCOUNTS

in €m	2021	2022	Change (%)
Total Revenues	314.7	307.3	-2.4%
EBITDA <sup>(1)</sup>	172.2	161.1	-6.4%
Margin (%)	54.7%	52.4%	
Operating Income/ EBIT	164.6	152.2	-7.5%
Margin (%)	52.3%	<b>49.5</b> %	
Net Income	134.1	128.3	-4.3%
Margin (%)	42.6%	41.7%	
Change in Working Capital	+68.1	-8.9	nm
Capex	-16.0	-22.9	+42.6%
Free Cash Flow <sup>(2)</sup>	224.3	129.3	nm
Dividend paid	-115.7	-121.8	+5.2%
	31/12/2021	31/12/2022	
Cash position	203.8	212.8	

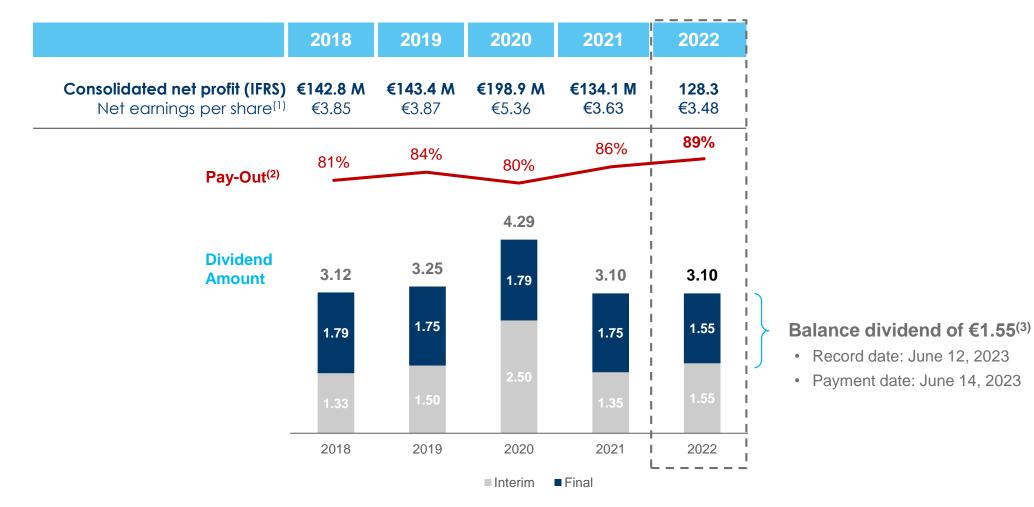
#### **KEY HIGHLIGHTS**

EBITDA	(-6.4% vs 2021)
E161M	<ul> <li>In line with the</li> </ul>

- In line with the decrease in revenues from core business
- Impact of Elogen
- Lean and fit cost approach notably at GTT SA level
- Change in WCR -€8.9 million due to year-end receivables mostly paid in January 2023, partially compensated by deferred revenues
- Capex +€6.9 million due to investments in R&D and minority stakes



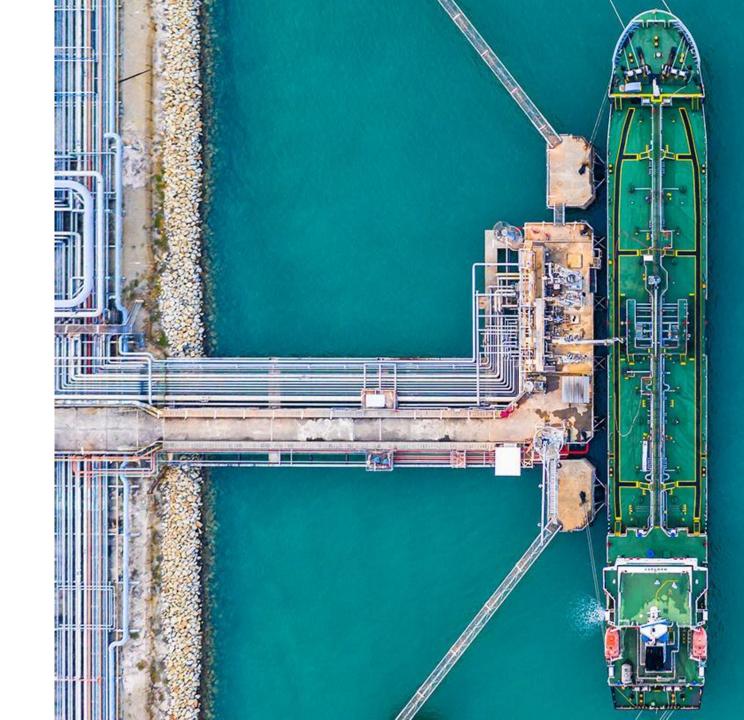
### 2022 Dividend: in line with guidance



(1) Net earnings per share is based on the weighted average number of shares outstanding
 (2) Dividend payout ratio calculated on profit distributed (and possible distribution of reserves) as % of consolidated net profit for the financial year
 (3) Subject to approval by the Shareholders' Meeting and the distributable profits in the corporate financial statements of GTT SA



# Outlook





### 2023 Outlook

Revenue	2023 consolidated revenue estimated in a range of €385M to €430M
EBITDA	2023 consolidated EBITDA estimated in a range of €190M to €235M
Dividend Payment <sup>(1)</sup>	2023 dividend payout of at least 80% of consolidated net income

Note: In the absence of any significant delays or cancellations in orders. (1) Subject to approval of Shareholders' meeting. GTT by-laws provide that dividends may be paid in cash or in shares based on each shareholder's preference



# Appendices

GTT



# - CII: emissions in operation – CO<sub>2</sub>/ton mile transported Annual rating • From 2023: Annual rating (A to E), with first results in May 24

- Each ship needs to be better than C
- If rating D for 3 consecutive years or rating E for 1 year: develop and implement an approved corrective action plan (SEEMP)
   -> Some vessels could leave the market by May 25.

#### **Emissions reduction**

- Emissions to reduce by 11% vs 2019
- Rates for 2027-2030 to be decided in 2026

#### THE CII RELATIVE TO 2019 REFERENCE LINE

FIGURE 38: REDUCTION FACTOR Z FOR

(DWT or GT

Year	Reduction factor relative to 2019 reference line
2023	5%
2024	7%
2025	9%
2026	11%

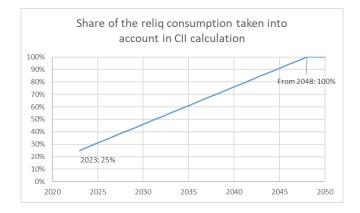
#### Correction factors, allowing to deduct part of emissions

- Cargo cooling/ reliq for gas carriers (more next slide)
- Ice class factor for ice class vessels, reefers for containerships, cargo heating and discharge pumps on tankers, STS operations, ...

## LNGC: CII reduction factor & other

#### Discount applied to consumption of reliq / cargo cooling systems

- Agreed at MEPC 78
- 75% discount in 2023, and reduces 3%/y to reach 0% discount in 2048 NB: Largely favors Qmax/Qflex who reliquefy 100% of the BOG (6MW reliq)



#### **Discount for N2 boil off**

- N2 in the cargo is boiling off and is burnt, and should thus be withdrawn from emissions
- Each shipowner will propose a formula to the class to model the amount of N2 boil off depending on the duration of the voyage; Class will have to validate for each shipowner.
- NB: This correction factor only applies in Laden

• Class do not like case by case and prefer repeatability – thus we believe IACS will end up agreeing on a general formula for the market NB: GTT is talking to Maran and Gaslog about this topic

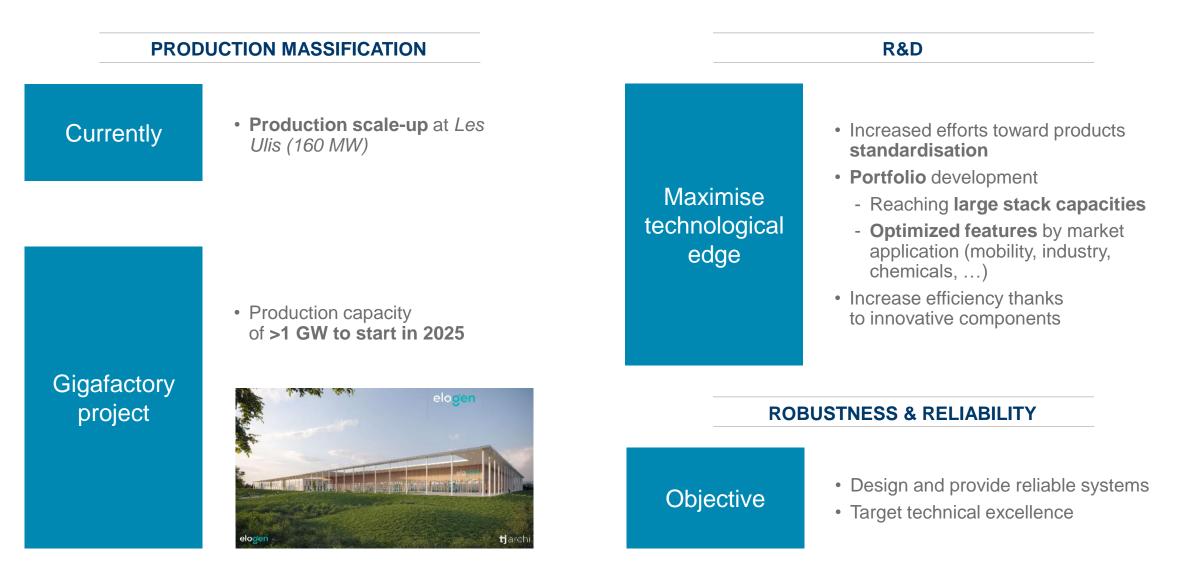
#### GCU emissions are included in the CII calculation

• IACS clarified position on September 30th 22 (the clearer text will be ratified at MEPC79)

#### Other

• All Bunker vessels and FSRUs are excluded from CII regulation

### Elogen growth to rely on its three strategic pillars



### Update on GTT Russian exposure

#### **Projects being built in Russia**

- 15 ice-breaking LNGCs (Zvezda): contract suspended since January, 8<sup>th</sup>, 2023
- 3 GBS (Saren B.V.<sup>(1)</sup> for Arctic LNG2 project): terms of GTT's departure are currently being finalised

#### Projects dedicated specifically to Arctic conditions, built in Asia

- 6 ice-breaking LNGCs, in Asian shipyards
- 2 FSUs, in Asian shipyards

#### LNGC projects for Russia, built in Asia, able to operate in all types of conditions

 8 conventional LNGCs in Asian shipyards, ordered by international ship-owners

#### Projects <u>removed</u> from the order book as at December 31, 2022:

• €81m in total of which €35m in 2023

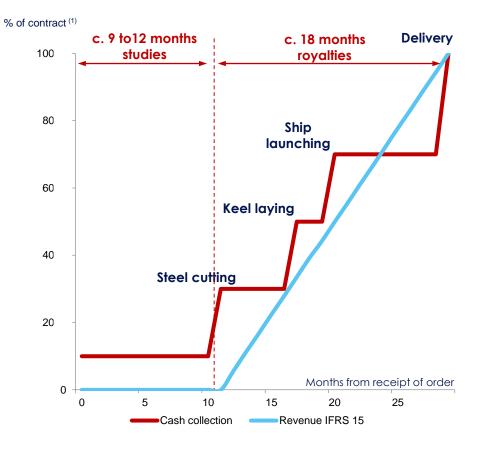
# Revenues to be recognised from December 31, 2022

- €24m by 2024
- Of which €20m in 2023



## An attractive business model supporting high cash generation

Invoicing and revenue recognition



#### Business model supports high cash generation

- Revenue is recognized pro-rata temporis between construction milestones
- Initial payment collected from shipyards at the effective date of order of a particular vessel (10%)
  - Steel cutting (20%)
  - Keel laying (20%)
  - Ship launching (20%)
  - Delivery (30%)

### Glossary

#### The following abbreviations have been used throughout this document

BOR	Boil Off Rate	FSU	Floating Storage Unit	MEGI	M-type, Electronically Controlled Gas Injection
APAC	Asia-Pacific	GBS	Gravity Based Structure	Mtpa	Million tons per annum
CAGR	Compound Annual Growth Rate	GHG	Greenhouse Gases	MW	Megawatt
DFDE	Dual Fuel Diesel Electric	GW	Gigawatt	NOx	Nitrogen Oxide
EBITDA	Earnings Before Interest, Tax, Depreciation & Amortization	HFO	Heavy Fuel Oil	O&G	Oil & Gas
EEDI	Energy Efficiency Design Index	IMO	International Maritime Organization	PEM	Polymer Electrolyte Membrane
EEXI	Energy Efficiency Existing Ship Index	IT	Information Technology	R&D	Research & Development
EJ	Exajoule	KFTC	Korea Fair Trade Commission	SOx	Sulfur Oxide
EPC	Engineering, Procurement & Construction	kW	Kilowatt	TEU	Twenty-foot Equivalent Unit
ESG	Environmental, Social & Governance	LNG	Liquefied Natural Gas	VLEC	Very Large Ethane Carrier
ETS	Emissions Trading System	LNGC	LNG Carrier	XFD	Type of propulsion system
FLNG	Floating Liquefied Natural Gas	LSFO	Low Sulfur Fuel Oil		
FSRU	Floating Storage Regasification Unit	LTI	Long Term Incentives		

55 -