



# Quarterly Report Q1 2023

26.05.2023



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# TECO 2030 ASA IN BRIEF

Spinoff from TECO Maritime Group AS



TECO2030 GEN 0 - Stack platform

## CLEANTECH COMPANY

- Established as legal entity in 2019
- Management team with extensive experience hydrogen, fuel cell space
- Large scale manufacturing of the first ever purpose-developed full cell stack and module tailormade for the marine and heavy-duty segment
- Currently in dialogue with decision makers for 200+ potential fuel cell projects
- Strong partnerships with blue chip leaders including AVL, the world largest independent developer of powertrain
- thyssenkrupp AE, world leading supplier focused on the powertrain value chain. Will deliver the production line and test facility for the giga-factory in Norway



SUB SUPPLY OF STACKS FOR MOTIVE INDUSTRY



SYSTEM SUPPLY FOR MARITIME & HEAVY-DUTY ENVIRONMENT

## NORWEGIAN

- HQ: Oslo, Norway
- Offices: Miami, Singapore
- Factory: Narvik, Norway
- Employees: Approx. 60





# CEO LETTER

## On a mission towards zero-emission

Dear Shareholders and hydrogen friends,

I am thrilled to share with you the remarkable progress we have achieved during the first months of 2023 as we continue to drive the transition to a more sustainable future. Our firm commitment to reducing the environmental impact of the shipping industry remains at the forefront of our mission, and I am proud to say that we are making significant progress in this direction.

The transition from development to commercialization has begun, and we have reached critical milestones that align perfectly with our company strategies. We have successfully procured all the components necessary for the first FCM400™ systems and have received our first manual fuel cell stacking equipment, enabling us to kickstart small-scale manual stack production. These achievements position us strongly on our path to revolutionize the marine and heavy-duty industries.

During the first quarter, we were engaged in numerous activities that have further accelerated our progress. We entered into a feasibility study with AVL, exploring the development and manufacture of heavy-duty motive systems based on our existing supply chain. Additionally, we have embarked on the world's largest fuel cell retrofit project in collaboration with Shell and other consortium partners. This significant 2.4-megawatt fuel cell retrofit project validates the retrofit concept and breathes new life into a 20-year-old ship, ensuring an extended lifespan without emissions. The project is supported by Horizon Europe's funding scheme of 5 million euros, and the remainder covered by Shell. The project is moving forward according to schedule.



The demand for zero-emission technologies and fuel cells is rapidly increasing, particularly in energy-intensive industries. It is inspiring to witness the surge of interest in our solutions, and together with all of you, we are persistently striving to reach new milestones, execute our fuel cell development and production plans, and elevate the TECO 2030 brand awareness on a global scale.

Going forward, TECO 2030 is further building up production capacity at the Innovation Center to meet the increasing interest for fuel cells and accelerating the transition towards renewable technologies. We built the first TECO 2030 fuel cell stack in Narvik in May, a great accomplishment by collective collaboration with our partners at AVL in Canada and Graz!

Later this year, we will see the first HyTruck rolling around in Austria with TECO 2030 stacks, and AVL's fuel cell module. In the fourth quarter we will deliver the first commercial stationary application for Implen Norway, to power their construction site.

The achievements of this quarter are a testament to our collective efforts, and I am confident that we are on the right path to transforming the shipping industry and making a profound impact on our planet's future.

Lysaker, Norway, May 26<sup>th</sup> 2023

Tore Enger  
Group CEO, TECO 2030



# HIGH AND INCREASING INTEREST FOR FUEL CELL ENGINES



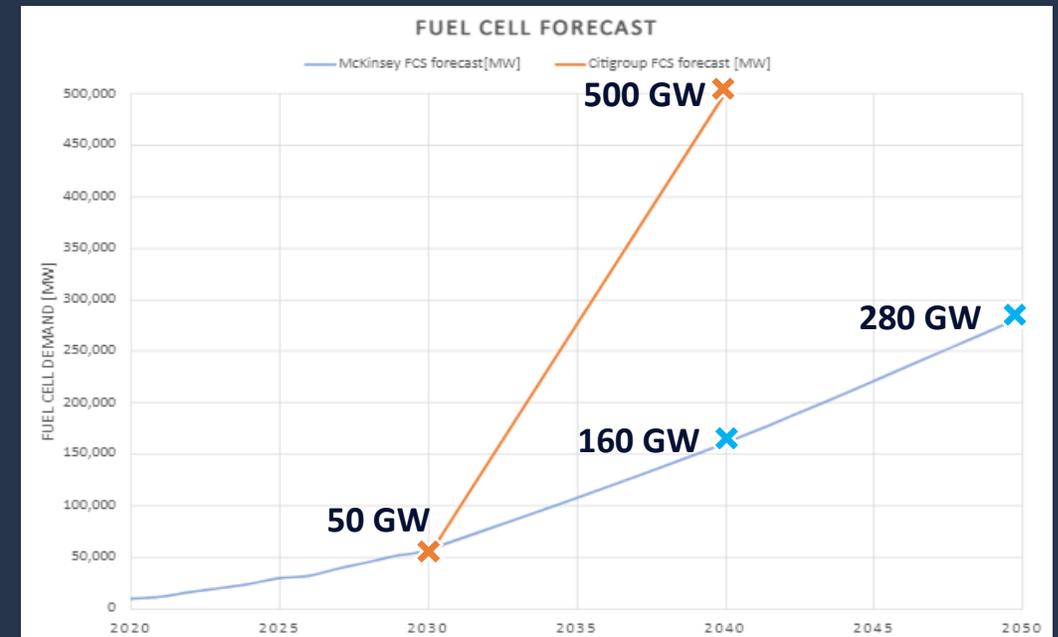
TECO 2030 has been very active in quoting new projects, more and more clients are getting serious about their projects. This can be seen as emission regulations are approaching implementation and carbon taxes are increasing. Quotes through the past years:

- Total quotes in 2021 approx. MEUR 8,-
- Total quotes in 2022 approx. MEUR 320,-
- Total quotes in 1Q 2023 approx MEUR 235,-

## TECO 2030 is building a substantial pipeline of outstanding quotes:

- During 2022 TECO 2030 had sent out sales offers with a total value of more than EUR 320 million.
- Through the first quarter alone, TECO 2030 sent out quotes for EUR 235 million.
- Total value of accumulated quotes at end Q1 2023 is approx. EUR 555 million.

# HYDROGEN & FUEL CELL MARKET FORECASTS



- Hydrogen demand
  - 2030: 140 million metric tons
  - 2050: 660 million metric tons
- \$ 10 trillion
  - Cumulative hydrogen investments required by 2050
- \$ 1.5 trillion
  - Investment in infrastructure and transportation required by 2050

- Citigroup fuel cell market forecast
  - 2030: 50 GW → \$ 35 – \$ 45 billion market (depending on fuel cell price)
  - 2050: 500 GW → \$ 200 – \$ 275 billion market (depending on fuel cell price)
- TECO 2030 market share forecast
  - 2030: ~ 1.5 – 2.8 %
  - Based on today's production schedule



Fuel Cell Module – FCM400™



FC Stack 100kW

# HYDROGEN FUEL CELL

Hydrogen fuel cells are the engines of tomorrow and convert hydrogen into electricity while emitting nothing but water vapour and warm air. The TECO 2030 Fuel Cell is the first fuel cell system in the world that is specifically designed for use in marine and heavy-duty applications.

The TECO 2030 Marine Fuel Cell will be delivered in stacks of 100kW or 400kW modules (FCM400™). The modules can easily be connected to enable system configurations in the multi-megawatt scale. The fuel cells will be suitable for both retrofits and newbuild vessels, and other heavy-duty applications. Fuel Cells offers a zero-emission power generation alternative for applications for which batteries are not a good option.

TECO 2030 is developing the hydrogen fuel cells together with the Austrian powertrain technology company AVL. The fuel cells will be produced at TECO 2030's new Innovation Center and Gigafactory in Narvik in northern Norway. AVL will also contribute to the planning and establishment of the new plant in Narvik. TECO 2030 has received an "Approval in Principle" (AiP) by DNV, one of the world's leading classification and certification bodies, for its Fuel Cell System and its Fuel Cell Module FCM400™, confirming that these are safe to use onboard ships.

# Why will TECO2030 take their market share



- System offering developed for specific markets segments such as industry and marine
- Unique IP and industrial development processes deployed together with AVL
- Aimed at TECO's core market, using network built on 30 years of marine business
- Working closely with market leading integrators such as ABB, Kongsberg Maritime, Siemens Energy etc.
- Strategically positioned in the value chain producing inhouse stacks, modules and skid-solutions
- Industrialization approach targeting cost level equal to diesel generators by 2028
- Standardization methodology combined with high volume production focus
- Solution orientated for simplified customer integrations
- Capability to provide inhouse Engineering, Procurement, Construction and Installation for customers





# FCM400 Product benefits

- Designed bottom up for Marine and Heavy-duty
- Based on 30 + year experience from marine activities and AVL development processes
- Modular and easy scalable to multimegawatt systems
- Optimized for simplified maritime/industrial integration
- Tier 1 sub-suppliers used, such as Mahle, IHI, Pierburg etc.
- Designed for mass-manufacturing in collaboration with AVL and thyssenkrupp



## TECO 2030 FCM400™ advantages:



**High power density**



**High operational voltage**



**Class leading lifetime targets**



**Class leading dynamics**



**Unique non-metallic Stacks**



**Purpose made Inherent safety concept**

# World leader thyssenkrupp to deliver production equipment



100,000 +  
employees  
worldwide

18,000 +  
granted patents in  
force

100 +  
years of  
experience

34  
billion € 2021  
revenue

56  
countries

- Signed agreement for the total PEM fuel cell production line to TECO 2030's Innovation Center in Narvik, Norway.

Quick facts and figures Source: thyssenkrupp

Cell Production

Stacking

System assembly

Test systems



# Why Narvik as first production location ?



- Existing production facility used for similar production approach
- Competent core team who ramped up from 2 – 380 employees in 2 years during the previous REC Solar production in same facility
- Excellent logistical infrastructure with railways, ships and air cargo
- Local university with dedicated educational tracks for Hydrogen technology, industrial production and power electronics.
- Active region on the renewable stage with companies like Aker's hydrogen ventures, Freyr's battery factory, Norwegian hydrogen and Gen2Energy, Hydrogen production



**TECO2030's Giga fuel cell innovation center includes:**



**Experienced core team**



**Lean production strategy**



**Industrial approach**



**Inhouse stack and module production**



**Serial product developed with world leading partners thyssenkrupp and AVL**



**Excellent logistical connections**

# OPERATIONAL HIGHLIGHTS

There has been a series of achievements towards reaching our common goals through Q1 2023.

Some of the highlights are summarized below:

During January TECO 2030 completed the selection of all major component suppliers and procured necessary parts for the first fuel cell modules (FCM400) marking that the FCM400 development is close to completion and the first units are ready for assembly.

During February, the HyEkoTank project which has been awarded a EUR 5 million grant under the European funding scheme HORIZON EUROPE has started, together with Shell and the other consortium partners.

In February TECO 2030 and AVL List sign contract for feasibility study of developing and industrializing a Fuel Cell System for heavy-duty (HD) trucks. After successful completion, TECO 2030 plans to industrialize this Heavy-Duty Fuel Cell System and manufacture them at the Innovation Center and gigafactory in Narvik, Norway.

During March TECO 2030 signed an MOU with an undisclosed party for cooperation on several fuel cell projects which in total could represent 50MW of fuel cell output. The projects represent marine fuel cells- and on-shore stationary fuel cell systems in megawatt scale. The MOU outlines a 3-year cooperation commitment to successfully execute the project objectives.

In March TECO 2030 fulfilled all prerequisites connected with the NOK 50 million grant from Innovation Norway and started to withdraw the first NOK 15 million. The grant was awarded to TECO 2030 in October 2021.



# OPERATIONAL HIGHLIGHTS AFTER Q1 2023

In April TECO 2030 officially started manual fuel cell stack production at its Innovation Center in Narvik, Norway.

In May TECO 2030 and Chart Industries Inc have expanded their existing cooperation agreement on Chart's Cryogenic Carbon Capture process technology, to include Chart's offer of liquid cryogenic fuel storage and supply systems, as well as Howden's hydrogen solutions.

During May TECO 2030 completed first manual fuel cell stack production in Narvik. The TECO 2030 Fuel Cell stack is a 100kW Proton Exchange Membrane (PEM) fuel cell stack purposely developed for marine, heavy duty, stationary or mobile power applications.

# KEY FINANCIALS Q1 2023

TECO 2030 recognised a total income of NOK 6.9 million in Q1 2023. This is twice the income in Q1 2022. The majority is sales revenue from the sale of a 10 MW scrubber tower. The contract was signed in Q4 2022, but the equipment was delivered in Q1 and hence the revenue recognition this quarter. NOK 1.6 million is related to the release of the grant from Innovation Norway which will be explained in more details below. Revenues from the sale of the 0.8 MW fuel cell container to Implenia, signed in Q4 2022, will be recognised at the delivery of the system, scheduled for Q4 2023.

EBITDA ended at NOK – 19.3 million in Q1 2023 compared to NOK – 15.8 million in Q1 2022. The reduction is related to the increase in the number of employees and the general ramp-up of the TECO 2030 Group including necessary preparations for the production of fuel cells in Narvik.

NOK'000	Q1 2023 (unaudited)	Q1 2022 (unaudited)
Sales revenues and other income	6,943	3,408
EBITDA	(19,306)	(15,817)
EBIT	(22,408)	(18,667)
CAPEX and R&D	42,968	17,805
Total assets	419,764	356,408
Total equity	94,283	102,086

TECO 2030 is still in the development phase of its PEM Fuel Cell systems and development expenses such as purchase of goods and services from development partners, development related labour costs, etc. are capitalized in the balance sheet as Intangible Assets. In the below table, these expenses are referred to as CAPEX and R&D (NOK 42.9 million). The capitalized amount is significantly higher in Q1 2023 compared to the previous year and provides a good picture of the current level of significant ongoing development. TECO 2030 was awarded NOK 50 million in grant from Innovation Norway in October 2021. In February 2023, TECO 2030 fulfilled all requirements from Innovation Norway related to the grant release and NOK 38.4 million out of the NOK 50 million have been recognised as deferred income in the balance sheet (Other non-current liability) per Q1 2023. The NOK 1.6 million, referred to as Other income is related to non-capitalized project expenses. The remaining NOK 10 million is dependent on the completion of the project and Innovation Norway's acceptance of the Project End-Report, expected to be submitted in Q3 2023. Out of the first NOK 40 million, NOK 15 million was received in Q1, whereas the next NOK 25 million were received in mid-Q2. The NOK 25 million is recognised as a current receivable (Trade and other receivables) per Q1.

The Group's cash position was somewhat weak by end of Q1. During Q2, the Group has a number of incoming payments related to the mentioned NOK 25 million from Innovation Norway, contract revenues from the scrubber sale and the Implenia-contract, the Shell/EU Horizon-supported HyEkoTank-project as well as the bond loan initiated in late Q1 but completed in Q2 (NOK 12 million).

# Appendixes



# APPENDIXES QUARTERLY REPORT Q1 2023

## Condensed income statement

Amounts in NOK '000	Q1 2023 (Unaudited)	Q1 2022 (Unaudited)
Sales revenue and other income	6,943	3,408
Cost of goods sold	-5,026	-2,921
Personnel expenses	-10,494	-8,645
Other operating expenses	-10,729	-7,659
<b>EBITDA</b>	<b>-19,306</b>	<b>-15,817</b>
Depreciation and amortization	-3,102	-2,851
<b>EBIT</b>	<b>-22,408</b>	<b>-18,667</b>
Net financial income (expense)	-5,094	-942
<b>Profit (loss) before tax</b>	<b>-27,502</b>	<b>-19,610</b>



# APPENDIXES QUARTERLY REPORT Q1 2023

## Statements of financial position

Amounts in NOK'000	31.03.23 (Unaudited)	31.12.22 (Unaudited)
<b>ASSETS</b>		
<b>Non-current assets</b>		
Intangible assets	194,792	151,824
Right-of-use assets	97,275	95,568
Finance lease receivables	12,192	13,880
Other non-current assets	5,894	5,521
<b>Total non-current assets</b>	<b>310,152</b>	<b>266,793</b>
<b>Current assets</b>		
Trade and other receivables	99,553	35,489
Inventories	5,299	6,974
Cash and cash equivalents	4,759	47,151
<b>Total current assets</b>	<b>109,612</b>	<b>89,615</b>
<b>TOTAL ASSETS</b>	<b>419,764</b>	<b>356,408</b>

Amounts in NOK'000	31.03.23 (unaudited)	31.12.22 (unaudited)
<b>EQUITY AND LIABILITIES</b>		
<b>Equity</b>		
Share capital	1,626	1,585
Other equity	92,657	100,501
<b>Total equity</b>	<b>94,283</b>	<b>102,086</b>
<b>Non-current liabilities</b>		
Non-current lease liabilities	112,660	113,015
Other non-current liabilities	118,296	93,623
<b>Total non-current liabilities</b>	<b>230,956</b>	<b>206,638</b>
<b>Current liabilities</b>		
Current lease liabilities	7,366	6,474
Trade and other payables	60,492	25,281
Other current liabilities	26,667	15,929
<b>Total current liabilities</b>	<b>94,525</b>	<b>47,684</b>
<b>Total liabilities</b>	<b>325,481</b>	<b>254,322</b>
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>419,764</b>	<b>356,408</b>

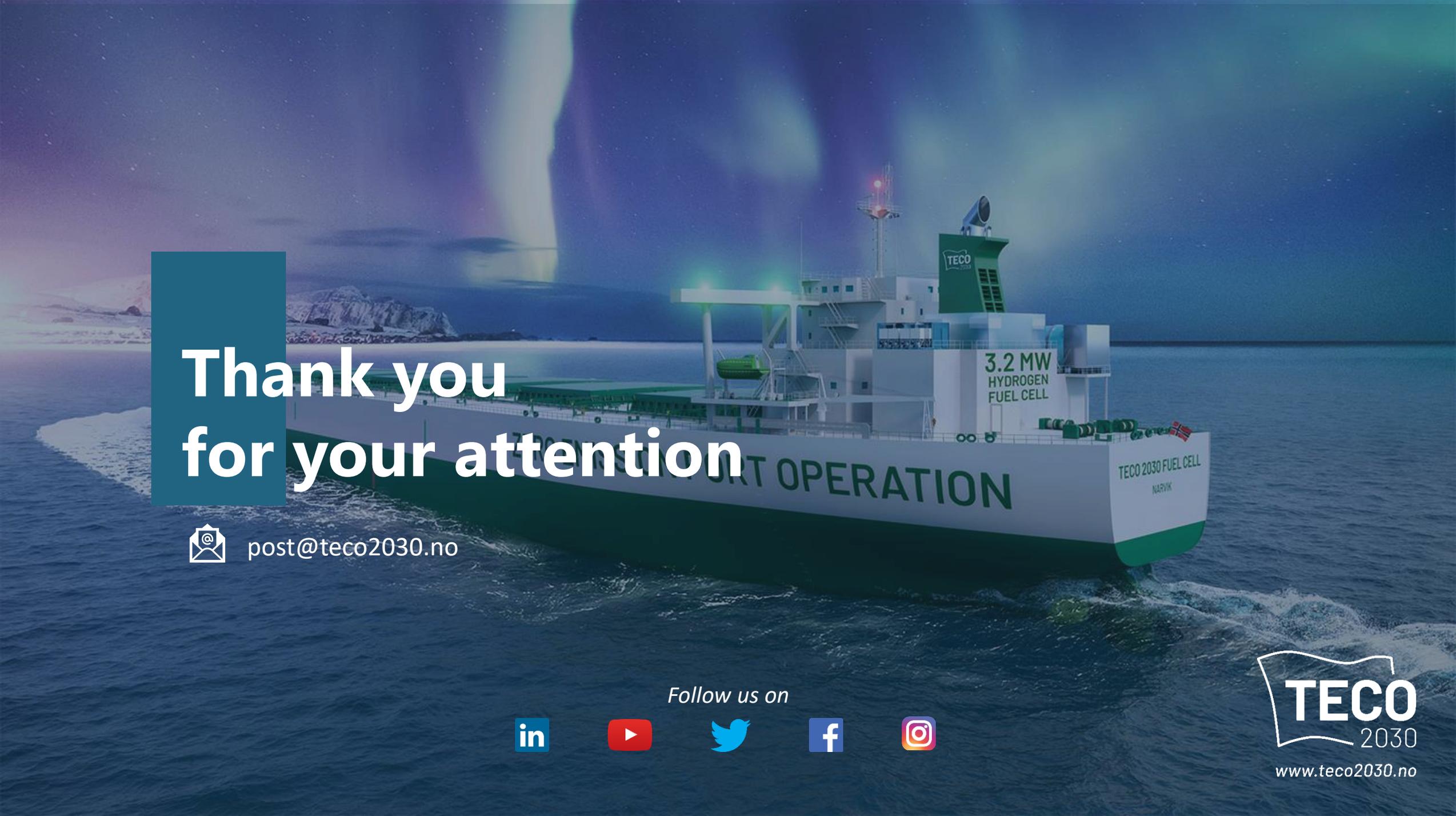
# APPENDIXES QUARTERLY REPORT Q1 2023

## Condensed statements of cash flow

Amounts in NOK'000	Q1 2023 (unaudited)	Q1 2022 (audited)
<b>Cash flows from operating activities</b>		
<b>Loss before tax</b>	<b>-27,502</b>	<b>-19,610</b>
<i>Adjustments to reconcile profit before tax to net cash flows:</i>		
Net financial income/expense	4,262	-942
Share based payments	115	679
Depreciation, amortization and impairment	3,102	2,851
<i>Changes in working capital:</i>		
Changes in trade receivables and trade payables	5,533	-15,220
Change in inventories	1,675	1,595
Other adjustments	-	2,411
<b>Net cash flows from operating activities</b>	<b>-12,816</b>	<b>-28,238</b>

Amounts in NOK'000	Q1 2023 (unaudited)	Q1 2022 (unaudited)
<b>Cash flow from investing activities</b>		
Purchase of property, plant and equipment	-560	-139
Development expenditures	-43,979	-17,805
Placement in deposit	-421	
<b>Net cash flows from investing activities</b>	<b>-44,961</b>	<b>-17,943</b>
<b>Cash flow from financing activities</b>		
Cash proceeds from issuance of equity	2,771	6,702
Proceeds from public funding	15,000	-
Cash payments for the principal portion and interest of the lease liability	-2,733	-2,900
Cash received for the principal portion of the sublease receivables	347	539
<b>Net cash flows from financing activities</b>	<b>15,384</b>	<b>4,952</b>
<b>Net increase/(decrease) in cash and cash equivalents</b>	<b>-42,392</b>	<b>-41,229</b>
Cash and cash equivalents at beginning of the period	47,151	59,619
<b>Cash and cash equivalents, end of period</b>	<b>4,759</b>	<b>18,389</b>

The statement of cash flows are prepared using the indirect method.

A large white and green ship, the TECO 2030 Fuel Cell, is shown at night sailing on the water. The ship has "3.2 MW HYDROGEN FUEL CELL" written on its side and "TECO 2030 FUEL CELL NARVIK" on the stern. The background features a dark sky with the aurora borealis and a snowy coastline.

# Thank you for your attention



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