

Fourth Quarter and Full Year 2022

**Earnings Call** 

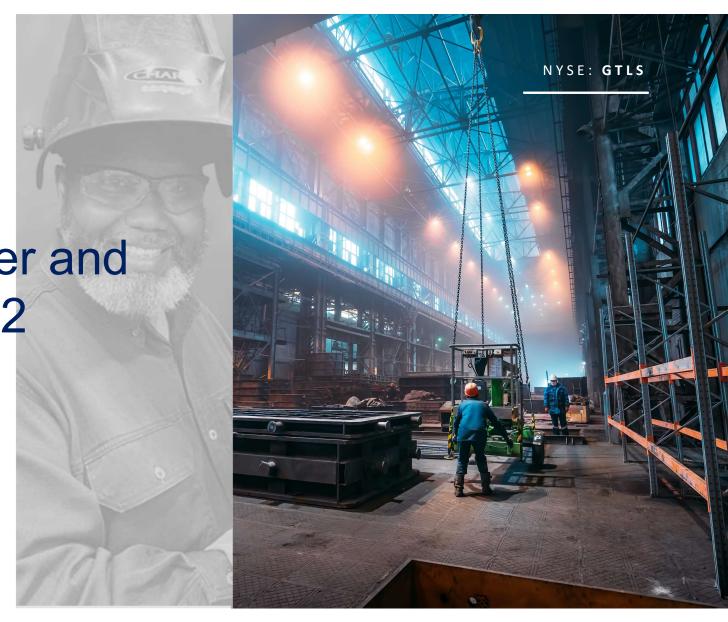
Presented by

Jill Evanko

**Chief Executive Officer** 

Joe Brinkman

**Chief Financial Officer** 





## Forward-Looking Statements

CERTAIN STATEMENTS MADE IN THIS PRESENTATION ARE FORWARD-LOOKING STATEMENTS WITHIN THE MEANING OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995. FORWARD-LOOKING STATEMENTS INCLUDE STATEMENTS CONCERNING THE COMPANY'S BUSINESS PLANS, INCLUDING STATEMENTS REGARDING PENDING AND COMPLETED DIVESTITURES, ACQUISITIONS AND INVESTMENTS, COST SYNERGIES AND EFFICIENCY SAVINGS, OBJECTIVES, FUTURE ORDERS, GROWTH RATES, REVENUES, MARGINS, SEGMENT SALES MIX, EARNINGS OR PERFORMANCE, LIQUIDITY AND CASH FLOW, INVENTORY LEVELS, CAPITAL EXPENDITURES, SUPPLY CHAIN CHALLENGES, INFLATIONARY PRESSURES INCLUDING MATERIAL COST AND PRICING INCREASES, BUSINESS TRENDS, CLEAN ENERGY MARKET OPPORTUNITIES, INCLUDING ADDRESSABLE MARKETS AND PROJECTED INDUSTRY-WIDE INVESTMENTS, GOVERNMENTAL INITIATIVES, INCLUDING EXECUTIVE ORDERS, ENVIRONMENTAL FACTORS INCLUDING CARBON REDUCTION TARGETS, AND OTHER INFORMATION THAT IS NOT HISTORICAL IN NATURE. FORWARD-LOOKING STATEMENTS MAY BE IDENTIFIED BY TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "COULD," "EXPECTS," "ANTICIPATES," "BELIEVES," "PROJECTS," "FORECASTS," "OUTLOOK," "GUIDANCE," "CONTINUE," "TARGET," OR THE NEGATIVE OF SUCH TERMS OR COMPARABLE TERMINOLOGY.

FORWARD-LOOKING STATEMENTS CONTAINED IN THIS PRESENTATION OR IN OTHER STATEMENTS MADE BY THE COMPANY ARE MADE BASED ON MANAGEMENT'S EXPECTATIONS AND BELIEFS CONCERNING FUTURE EVENTS IMPACTING THE COMPANY AND ARE SUBJECT TO UNCERTAINTIES AND FACTORS RELATING TO THE COMPANY'S OPERATIONS AND BUSINESS ENVIRONMENT, ALL OF WHICH ARE DIFFICULT TO PREDICT AND MANY OF WHICH ARE BEYOND THE COMPANY'S CONTROL, THAT COULD CAUSE THE COMPANY'S ACTUAL RESULTS TO DIFFER MATERIALLY FROM THOSE MATTERS EXPRESSED OR IMPLIED BY FORWARD-LOOKING STATEMENTS. FACTORS THAT COULD CAUSE THE COMPANY'S ACTUAL RESULTS TO DIFFER MATERIALLY FROM THOSE DESCRIBED IN THE FORWARD-LOOKING STATEMENTS INCLUDE: THE COMPANY'S ABILITY TO SUCCESSFULLY CLOSE AND INTEGRATE THE PENDING HOWDEN ACQUISITION AND OTHER RECENT ACQUISITIONS AND ACHIEVE THE ANTICIPATED REVENUE, EARNINGS, ACCRETION AND OTHER BENEFITS FROM THESE ACQUISITIONS; THE COMPANY'S ABILITY TO SUCCESSFULLY CLOSE ON ITS INTENTION TO DIVEST THE TWO PRODUCT LINES AND ACHIEVE THE ANTICIPATED PROCEEDS FROM THESE DIVESTITURES; SLOWER THAN ANTICIPATED GROWTH AND MARKET ACCEPTANCE OF NEW CLEAN ENERGY PRODUCT OFFERINGS; INABILITY TO ACHIEVE EXPECTED PRICE INCREASES OR CONTINUED SUPPLY CHAIN CHALLENGES INCLUDING VOLATILITY IN RAW MATERIALS COST AND SUPPLY; RISKS RELATING TO THE OUTBREAK AND CONTINUED UNCERTAINTY ASSOCIATED WITH THE CORONAVIRUS (COVID-19) AND THE CONFLICT BETWEEN RUSSIA AND UKRAINE, INCLUDING POTENTIAL ENERGY SHORTAGES IN EUROPE AND ELSEWHERE, AND THE OTHER FACTORS DISCUSSED IN ITEM 14 (RISK FACTORS) IN THE COMPANY'S MOST RECENT REVISE ANY FORWARD-LOOKING STATEMENT.

THIS PRESENTATION CONTAINS FOURTH QUARTER AND FISCAL YEAR 2022 NON-GAAP FINANCIAL INFORMATION, INCLUDING ADJUSTED NON-DILUTED EPS, NORMALIZED BASIC EPS, "NET INCOME, ADJUSTED", FREE CASH FLOW, ADJUSTED FREE CASH FLOW, EBITDA, ADJUSTED EBITDA, ADJUSTED OPERATING INCOME, AND ADJUSTED OPERATING MARGIN. FOR ADDITIONAL INFORMATION REGARDING THE COMPANY'S USE OF NON-GAAP FINANCIAL INFORMATION, AS WELL AS RECONCILIATIONS OF NON-GAAP FINANCIAL MEASURES TO THE MOST DIRECTLY COMPARABLE FINANCIAL MEASURES CALCULATED AND PRESENTED IN ACCORDANCE WITH ACCOUNTING PRINCIPLES GENERALLY ACCEPTED IN THE UNITED STATES ("GAAP"), PLEASE SEE THE RECONCILIATION SLIDES TITLED "FOURTH QUARTER AND FULL YEAR 2022 EARNINGS PER SHARE," "FOURTH QUARTER AND FULL YEAR 2022 ADJUSTED EBITDA" AND "FOURTH QUARTER 2022 FREE CASH FLOW" INCLUDED IN, OR IN THE APPENDIX AT THE END OF, THIS PRESENTATION. PLEASE SEE THE RECONCILIATION TABLE AT THE END OF THE ACCOMPANYING EARNINGS RELEASE FOR THE "ADJUSTED GROSS PROFIT" AND "ADJUSTED OPERATING INCOME" RECONCILIATIONS, AS WELL AS A RECONCILIATION AND ADDITIONAL DETAILS ON ADJUSTED NON-DILUTED EPS AND ADJUSTED FREE CASH FLOW. WITH RESPECT TO THE COMPANY'S 2023 FULL YEAR EARNINGS OUTLOOK, THE COMPANY IS NOT ABLE TO PROVIDE A RECONCILIATION OF THE ADJUSTED EBITDA AND ADJUSTED EARNINGS PER DILUTED SHARE OR ADJUSTED FREE CASH FLOW, OR PRO FORMA COMBINED 2023 EBITDA OUTLOOKS BECAUSE CERTAIN ITEMS MAY HAVE NOT YET OCCURRED OR ARE OUT OF THE COMPANY'S CONTROL AND/OR CANNOT BE REASONABLY PREDICTED.

CHART INDUSTRIES, INC. IS A LEADING INDEPENDENT GLOBAL MANUFACTURER OF HIGHLY ENGINEERED EQUIPMENT SERVICING MULTIPLE APPLICATIONS IN THE ENERGY AND INDUSTRIAL GAS MARKETS. OUR UNIQUE PRODUCT PORTFOLIO IS USED IN EVERY PHASE OF THE LIQUID GAS SUPPLY CHAIN, INCLUDING UPFRONT ENGINEERING, SERVICE AND REPAIR. BEING AT THE FOREFRONT OF THE CLEAN ENERGY TRANSITION, CHART IS A LEADING PROVIDER OF TECHNOLOGY, EQUIPMENT AND SERVICES RELATED TO LIQUEFIED NATURAL GAS, HYDROGEN, BIOGAS AND CO2 CAPTURE AMONGST OTHER APPLICATIONS. WE ARE COMMITTED TO EXCELLENCE IN ENVIRONMENTAL, SOCIAL AND CORPORATE GOVERNANCE (ESG) ISSUES BOTH FOR OUR COMPANY AS WELL AS OUR CUSTOMERS. WITH OVER 25 GLOBAL LOCATIONS FROM THE UNITED STATES TO ASIA, AUSTRALIA, INDIA, EUROPE AND SOUTH AMERICA, WE MAINTAIN ACCOUNTABILITY AND TRANSPARENCY TO OUR TEAM MEMBERS, SUPPLIERS, CUSTOMERS AND COMMUNITIES. TO LEARN MORE, VISIT WWW.CHARTINDUSTRIES.COM.



# 2023 Outlook

# Reiterating Chart's Full Year 2023 Standalone Outlook

### Revenue

\$2.10 billion to \$2.20 billion

## Adjusted EBITDA

\$440 million to \$480 million

## Adj. Free Cash Flow

\$250 million to \$300 million

## **Cap Expenditures**

~\$60 million to \$65 million

#	Description	\$ millions
1	2023 Shippable Backlog as of 12/31/2022	\$1,250 to 1,300
2	Repair, service, leasing book & bill business (not backlog)	220 to 225
3	Book & Ship drop-in standard product businesses	630 to 675
4	Initial revenue outlook range 2023	\$2,100 to \$2,200

## We are confident in delivering the above range

- 1. It is not unusual for project revenue to shift between quarters. We anticipate realizing pushed Q422 revenue in 2023 based on customer, project and material receipt timing
- 2. Our outlook does not include any additional mid-size or large project orders between now and the end of the first half 2023, which could provide additional revenue in the second half of 2023
- 3. Even though we are seeing early end market improvement in HLNG vehicle tank sales, our forecast is flat with 2022
- 4. As of December 31, 2022, we had record backlog of \$2,338.1 million, with ~60% of the full year 2023 sales outlook already in backlog, which is meaningfully higher than in prior years
- 5. We have existing capacity to deliver on our backlog and any potential new orders that could materialize throughout the year

# 2023 Chart Standalone Segment Outlook

	Primary End Markets	GTLS projected organic growth rate	Comments
Heat Transfer Systems	Liquefied Natural Gas Oil and Gas	50%+	<ul> <li>Record backlog</li> <li>2022 order strength in ssLNG, Big LNG</li> <li>Traditional energy build</li> </ul>
Cryo Tank Solutions	Industrial Gas	5% to 7%	<ul> <li>Sustainability activity = more storage</li> <li>Capital budgets in mid-single digits</li> <li>LTAs updated</li> </ul>
Specialty Products	Hydrogen, CCUS Water Treatment Food & Beverage Space, Gas By Rail	35% to 40%	<ul> <li>Record backlog</li> <li>U.S. Inflation Reduction Act</li> <li>EU Green Deal Industrial Plan</li> <li>Private sector investment</li> <li>CO2 shortages</li> </ul>
Repair, Service, Leasing	Storage & Transport Refurbishment Field Services and Monitoring	8% to 10%	<ul> <li>Q422, Q123 service order strength</li> <li>2H 2022 increase in EU customers with MSAs for service and monitoring</li> </ul>

# 2023 Demand Outlook is Strong and Supported by Numerous Macro Tailwinds

## Our current commercial pipeline for the next 12 months totals over \$11.5 billion

## Booked \$285 million of orders in January 2023

- Specific solution opportunities of \$8.2 billion
- Over \$100 million of liquid hydrogen trailer opportunities
- 27 hydrogen liquefier opportunities being bid in various stages of progress, some with multiple trains
- China re-opening
- Multiple customers in a variety of regions ordering hydrogen equipment to start 2023
- Lifecycle service (within Repair, Service & Leasing) had the largest order month in December 2022 and a strong start to 2023 supporting strong first half 2023 RSL margins
- Helium shortages driving new He liquefier potential customers and projects (quoting 5 currently)
- CO2 shortages driving additional CCUS opportunities, in particular immediate-term for Earthly Labs CiCi
- Steady growth in both domestic and international midscale liquefaction capacity

## Meaningful Year-to-Date 2023 Orders

YTD Through February 22, 2023

## **LNG / OIL**

- LNG systems with APAC EPC \$115M
- Floating LNG BAHX \$19.5M
- USA ACHX for LNG \$4.9M
- Cryo plant BAHX \$1.9M
- UAE ACHX \$0.9M

#### **SPACE EXPLORATION**

- Exploration tanks \$3.3M
- Exploration tanks India \$2.0M
- Vacuum Insulated Pipe \$2.2M

### **FIELD SERVICE**

- M. East Lifecycle field service \$2.6M
- IG field service \$0.3M

## **HYDROGEN**

- LH2 expansion; O2 storage \$63M
- LH2 tanks \$1.9M
- LH2 tanks \$1.7M
- LH2 tanks \$0.7M
- LH2 S. Korea tank \$0.5M

#### WATER TREATMENT

- PA wellsite water treatment \$1.3M
- California water treatment \$1.1M
- Indiana water plant CO2 \$0.5M

#### **CCUS / METHANE ELIMINATION**

- Fans for direct air capture \$2.3M
- Methane elimination \$1.9M
- 4 CiCi Oaks to beverage dist. \$0.4M
- KAUST expanded FEED \$0.3M
- Earthly CiCi NZ unit \$0.2M

## **INDUSTRIAL GAS**

- IG equipment \$2.4 million
- Customer storage, transport \$1.6M
- IG customer tanks \$1.4M
- IG customer2 tanks \$1.4M
- S. Africa customer trailers \$1.3M
- IG customer ACHX \$1.3M
- IG repair & service \$0.8M
- IG USA1 Feb \$0.8M
- IG USA2 Feb \$0.8M
- IG USA electronic tank \$0.8M
- India 20' ISOs \$0.8M
- IG Thailand trailers \$0.7M
- IG EU Feb \$0.6M



## Pro Forma Combined Chart and Howden 2023 Outlook

Levered Adj Free Cash Flow Bridge	\$M
Approx. pro forma EBITDA, pre-commercial	~\$1,000
Less: Interest Expense	~315
Less: Cash tax, working capital, capex	~250
Less: Costs to achieve synergies	~16
Levered pro forma adj. FCF	~\$420

- 1. Pro forma Chart and Howden combined 2023 full year revenue of approximately \$4.25 billion
- 2. Pro forma Chart and Howden combined 2023 full year adjusted EBITDA of approximately \$1 billion, inclusive of year-one cost synergies of \$175M
  - a. First month of ownership will have \$20 million of annualized synergy cost out
  - b. First six months of ownership will have \$75 million of annualized synergy cost out
- 3. Share count estimates of 42.7 million basic and 47 million diluted (Q1 2023 estimate)
- 4. Placed long-term debt in December 2022
  - a. Term loan will execute on Howden close
  - b. Estimated net debt at close remains ~\$4.2B
  - c. Blended interest rate on debt ex. convertible notes is currently within the prior discussed 7% to 8.5% range
  - d. SOFR rate of 4.55%; 12-month pro forma interest of ~\$315M
  - e. Excludes any impact to debt paydown from potential divestitures

<sup>\*</sup>Chart's acquisition of Howden is currently pending regulatory approvals before closing

## Pro Forma Adjusted EBITDA Bridge 2023 to 2024

## Combined Chart + Howden



- Revenue growth led by energy transition markets and backlog conversion
- Implied organic volume leverage of ~30%
- Favorable mix driven by energy transition verticals
- Cost synergies embedded in margin expansion and SG&A improvement

# Reiterating our 2024 Combined EBITDA Forecast



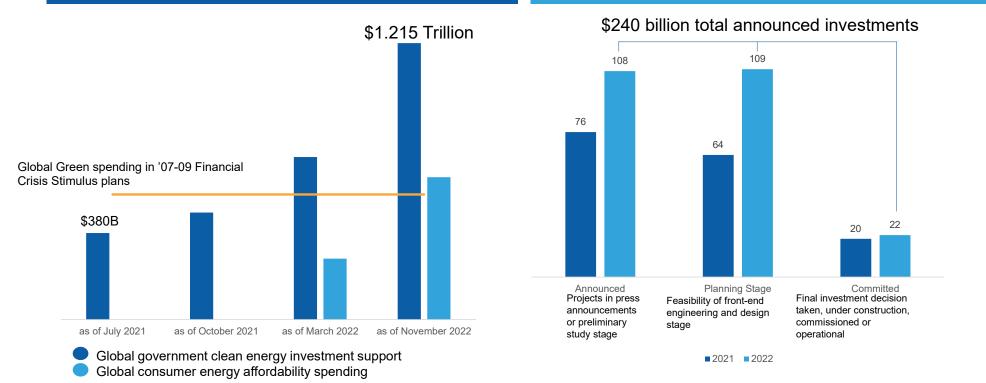
# Macro Tailwinds Continue to Build

# Global Investment - Energy Transition



Global government spending for clean energy investment support

Announced Hydrogen Investment by Maturity through 2030



Latest update includes US Inflation Reduction Act (IRA) and European national funding; Recent EU Green Deal Industrial Plan (GDIP) is incremental to November 2022 update

Source: IEA, Hydrogen Council GTLS: GAS TO LIQUID SYSTEMS®

## Recent Hydrogen News = Positive News for GTLS & Howden

#### Canada

- Introducing new tax credit of up to 40% for hydrogen production (2023-2030)
- Federal government will distribute \$800 million to 60 Canadian clean fuels companies

#### **United States**

- Biden Administration announced \$750M to accelerate clean hydrogen technologies
- NASA signed hydrogen molecule supply purchase agreement
- Air Products and AES announce mega-scale hydrogen plant in Texas
- PTC and DOE Hub funding also incentivizing private investment

#### Mexico

 Jan 12, 2023- US, Canada and Mexico agree to cooperate on N. American clean hydrogen market

#### **Africa**

Masdar and McKinsey &
 Company said in a November
 2022 published report that
 Africa could capture as much as
 10% of global demand for green
 hydrogen by 2050

#### **Europe**

 EU Green Deal Industrial Plan Announced 2/1/2023

#### China & S. Korea

 China 1+N policy for investments in renewables

#### India

- January 4, 2023 India approves National Green Hydrogen Mission
- February 2023 EIB joins IH2A and offers support for 1B Euro facility for future funding, subject to approvals

#### Australia

The Western Australian
Government has earmarked
land for seven renewable
energy projects collectively
valued at \$70 billion. The
projects are mainly
hydrogen-related with
steelmakers and mining
companies the primary users

## **Positive Impact to Chart**



- For hydrogen liquefaction plants, excluding H2 production, Chart's content is up to ~50% of cost of plant
- Including H2 production and liquefaction, Chart content is up to ~15-20% and increases to up to ~20-25% with Howden content
- Chart's leading certified storage and transport equipment will benefit from regional and global public & private investment

## **Positive Impact to Howden**



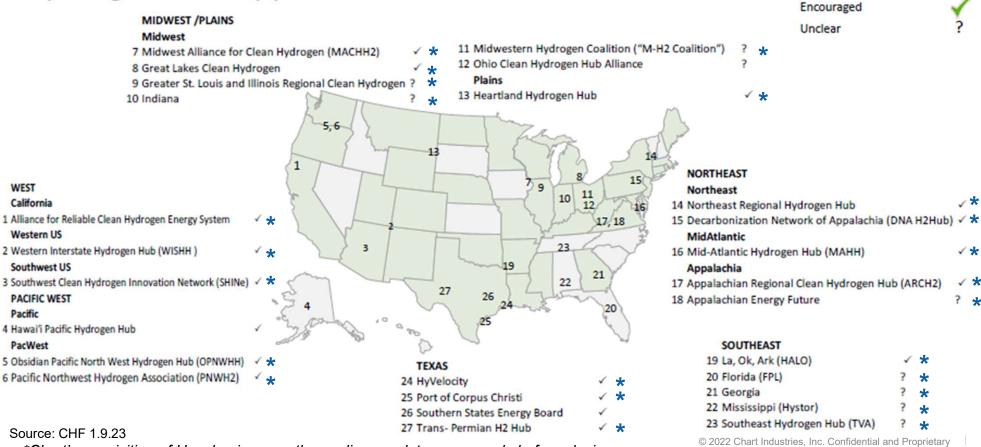
- For gaseous hydrogen production facilities, Howden content would be approximately 10% of the cost of the facility
- Natural gas pipelines can handle ~20% to 30% of hydrogen blended which would be a natural application for Howden's compressors
- Pipeline is expected to be the cheapest form of H2 transport over land (when at scale)

## US DOE Hub Applications Status

#### Potential for Chart or Howden Content \*

**DOE Status** 

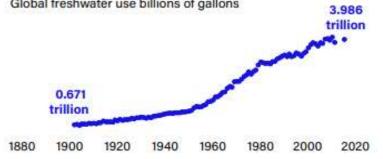




\*Chart's acquisition of Howden is currently pending regulatory approvals before closing

## Recent Water News = Positive News for GTLS & Howden

- PFAS Bans and restrictions going into effect in States in 2023 (USA)
- Inflation Reduction Act includes \$4 billion in drought resilience and \$550 million for domestic water program funding (USA)
- US Infrastructure bill includes \$55 billion for clean water over 5-years including \$10 billion for emerging contaminants/ PFAS
- Tunisia is receiving 285 million euro in financing from KfW and the European Union to accelerate water and sanitation projects
- Drought in SW USA driving new groundwater projects
- Asia Pacific is seeing government funding for clean drinking water and treatment of wastewater
- Brazil federal water legislation to provide 99% of its population with access to drinking water by 2033
- Industrial emergency oxygen for Philippines and India becoming a key discussion topic
   Global freshwater use billions of gallons



Sources: Council on Strategic Risks, Population Connection, Nature, Kummu et al., Global International Geosphere-Biosphere Programme, Our World in Data

## Positive Impact to Chart



Cooler By Design.

- New groundwater projects will require treatment of contaminants (high volume of current proposals)
- Ozone is only proven way to remove specific bacteria in surface water reservoirs; Our LOX systems will likely be required due to size
- Our SDOX for emergency oxygen work well where high power cost comes into play
- We are currently completing Sao Paulo water project

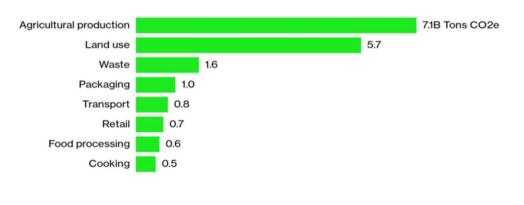
## **Positive Impact to Howden**



- Aeration can account for over 60% of the power used in a treatment plant
- Installed base of more than 2,500 Mechanical Vapor Recompression (MVR) compressors in more than 70 countries
- Continue to leverage Howden's water presence globally

## Recent GHG/CCUS News = Positive News for GTLS & Howden

- European cement manufacturers have committed to reducing carbon emissions by 30% by 2030
- U.S. Leadership in Climate Change via announcements at COP27 by Biden Administration specific to Africa and smart agriculture
- Continued expansion of the First Movers Coalition, a publicprivate partnership, for hard to decarbonize sectors
- CO2 shortages in U.S., UK, Australia, New Zealand impacting food & beverage, industrial industries
- The food system generates ~31% of GHG emissions:



## **Positive Impact to Chart**



Cooler By Design.

- Leader in post-combustion cryogenic carbon capture (CCC)
- Equipment and process technology across a wide range of volume and CO2 concentration levels with Earthly Labs (smaller volumes) and SES (larger volumes)
- ACHX, fans and tanks for all types of carbon capture and direct air capture technologies and applications
- Sugar Creek cement plant pilot (DoE, FL Smidth, Eagle Materials)

## **Positive Impact to Howden**

- Compression plays across the CCUS value chain
- Leverage to CO2 capture, separation, transport, storage, and end usage
- Tailored solutions for different types of CCUS applications (direct air capture, etc.)
- Ability to pull Chart content into other CCUS application given use of compression across different technology solutions

Source: Our World in Data, Crippa et al (2021)

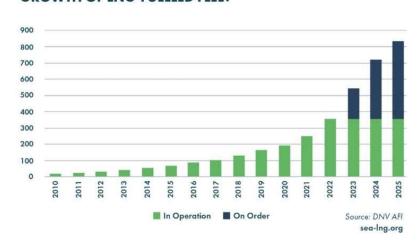
**Bloomberg Green** 

\*Chart's acquisition of Howden is currently pending regulatory approvals before closing

## Recent Marine News = Positive News for GTLS & Howden

- Large marine transport firms building sustainable fuel fleets, including e-methanol
- Carbon Intensity Indicator (CII) in effect as of 1/1/2023: all ships will be required to have an enhanced Ship Energy Efficiency Management Plan (SEEMP) with an implementation plan for achieving the required CII that will need to be approved and kept on board.

#### **GROWTH OF LNG-FUELLED FLEET**



## **Positive Impact to Chart**



- Operators are looking for upfront engineering optimization and complete solution package which Chart and Howden bring plus over 1500 technical engineering resources
- Air coolers are critical elements of e-methanol
- Chart currently has hydrogen cruise ship and hydrogen ferry (tug) in backlog

## **Positive Impact to Howden**



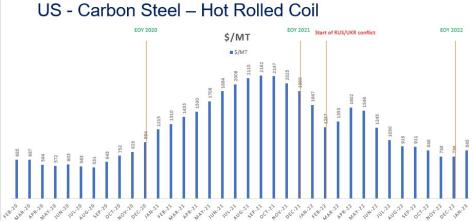
 Howden can provide multiple technologies for emethanol including compressors, mechanical vapor recompression for distillation, steam turbines for waste heat recovery



# **Operating Environment**

# **Industry Input Costs**



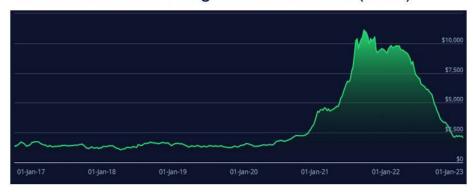


US - Stainless Steel 304 - Hot Rolled Coil



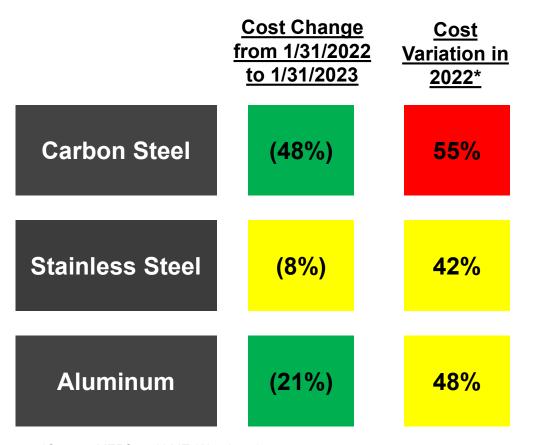
Sources: LME (Aluminum), MEPS (Carbon and Stainless Steel), Freightos

Global Container Freight Rate Index 3Y(USD)



## Year-Over-Year Material Cost Change

Three Main Raw Material Inputs



#### 2022

- Increase in demand in construction and infrastructure led to an increase in prices of steel and aluminum
- Shortage of key raw materials such as iron ore and aluminum contributed to price increases
- Logistics challenges subsided in the year, yet still exist
- The rise in energy prices contributed to the increase in raw material costs

## 2023 expectations

- Demand for steel and aluminum expected to remain high
- Impact of COVID-19 pandemic on the industry has subsided and expect that to remain stable
- Cost of energy is more stable
- Disruption in supply chain due to geo-political trade tensions could lead to variation in costs

<sup>\*</sup>Source: MEPS and LME (Aluminum)

# **Chart Pricing**

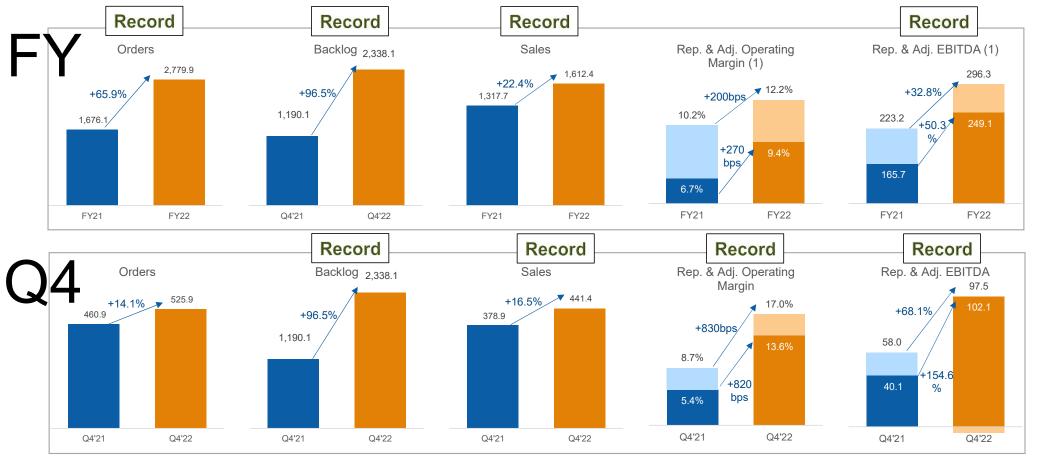
	GTLS Three Main Pricing Approaches	Pricing Actions Taken From Q1 2021 through Q4 2022	2023 Anticipated Pricing Approaches		
1	Standard Product Pricing	<ul> <li>Americas &amp; Global</li> <li>8 base price increases + surcharges</li> <li>EMEA</li> <li>4 base price increases + surcharges</li> </ul>	<ul> <li>January 1, 2023 revised tier pricing</li> <li>Selected price increases on specific products</li> </ul>		
2	Long-term agreement pricing mechanisms in contracts	<ul> <li>Quarterly and semi-annual changes per index</li> <li>Additional surcharges</li> </ul>	Implement scheduled     Q1 2023 price increase     per contracts		
3	Project based specific material pricing	<ul> <li>Shortened bid validity</li> <li>Lock in material early</li> <li>Include escalation estimates</li> </ul>	<ul> <li>Maintain shortened bid validity</li> <li>Utilize on hand inventory from safety stock</li> </ul>		



# Q4 and Full Year 2022 Results, Continuing Operations



## Q4 and Full Year 2022 Record Reported Results



1) Adjusted operating income, adjusted operating margin, EBITDA and adjusted EBITDA are non-GAAP measures. Please see reconciliation tables at the end of the accompanying earnings release for a reconciliation to the relevant GAAP measures.

## Q4 and Full Year 2022 Historical GTLS Records by Segment

Q4

## Heat Transfer Systems

- Record sales of \$148.4MM
- Record backlog of \$1.3B
- Record gross profit of \$37.2MM
- Record operating income of \$27.9M
- Record operating margin of 18.8%

## Repair, Service & Leasing

- Record orders of \$66.3MM
- Record gross profit of \$25.8MM
- Record gross margin of 46.7%
- Record operating income of \$18.7MM
- Record operating margin of 33.9%

#### Cryo Tank Solutions

- Record backlog of \$371.0MM
- Record gross profit of \$28.9MM
- Record operating income of \$17.8MM

### Specialty Products

- Space has record backlog, gross profit, and operating income
- Water treatment and Carbon Capture has record backlog



## Heat Transfer Systems

- Record orders of \$1.42B
- Record sales of \$462.7MM
- Record backlog of \$1.3B
- Record operating income of \$51.7M
- Record operating margin of 11.2%

## Repair, Service & Leasing

- Record orders of \$218.9MM
- Record sales of \$209.6MM
- Record gross profit of \$79.5MM
- Record gross margin of 37.9%
- Record operating income of \$51.0MM
- Record operating margin of 24.3%

## Cryo Tank Solutions

- Record sales of \$504.3MM
- Record backlog of \$371.0MM
- Record operating income of \$54.0MM

## Specialty Products

- Record Orders of \$665.5MM
- Record sales of \$448.3MM
- Record backlog of \$645.9MM

<sup>\*</sup> Operating Margin is a record for years 2015-2022

## 12 Quarters Orders Trends

# Full year 2022 had our four highest order quarters in our history







\$millions	2022	2021	% change	
Chart total orders	\$2,779.9	\$1,676.1	65.9%	
Big LNG	620.7	2.9		
Chart orders ex Big LNG	2,159.2	1,673.2	29.0%	
Over-the-Road (OTR) Vehicle tanks	16.6	111.7		
Chart orders ex Big LNG and OTR Tanks	2,142.6	1,561.5	37.2%	

# Continued Strength in Base Business Orders

\$millions	2022	2021	% change
Chart total orders	\$2,779.9	\$1,676.1	65.9%
Big LNG	620.7	2.9	
Chart orders ex Big LNG	2,159.2	1,673.2	29.0%
Over-the-Road (OTR) Vehicle tanks	16.6	111.7	
Chart orders ex Big LNG and OTR Tanks	2,142.6	1,561.5	37.2%

Full Year	2022	2021	% change
Orders (\$ millions)	\$16.6	\$111.7	(85%)
Customers who placed orders > than \$50k	16	7	+129%
New customers who placed orders > than \$50k	9	1	N/A
Customer who ordered onboard liquid hydrogen tanks	2	0	N/A













# Record Full Year 2022 Orders



#	Orders	Q1 2022	Q2 2022	Q3 2022	Q4 2022	FY 2022
1	Venture Global (BKR) Plaquemines Phase 1 FNTP	135.5				135.5
2	Venture Global (BKR) Plaquemines Phase 2 FNTP	45.4		91.8		137.2
3	Cheniere (Bechtel) CCL Stage 3 LNTP & FNTP	47.5	300.5			348.0
4	BigLNG orders booked	228.4	300.5	91.8	0.0	620.7
5	FLNG (New Fortress Energy) FastLNG2 & 3	38.3	46.3			84.6
6	FLNG (New Fortress Energy) FastLNG4				46.8	46.8
7	FLNG (New Fortress Energy) FastLNG5				46.8	46.8
8	Southeastern US Utility ssLNG retrofit & expansion		26.8			26.8
9	Space exploration supersize tanks		16.1		12.5	28.6
10	Hydrogen liquefiers /Equipment		134.5			134.5
11	EU Member State military mobile equipment order		22.3			22.3
12	N. American hydrogen liquefaction, water treatment plant			108.0	LOI/no PO	108.0
13	N. American ssLNG facility			100.0	38.4	138.4
14	APAC FLNG			50.0		50.0
15	NAM FLNG			25.0		25.0
16	APAC Petrochem aftermarket				22.0	22.0
17	Other GTLS orders	370.1	341.3	354.6	359.4	1,425.4
18	Total GTLS Orders Booked 2022	636.8	887.8	729.4	525.9	2,779.9

## Record Q4 and Full Year 2022 Sales

	% change	FY 2022 vs. 2021	Q4 '22 vs. Q4 '21
	Reported sales	22.4%	16.5%
\	Organic	21.4%	20.5%
7	Inorganic	4.8%	0.2%
	FX (Currency)	(3.9%)	(4.2%)

\$millions	2022	2021	% change
Chart total sales	\$1,612	\$1,318	22.3%
OTR Vehicle tanks	27	131	(79.4%)
Chart sales ex OTR	\$1,585	\$1,187	33.5%

\$millions	Q4 2022
Q4 2022 Reported Sales	\$441.4
Negative foreign exchange impact	\$16.0
Delays in supply chain receipts in HTS & Specialty	20.9
Customer receipt timing preferences from year-end to 2023	11.3
Field service job deployment & of rebundle ACHX aftermarket timing	9.8
RSL field service customer chose to replace versus repair	7.0
Implied Q4 2022 with timing shifts	\$506.4

# Total Chart and each of our four segments had record sales in full year 2022

(all %'s rounded)

#### **End Markets**

- CCUS +690% (small)
- Space exploration +213%
- Water treatment +140%
- Hydrogen +48%
- Food & beverage +9%

## **Products**

- HTS systems +150%
- Air cooled heat exchangers +58%
- Brazed aluminum heat exchangers +51%
- VRV +60%
- Fans +8%
- Storage equipment, +9%
- Engineered tanks +8%
- Mobile equipment +8%



# Sales & Operating Margin Trends

- Q4 2022 reported operating income is a historical record
- Q4 2022 reported operating income as a percent of sales is a historical record



<sup>1)</sup> Adjusted operating margin is a non-GAAP measure. Please see reconciliation table at the end of the accompanying earnings release for a reconciliation to the relevant GAAP measure.



## Fourth Quarter and Full Year 2022 Adjusted EBITDA

millions, except per share amounts onsolidated	Q4 2022	Q4 2021	Change v. PY	YTD 2022	YTD 2021	Change v. PY
Net income from continuing operations	\$17.4	\$12.4	\$5.0	\$82.6	\$60.9	\$21.7
Income tax expense, net	11.9	3.6	8.3	15.9	13.5	2.4
Interest expense, net	16.3	3.3	13.0	31.7	10.7	21.0
Acquisition Related Finance Fees	37.0	-	37.0	37.0	-	37.0
Depreciation and amortization	19.5	20.8	(1.3)	81.9	80.6	1.3
EBITDA (1)	\$102.1	\$40.1	\$62.0	\$249.1	\$165.7	\$83.4
Non-recurring costs	16.2	14.8	1.4	49.2	46.3	2.9
Share-based compensation	2.7	3.1	(0.4)	10.6	11.2	(0.6)
Svante revaluation / MTM	(23.6)	0.0	(23.6)	(12.7)	0.0	(12.7)
Def financing for Howden	0.1	0.0	0.1	0.1	0.0	0.1
Adjusted EBITDA (1)	\$97.5	\$58.0	\$39.5	\$296.3	\$223.2	\$73.1

<sup>1)</sup> EBITDA and Adjusted EBITDA are not measures of financial performance under U.S. GAAP and should not be considered as an alternative to net income in accordance with U.S. GAAP. Management believes that EBITDA and Adjusted EBITDA facilitate useful period-to-period comparisons of financial results and the information is used by us in evaluating our internal performance.

# Fourth Quarter and Full Year 2022 Adjusted EPS

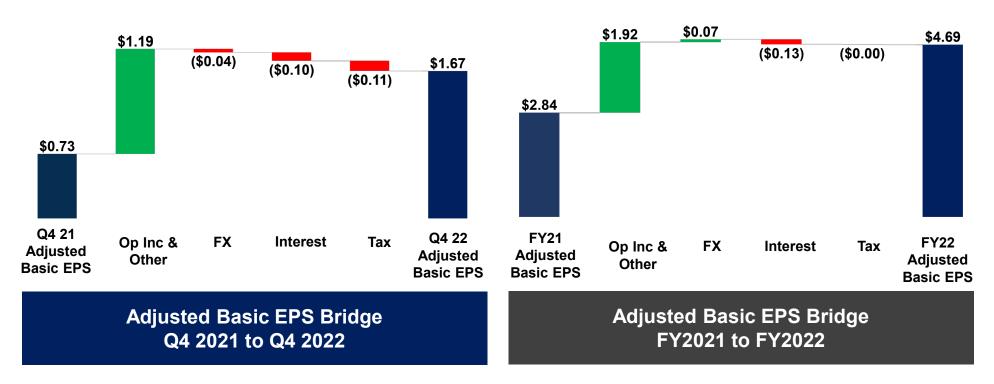
\$ millions, except per share amounts	Q4 2022	Q4 2022 at normalized	Q4 2021	Change v Q421	YTD 2022	YTD 2022 at normalized	YTD 2021	Change v. PY
Continuing Operations		share count <sup>3</sup>		Q721		share count <sup>3</sup>		
Net income attributable to Chart Industries, Inc.	\$17.2	\$17.2	\$12.1	\$5.1	\$81.6	\$81.6	\$59.1	\$22.5
Less: Mandatory convertible preferred stock dividend	\$1.4	\$1.4		\$1.4	\$1.4	\$1.4		\$1.4
Income from continuing operations attributable to Chart	\$15.8	\$15.8	\$12.1	\$3.7	\$80.2	\$80.2	\$59.1	\$21.1
Reported Basic EPS	\$0.42	\$0.44	\$0.34	\$0.10	\$2.21	\$2.24	\$1.66	\$0.58
Investment equities mark-to-market, net of FX	(0.61)	(0.63)	(0.06)	(0.57)	(0.25)	(0.25)	(0.12)	(0.13)
2 Gains on purchase or sale	-	-	(0.07)	0.07	-	-	(0.07)	0.07
3 Debt and debt refinance costs	1.21	1.26	0.12	1.14	1.25	1.26	0.12	1.14
4 Mandatory convertible preferred stock dividend	0.04	0.04		0.04	0.04	0.04	-	0.04
5 Tax effects (1)	(0.01)	(0.01)	-	(0.01)	(0.06)	(0.06)	0.01	(0.07)
Normalized Basic EPS	\$1.05	\$1.10	\$0.33	\$0.77	\$3.19	\$3.23	\$1.60	\$1.63
6 Restructuring and related costs	0.22	0.23	0.21	0.02	0.58	0.59	0.60	(0.01)
7 Deal related and integration costs	0.26	0.27	0.17	0.10	0.71	0.71	0.47	0.24
8 Start-up costs (organic)	0.08	0.08	0.08	-	0.30	0.31	0.25	0.06
9 Other one time	-	-	0.01	(0.01)	-	-	0.14	(0.14)
10 Tax effects (1)	(0.01)	(0.01)	(0.07)	0.06	(0.15)	(0.15)	(0.22)	0.07
Adjusted Basic EPS (2)	\$1.60	\$1.67	\$0.73	\$0.94	\$4.63	\$4.69	\$2.84	\$1.85
11 Acquisition financing equity issuance <sup>3</sup>	\$0.07				\$0.06			
Adjusted Basic EPS (2)	\$1.67				\$4.69			

<sup>(1)</sup> Tax effect reflects adjustment at normalized periodic rates

<sup>(2)</sup> Adjusted Basic EPS and Normalized Basic EPS (both non-GAAP measures) are as reported on a historical basis. EPS adjustment reconciliation table is provided in accompanying press release financial tables.

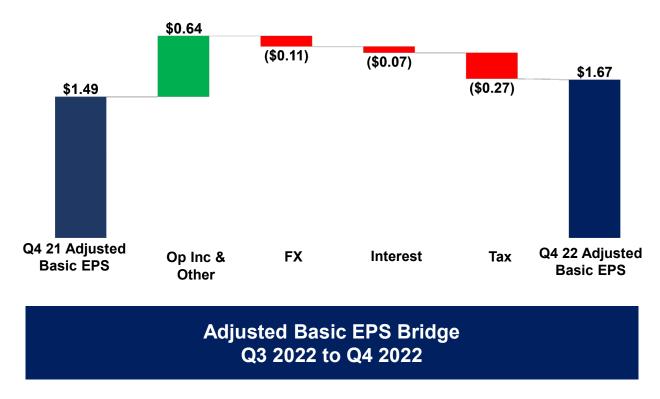
<sup>(3)</sup> Normalized Share count excludes the 5.92 million shares of Common Stock issued in our December 2022 offering. As such, it is a non-GAAP measure.

# Fourth Quarter and Full Year 2021 to 2022 Adjusted EPS Walk



Adjusted Basic EPS and Normalized Basic EPS (both non-GAAP measures) are as reported on a historical basis. EPS adjustment reconciliation table is provided in accompanying press release financial tables.

# Q3 2022 to Q4 2022 Adjusted EPS Walk



Adjusted Basic EPS and Normalized Basic EPS (both non-GAAP measures) are as reported on a historical basis. EPS adjustment reconciliation table is provided in accompanying press release financial tables.

## Fourth Quarter 2022 Free Cash Flow

\$ millions, consolidated, continuing ops	Q4 2022 Act	Adjustments	Q4 '22 Adj.
Net Income	17.4		17.4
Operating income adjustments		15.0	15.0
Tax affect on operating income adjustments		(2.1)	(2.1)
Non operating income adjustments		4.6	4.6
Tax affect on non operating income adjustments		1.2	1.2
PY Tax adjustment		3.1	3.1
Deal financing and interest costs		45.2	45.2
Depreciation and amortization	19.5		19.5
Share based compensation	2.7		2.7
Financing costs amortization	0.8		0.8
Unrealized gain on investment in equity securities	(24.0)		(24.0)
Unrealized foreign currency transaction loss (gain)	0.1		0.1
Equity in loss (earnings) of unconsolidated affiliates	0.2		0.2
Deferred income tax expense (benefit)	(1.7)		(1.7)
Other non-cash operating activities	7.9		7.9
Changes in:			
Accounts Receivable	0.9		0.9
Inventory	9.7		9.7
Unbilled contract revenue	1.2		1.2
Accounts payable and other liabilities	27.0		27.0
Customer advances and billings in excess of	(31.2)		(31.2)
Net cash provided by operating activities	30.5	67.0	97.5
Capital Expenditures	(26.0)		(26.0)
Free Cash Flow / Adjusted Free Cash Flow	4.5	67.0	71.5

Changes not added back as compared to original forecast total \$18.5 million and are as follows:

- Capex acceleration for quicker progress on additional capacity given strength in demand in primarily BAHX and cold boxes ~\$8.9 million accelerated
- 2. Foreign exchange headwinds of ~\$1.4 million
- 3. Timing of AR receipts from December 2022 to 2023 (all received in first business days of January 2023) of \$8.3 million from space customer (\$2.5M), IG customer (\$2.8M), energy customer (\$1.7M) and railcar customer (\$1.3M)

<sup>&</sup>quot;Free cash flow" and "adjusted free cash flow" are not measures of financial performance under U.S. GAAP and should not be considered as an alternative to net cash provided by (used in) operating activities in accordance with U.S. GAAP. The Company believes this figure is of interest to investors and facilities useful period-to-period comparisons of the Company's operating results.



# Q4 and FY 2022 Segment Information

# Heat Transfer Systems: LNG Opportunities for GTLS

				Pre Feb 24, 2022 GTLS	April 29, 2022 GTLS	July 29, 2022 GTLS	October 28, 2022 GTLS	February 24, 2023 GTLS
BigLNG (greater than 5 MTPA)	1	•	Number of reasonably possible projects to move to order stage in next 3 years	10	22	24 (excludes what is in backlog)	24 (excludes what is in backlog); +1 from last update	25 (excludes what is in backlog); +1 from last update
	2	•	Number of international projects contemplating using IPSMR®	1	2	3	4	5
	3	•	GTLS Associated Order Potential \$ Not Yet Booked and including expanded scope / retrofit opps	\$1.25 billion	\$4.55 billion	\$5.35 billion	\$5.68 billion (excludes what is in backlog)	\$6.3 billion (excludes what is in backlog)
	4	•	GTLS Order \$ Booked Year-to-Date / Full Year 2022	\$0	\$228.4 million	\$528.9 million	\$620.7 million	\$620.7 million
ssLNG	5	•	Number of reasonably possible projects to move to order stage in next three years	205	233	276	318	316
(5 MTPA and	6	•	Number of Floating LNG projects in bid pipeline	13	26	27	27 (excludes what is in backlog)	27 (excludes what is in backlog)
smaller)	7	•	GTLS Order \$ Booked Year-to-date / Full Year 2022	0	\$38.3 million	\$138 million	\$313 million	\$446 million

## Chart Executed 30 Individual MOUs in 2022

Category	Q4 2022	Full Year 2022	YTD 2/23/2023
CCUS / CO2	1	8	
Hydrogen (including liquefaction)	5	12	2
Water treatment	1	1	1
LNG (including liquefaction)	4	11	
Total	11	32*	3







\*Two of the 30 MOUs encompass both hydrogen and CCUS

HYDROGEN / BIOFUELS

CCUS

LNG / ACHX

WATER TREATMENT

WATER TREATMENT

HYDR \*\*OZONIX

WISON

WISON

PINNACLE

MIDSTREAM

1) BNG Clean Fuel was signed in December 2022, publicly announced Jan 2023\*hart Industries, Inc. Confidential and Proprietary

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### Chart Q4 and Full Year 2022 First-of-a-Kind Orders

# 89 new First-of-a-Kinds (FOAK) orders received in the full year 2022 168 new FOAK orders received in the past two years

**LNG** 



The first IPSMR® system being installed on a vessel

Hydrogen



Hyzon Motors with an order for liquid hydrogen onboard tank **Water Treatment** 



Guyana Water
Incorporated (GW)
award for two
projects to support
water infrastructure
initiative in Guyana

**Emission Reduction** 



New Orca design mounted to a F650 truck chassis **BioLCNG** 



BioLCNG fueling station

**Chart Offering Being Used in the Respective Application** 

IPSMR® and associated heat exchanger equipment

Liquid hydrogen onboard vehicle tank

AdEdge water treatment technology and associated GTLS equipment

ORCA

Fueling station, bulk tanks and associated metering equipment

### Chart Q4 and Full Year 2022 New Customers

# 327 new customers placed orders in the full year 2022 729 new customers in the past two years

Food & Bev



Dosing equipment for Wine on Wheels

Hydrogen



Hydrogen equipment solutions for Energy Vault's Calistoga Project in California **Water Treatment** 



Yarmouth,
Massachusetts
Fe/Mn PFAS
Treatment system –
first Flourosorb
system in MA

**CCUS** 



Pre-FEED study order for our SES CCC technology for Carmeuse (lime industry) **Small-scale CCUS** 



Earthly Labs CiCi Unit in Little Brown Jug's brewery

**Chart Offering Being Used in the Respective Application** 

Dosers

Liquid hydrogen storage tanks

AdEdge water treatment technology and associated GTLS equipment

SES cryogenic carbon capture technology

Small-scale carbon capture CiCi unit

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## Cryo Tank Solutions: Chart China Setting Records

### 2021 Records

- Full year 2021 orders
- Full year 2021 sales
- · Full year operating income
- Full year operating income % of sales
- Q4 2021 gross margin as a percent of sales
- Q4 2021 operating income as a percent of sales
- China standardized and expanded ISO manufacturing line supported total Chart ISO record sales

### 2022 Records

- Full year 2022 reported gross margin as a percent of sales
- Full year 2022 reported operating income as a percent of sales
- Q4 2022 reported gross margin as a percent of sales
- Q4 2022 reported operating income as a percent of sales
- 2022 reported and adjusted operating income as a percent of sales doubled compared to 2021
- Chart China has a safety total recordable incident rate (TRIR) of ZERO for 2022!
- Highest number of ISO tanks ordered in history

### **2023 China Economic Outlook**

- China re-opening December 5, 2022 supports a stronger 2023
- Government leadership finalized March 1, 2023
- Development of fueling stations in the market expected to support growth of our LNG trailers
- Economic recovery in the southern and eastern regions is anticipated to stimulate demand for industrial gas business

### Repair, Service, Leasing: Leasing Continues to Grow

#	Description	2019	2020	2021	2022
1	Number of new signed leases	6	57	79	465
2	Number of assets in leasing fleet	58	118	137	171
3	Fleet assets + underway fleet additions	58	118	204	245
4	# of fueling stations with GTLS LTA service	0	8	63	95
5	# of lifecycle service customers	N/A	63	111	142

### Three- year Master Service Agreement (MSA) signed with VERBIO for LNG Vehicle Fueling Stations



- Periodic Maintenance → Monheim, Germany
- 24/7 Helpdesk Service → Monheim, Germany (daytime), Decin, Czech Republic (nighttime)
- Parts Supply (3 levels Starter Kit on Site/Monheim/Decin)
- Training → Monheim, Germany
- Hypercare and Relocation Services → Decin, Czech Republic



# Announced Definitive Agreement to Acquire Howden

### Combined Solutions Across the Nexus of Clean™

	Clean	Solution	Chart Proces	ss Technologies	CHART	
	End Market	Solution	Wholly-Owned	Minority Ownership	© Cooler By Design. ⊕	Howden
Offering	Clean Power	<ul> <li>Hydrogen</li> <li>Helium</li> <li>LNG</li> <li>Biogas</li> <li>Nuclear</li> <li>Energy recovery</li> <li>Biofuel / synfuels</li> <li>Biomass</li> </ul>	Technologies  CHART  Cooler By Design.	TRANSFÜRM MATERIALS  McPhy	<ul> <li>BAHX</li> <li>Valves / Vaporizers</li> <li>ACHX</li> <li>Expanders</li> <li>Liquefiers</li> <li>Fans</li> <li>Cold Boxes</li> <li>Transports</li> </ul>	<ul><li>Fans</li><li>Compressors</li><li>Blowers</li><li>Heaters</li><li>Steam Turbines</li><li>SaaS</li></ul>
Digital Offering	Clean Water	<ul><li>Water&amp; Wastewater Treatment</li><li>Desalination</li></ul>	AdEdge Aded and a second and a		<ul> <li>Bulk tanks</li> <li>Dissolution equipment</li> <li>Vaporizers</li> <li>Cryo-lease</li> </ul>	■ Blowers ■ SaaS
Integrated	Clean Food, Beverage & Agriculture	<ul><li>Carbon capture</li><li>Beverage &amp; Food</li></ul>	Earthly Labs		<ul> <li>Microbulk tanks</li> <li>Dosers</li> <li>Vaporizers</li> </ul>	<ul><li>Compressors</li><li>SaaS</li></ul>
F	Clean Industrials	<ul> <li>CCUS</li> <li>Metals processing</li> <li>Chemicals / Petrochem</li> <li>Cement</li> <li>Mining</li> <li>Marine</li> <li>Refrigeration</li> <li>Gas By Rail</li> </ul>	SES INNOVATION A Ourt Industrie Compiny	Svante  TRANSFÜRM  MATERIALS	<ul> <li>Heat exchangers</li> <li>Storage tanks</li> <li>Vaporizers</li> <li>Cold Boxes</li> <li>VIP/VJP</li> <li>Expanders</li> </ul>	<ul> <li>Fans</li> <li>Compressors</li> <li>Blowers</li> <li>Steam Turbines</li> <li>Heaters</li> <li>VentSim Software</li> <li>SaaS</li> </ul>

Howden additions Where Howden helps Chart's presence and penetration

<sup>\*</sup>Chart's acquisition of Howden is currently pending regulatory approvals before closing

# Chart

### VentSim™

### How We Think About The Business



### One Chart Global Commercial Team

### One Chart Global Engineering Team

### One Chart Global Products - Operations - Aftermarket

### **Heat Transfer Systems**











**Specialty Products** 



### Repair, Service & Leasing







#### **Chart New Build Products**

- Air Cooled Heat Exchangers (ACHX)
- **Brazed Aluminum Heat Exchangers**
- Cold Boxes
- Nitrogen Rejection Units (NRU)
- Integrated systems
- High Efficiency Flow Fans

#### **Chart New Build Products**

- Dosing equipment
- · HLNG vehicle tanks
- Fueling Stations
- LNG by Rail (Gas By Rail Offering)
- Hydrogen equipment
- · Water treatment (PFAS remediation)
- · Carbon Capture equipment

#### **Chart Aftermarket**

- Repair and service
- · Aftermarket parts and maintenance
- Global Leasing
- Installations
- · Full lifecycle

#### **Chart New Build Products**

- · Bulk and Micro Bulk Storage Tanks
- ISO Containers
- · Packaged Gas Systems
- · Non-specialty mobile equipment
- Vaporizers

#### **Howden New Build Products**

- Compressors
- Blowers & fans
- · Rotary heaters
- Steam turbines

#### **Howden New Build Products**

- Compressors
- Blowers & fans
- · Rotary heaters
- Steam turbines
- VentSim™

#### Howden Aftermarket (47% of revenue '22)

- Spare parts
- Retrofits
- Service
- · Software & digital Uptime

#### **Howden New Build Products**

- · Related to Industrial end markets
  - Compressors
  - Blowers & fans
  - Rotary heaters
  - · Steam turbines



## Complementary Exposure to Specialty Markets

•						
		Appro	ximate % o	f revenue		
Market	What is in this category	Chart	Howden	Combined	Mkt growth ahead	Growth Drivers
Aftermarket, repair, service	<ul><li>Field service</li><li>Remote monitoring</li><li>Spare parts</li></ul>	13%	48%	31%	+20%	<ul> <li>Penetration of existing installed base</li> <li>Digital Uptime deployment</li> <li>Field service increasing with new builds and retrofits</li> <li>Continued expansion of 3<sup>rd</sup> party service capabilities</li> </ul>
Energy transition & renewables (new build)	<ul> <li>Hydrogen</li> <li>Biofuels &amp; Synfuels</li> <li>CCUS</li> <li>Nuclear</li> <li>LNG</li> <li>Electrification</li> <li>Water treatment</li> <li>Infrastructure</li> <li>Food &amp; beverage</li> </ul>	49%	32%	41%	+20% to 30%	<ul> <li>Carbon emission reduction targets</li> <li>Government national hydrogen strategies</li> <li>Public sector incentives and taxes</li> </ul>
Industrials (new build)	<ul><li>Industrial gas</li><li>Cement</li><li>Marine</li><li>Metals</li></ul>	27%	14%	19%	~4-5%	<ul> <li>These markets are moving to ESG with CCUS and other alternatives</li> <li>Marine IMO2020</li> <li>Moving to green metals</li> </ul>
Traditional Energy (new build)  *Chart's acquisition of Howde	<ul> <li>Oilfield applications</li> <li>Petrochemical</li> <li>n is currently pending regulatory approvals</li> </ul>	12%	6%	9%	~4-5% ©	<ul> <li>Traditional oil and gas and coal are moving toward efficiencies in existing asset base</li> <li>2022 Chart Industries, Inc. Confidential and Proprietary</li> </ul>

# Specialty Products Total Addressable Market Increase

	CHART	
Š	Cooler By Design. <sub>®</sub>	8

\$ billions	Chart TAM as of	02/24/2023	Howden TAM	Estimate	Combin	ed TAM
End-use of Products	Near-term TAM <sup>(1)</sup>	2030 TAM CAGR <sup>(2)</sup>	Near-term TAM <sup>(1)</sup>	2030 TAM CAGR (2)	Near-term TAM <sup>(1)</sup>	2030 TAM CAGR <sup>(2)</sup>
<ul><li> Hydrogen</li><li> Biofuels &amp; Synfuels</li><li> Nuclear</li><li> Energy recovery</li></ul>	\$4.50	26.8%	\$6.40	28.5%	\$10.90	27.8%
<ul><li>CCUS</li><li>Marine</li></ul>	1.00	27.5%	1.10	33.3%	2.10	30.8%
<ul><li>Food &amp; beverage</li><li>Cannabis</li><li>Lasers</li><li>Space</li></ul>	1.20	10.1%	0.25	9.1%	1.45	10.0%
<ul><li>Electrification</li><li>Clean Infrastructure</li><li>OTR vehicles</li><li>Rail</li><li>Water treatment</li></ul>	3.00	16.5%	4.60	12.1%	7.60	14.0%
	\$9.70	22.7%	\$12.35	24.3%	\$22.05	23.6%

<sup>(1)</sup> Near-term TAM is defined as cumulative addressable market opportunity now through 2026. Source; internal estimates

<sup>(2) 2030</sup> TAM is defined as cumulative addressable market opportunity now through 2030. Source: internal estimates

<sup>\*</sup>Chart's acquisition of Howden is currently pending regulatory approvals before closing

# Q4 2022 & Q1 2023 Howden Example Wins in the Nexus of Clean™

### Hydrogen

### **Ventilation Systems**

### Hydrogen

### Hydrogen

### **Atura Power**

Atura Power's Niagara
Hydrogen Centre in Ontario,
Canada powered by
renewable hydroelectricity,
will produce 20MW of green
hydrogen where the energy
will be used to power
electrolyzers to produce H2



#### GOLD FIELDS

Howden will install
ventilation optimization
system for Gold Fields South
Deep gold mine to support a
safe working environment &
reducing the mine's energy
consumption



Howden supplying hydrogen compression solution for Shell's Holland Hydrogen 1 facility in Rotterdam, which, when complete will be Europe's' largest renewable hydrogen plant



pHYnix, an independent renewable hydrogen producer selected Howden to supply their Vitale plant, the first commercial-scale 10MW renewable hydrogen production plant in Spain

### **Howden Offering Being Used in the Respective Application**

Diaphragm compressors

Ventsim™ CONTROL system

Reciprocating compressors enabled with digital Uptime

Hydrogen diaphragm compressors enabled with Howden's digital analytics platform, Uptime

### Howden Executed Two New MOUs 2023 Year-To-Date

### **Marine MOU Executed**

# FORESHIP

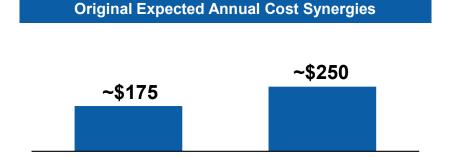
- Howden and Foreship have signed a cooperation agreement focused on streamlining the ship building design process to incorporate Howden's HV-TURBO compressors in Air Lubrication Systems (ALS), suitable for all types of vessels.
- Howden's ALS technology blows micro air bubbles under the hull of the vessel to reduce the resistance generated between the ship's hull and the water, saving fuel as a result.
- The ALS can save up to 8% on fuel consumption, also reducing carbon emissions.
- This solution can support ship owners in meeting their carbon saving targets, given the new Carbon Intensity Indicator (CII) and Energy Efficiency eXisting ship Index (EEXI) regulations

# Hydrogen MOU Executed



- Howden and Hydrexia have signed a cooperation agreement focused on mobility applications, specifically hydrogen refuelling stations, and will combine their expertise to deliver complete refuelling stations solutions with a modularisation concept bringing cost and leadtime efficiencies for customers in Australia, New Zealand and Southeast Asia.
- Hydrexia is the international business of China's Hyfun (Hydrexia China), which have collectively delivered 58 HRS projects in China and South-East Asia since 2016.
- Flagship projects include decarbonising the Shanghai-Pudong freight corridor supplying 300 hydrogen fuel cell logistics trucks for DHL China; and the world's largest hydrogen refuelling station at 6,400 kg per day in Hebei, China.

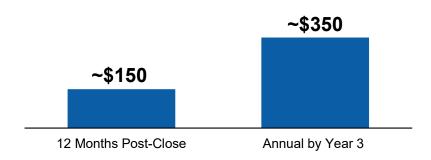
# Howden & Chart Cost and Commercial Synergies



### **Original Expected Commercial Synergies (Revenue)**

Annual by Year 3

12 Months Post-Close



\*Chart's acquisition of Howden is currently pending regulatory approvals before closing

### Additional cost synergy opportunities identified

- Footprint consolidation –numerous additional offices and other sites resulting in identified \$25M+ in potential synergies, exceeding our initial target
- Consolidate Chart's existing repair and refurbishment activities in Czech Republic into Howden's CZ repair site
- Howden China can utilize Chart's pressure vessel for compression skids, digital NDT X-Ray
- Detailed insourcing options providing further opportunities including China in-house sourcing of electrical panels

### Additional commercial synergy opportunities identified

- Utilize Howden EU repair for calibration support for Chart's Flowcom offering
- Specific customers in sustainable fuels and marine that are working on e-methanol looking for total solution, process optimization and a reliable partner for all critical components have approached us to discuss partnering
- Potential for cold box assembly in Howden (Weihei, China), adding potential for another CB region



# Recognizing our One Chart Team and ESG Progress

# Safety, Certifications and On-Time Delivery Focus

# SAFETY Goal of Zero Accidents

- Lowest 12 month rolling total recordable incident rate (TRIR) achieved
- 28 sites with no accidents in 2022 (76% of our sites)
- 35% reduction in 12/31/2022 TRIR compared to 12/31/2021

# CERTIFICATIONS IN Q4 2022 Differentiation through leadership in qualifications

- Chinese ML Cert (La Crosse, Wisconsin site)
- Canadian Welding Bureau certification (Tulsa, Oklahoma, Q1 2023)
- KGS Cert (New Iberia, Louisiana)
- R110 certification for HLNG bus tanks
- Renewal of ISO 9001 certification and extension of SELO license for export to China (Ornago, Italy)
- Canadian Registration Notice (CRN) for hydrogen tank
- Renewal of KGS Certification (Ball Ground, Georgia)
- AAR Certificate (New Prague, Minnesota)
- Railroad Commission of Texas renewal (Ball Ground, Georgia)
- RDW approval Netherlands Vehicle Authority HLNG (Georgia)
- TPED Euro-Cyl Type Approval (Ball Ground, Georgia)



- This year, we asked our global team members to submit their innovative ideas as part of a company-wide competition. We received hundreds of submissions from team members across the global organization. We narrowed this down to a list of finalists, and everyone at Chart had the chance to vote for the winner.
- Each of our three winners is from a different Chart facility, and each idea is related to a different subject matter field/tech service improvements, IT efficiencies, and ESG/marketing. This further demonstrates the diversity of our business and the variety of thoughts and perspectives across the global organization, which is something that has continued to allow us to innovate and establish ourselves as global leaders in the Nexus of Clean™.

# Congratulations!



- On January 15, 2023, Howden won the 2022 "Visionary Business & Technology Disruptor in Energy" award at the World Clean Tech Awards in Dubai, UAE.
- The World Clean Tech Awards recognize individuals and companies advocating the clean tech transformation mission.
- On February 9, 2023, both Chart and Howden were named finalists for the "Hydrogen Technology of the Year" award in the 2023 Hydrogen Future Awards.
- Finalists for the "Hydrogen Technology of the Year" category have been recognized for their exceptional performance, innovative design, and significant contributions to the growth and development of the hydrogen industry

### Chart ESG Scorecard 2022

### **Environmental**

#### **Targets**



Reduce carbon intensity 30% by 2030 compared to our 2020 baseline

Carbon neutral by 2050

\*We continue to make improvements in our carbon emission reduction YOY. More information to be provided in our 2022 ESG report.

#### Completed/Ongoing Company Efforts

- Replaced lighting to LED at all facilities
- Recycling/waste management programs
- Energy efficiency improvements
- · Transition to electric vehicles
- Solar panel installations

Number of strategic acquisitions in 2022



Number of strategic investments in 2022

#### In 2022, Chart Products...

**Treated over** 4.5 billion gallons of water a day in the US



Produced about 50 million tons of LNG to replace coal fired power generation (non-US)

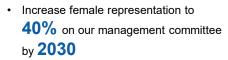
Reduced over 500 million liters of diesel used by overthe-road trucks





Helped eliminate nearly 260 million pounds of PET (plastic) used in water bottles in the U.S.

### **Targets**



- Increase female representation to 35% in senior roles by 2030
- · Achieve team member volunteer participation of 25% as part of our community program by **2030**

#### **Chart Gives Back**



Number of paid day(s) off per year for team members to support a community initiative of their choosing



Amount of \$ Chart will match for team member donations

### Safety is our #1 Priority

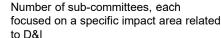
Social



Achieved historical low rolling 12-month TRIR as of 11/30/2022

#### Global D&I Committee





#### **ERGs**

Launched our first employee resource group (ERG) in 2022 - Chart Network of Women (NOW) - to empower and elevate recruitment of women in the workplace

### **Key Talent Development Programs**

Engineering Fellows & Key Experts, Rotational Engineering Program, Internships/Co-ops (including micro internships), **Emerging Leaders Program** 

### Governance

### **Ethics Training**



% of team members who need to pass annual ethics training

#### **Diverse Board Structure**



4 of 7 Directors are Female

4 of 7 Directors are Diverse

Included ESG metric in executive 2022 short-term bonus

Governed with separate Chair and CEO – both Female

### Maintaining Governance in Supplier Network

Number of suppliers who we proactively monitor through our 20,000+ Riskmethods analytics software



### Howden ESG Scorecard 2022



### **Environmental**

### **Targets**



- Send zero waste to landfill at 50% of our operations by 2030
- > Reduce our mains water usage 30% by 2030

\*Carbon emissions down 22% in 2022 on an absolute value, and well on track to 50% reduction by 2030. Mains water usage down 7%.

50% of production sites externally accredited to the ISO 14001 environmental standard in 2021

\*Goal is to certify all production sites by 2023

### **Helping Customers Achieve** ESG targets...

For example, a single gas-gas heaters are estimated to avoid 64,000 tons of carbon emissions from flue gas and enables the removal of 90% of

Oxide preventing acid rain, poor air quality, and smog in surrounding areas.

The annual impact from Howden's installed equipment on customers' emission avoidance is the equivalent of 245M tons of CO2.

Joined the Carbon Disclosure Project in 2021. Received a C score in 2021 and B score in 2022.

\*Goal is to receive an A score by 2025.

### **Targets**





Social

- ➤ Increase female representation to 35% in senior roles by 2030
- > Achieve employee volunteer participation of **25%** as part of our community program by 2030

### **Aiming for Zero Accidents**

Implemented numerous global safety programs designed to increase safety including Life Saving Behaviors, Think Safe, Cardinal Rules, and Visible Felt Leadership (VFL) programs, as well as holding monthly toolbox talks.

### Global Wellbeing Week

In 2022, introduced a Global Wellbeing Week to increase the teams' awareness of physical, mental, emotional, and financial wellbeing through various activities and initiatives.

### **Bright Futures Program**



80% of Howden locations actively developed Bright Futures initiatives in 2022.

120 Bright Futures projects in 2022.

13% of team members involved in volunteering throughout 2022.

### ACE Program \*\*\*



In 2021, rolled out a new High Potential **Development Program (ACE)** for fast-track succession and career development for high potential employees.

### Governance

### **Stay Secure Howden**

Since 2020. Howden holds their annual Stay Secure Howden cybersecurity training program focused on improving the policies and procedures of the business.



#### **Compliance Week**

In 2021, Howden launched their inaugural Compliance Week – a week of activities focused on building awareness and personal ownership of key aspects of compliance including anti-bribery, anti-trust, data privacy, trade compliance, agents, intellectual property, and more.



#### **Ethics Point Hotline**

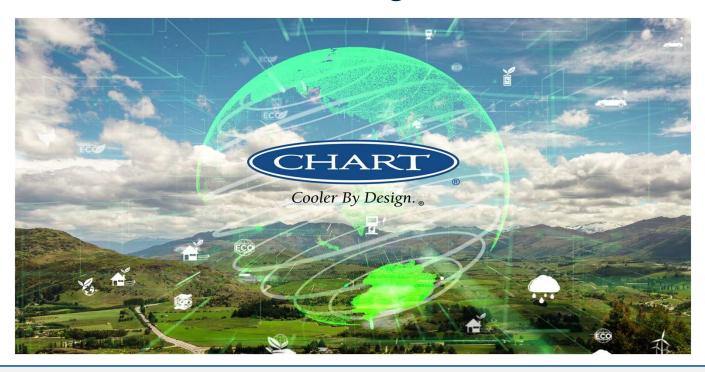
Through Howden's EthicsPoint Hotline, employees can report behaviors inconsistent with their Code of Conduct in an anonymous fashion.



\*Chart's acquisition of Howden is currently pending regulatory approvals before closing

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# Our Emissions Reductions Targets, Reiterated



Committed to reducing our carbon intensity 30% by 2030 compared to our 2020 baseline as well as pledging carbon-neutrality by 2050 [targets are inclusive of pending Howden acquisition]



# Appendix

# Q4 Addback Detail (1/2)

	Main category	Detailed Description	Q4 gross amount (+ added to / (-) reduced reported income)	Impact to operating income	Addback will exist in 2023?
1	Mark-to-Market of inorganic investments	<ul> <li>McPhy MTM</li> <li>Stabilis MTM</li> <li>Minority investments, other (Liberty and HTEC)</li> </ul>	(0.3)	No, net income only	Yes
2	Inorganic investment revaluation	<ul> <li>Chart's investment in Svante from 2021 revalued based on Series E issuance (Dec 2022), led by Chevron and OGCI, net of Chart's related costs</li> </ul>	(23.3)	No, net income only	No
3	Inorganic investment reval tax	<ul> <li>Tax impact from the revaluation of Svante investment (related to #2 on this table)</li> </ul>	5.3	No, net income only	No
4	Deal & Integration related costs, non- Howden	<ul> <li>Integration costs including IT system implementations, legal, travel related to Chart's acquisitions completed (non-Howden)</li> </ul>	4.6	Yes, operating and net income	Only in 1H 2023 for Fronti, CSC
5	Brazed Aluminum Heat Exchanger Furnace Installation Expenses	BAHX furnace in Tulsa, Oklahoma factory (install Q4 2022)	2.6	Yes, operating and net income	No
6	Customer concession	One-time concessions	0.7	Yes, operating and net income	No

# Q4 Addback Detail (2/2)

	Main category	Detailed Description	Q4 gross amount (+ added to / (-) reduced reported income)	Impact to operating income	Addback will exist in 2023?
7	Restructuring	<ul> <li>Specific to org structure changes, movement of people between facilities, sign-on bonuses</li> </ul>	\$4.5	Yes, operating and net income	Yes; will be smaller
9	Howden Expenses	<ul><li>Due diligence &amp; OBS fees</li><li>Legal fees</li></ul>	6.1	Yes, operating and net income	Yes
10	Financing Costs	Howden financing and debt costs	42.5	No, net income only	No
12	Financing Costs	Additional interest on Howden funding	2.7	No, net income only	Yes
14	Tax adjustment	Prior year one-time tax return true-up	3.1	No, net income only	No
15	Tax effect on all above adjustments	Tax effect on gross adjustments in operating income as shown above	(6.0)	No, net income only	Yes



### **Amended Bank Covenants**

### Debt Covenant: Net Debt/ LTM Adjusted EBITDA

	2023			2024				2025
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Prior	4.00X							
Amended	6.00X	6.00X	6.00X	6.00X	5.00X	5.00X	4.50X	4.50X

<sup>(1)</sup> Adjusted EBITDA is defined by Credit Agreement

### **Covenants and Credit Ratings**

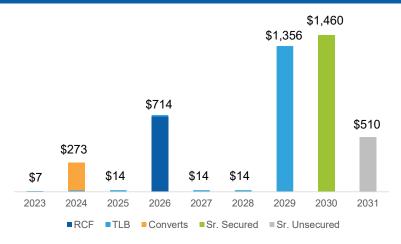
### Covenants:

- Maximum Net Leverage
- · Minimum Interest Coverage

### **Credit Ratings**

- Moody's LTR B1 Stable
- S&P LT Issuer Credit B+ Watch Positive

### Debt Maturity Schedule (\$m)



### **Capital Allocation Policy**

### **Deleverage**

**Organic Growth** 

- Reiterate our financial policy that until we are within our target net leverage ratio range of 2-2.5, we will:
  - Not do any additional material cash acquisitions
  - Not do share repurchases
- Additional cash generation opportunities
  - Two divestitures
  - Above plan synergies
  - Additional product line sales
  - Sales of owned buildings



# Fourth Quarter 2022 Adjustments

\$ millions, except per share amounts Continuing Operations	Q4 2022, Reported	Adjustments	Q4 2022, Adjusted
Sales	\$441.4	-	\$441.4
Cost of sales	317.1	(7.8)	309.3
Gross profit	124.3	7.8	132.1
Selling, general, and administrative expenses	55.2	(7.7)	47.5
Amortization expense	9.0	0.60	9.6
Operating expenses	64.2	(7.1)	57.1
Operating income	60.1	14.9	75.0
Non Operating Expense (income)	5.6	9.8	15.4
Income before equity in (loss) earnings of unconsolidated affiliates, net	17.5	42.1	59.6
Equity in (loss) earnings of unconsolidated affiliates, net	(0.1)	0.4	0.3
Net income	17.4	42.5	59.9
Less: Income attributable to noncontrolling interests, net of taxes	0.2	-	0.2
Net income attributable to Chart Industries, Inc.	\$17.2	\$42.5	\$59.7

<sup>&</sup>quot;Adjustments" and "Q4 2022, Adjusted" are not measures of financial performance under U.S. GAAP and should not be considered as an alternative to net income in accordance with U.S. GAAP. Management believes that these adjustments facilitate useful period-to-period comparisons of our financial results, and this information is used by us in evaluating our internal performance.