CHART®

Cooler By Design.®

NYSE: **GTLS**

Clean Opportunities In Hydrogen

October 19, 2022

Presented by

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VP Global Decarbonization

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 COMPLETED ACQUISITIONS, COST SYNERGIES AND EFFICIENCY SAVINGS, OBJECTIVES, FUTURE ORDERS, REVENUES, MARGINS, SEGMENT SALES MIX, EARNINGS OR PERFORMANCE, LIQUIDITY AND CASH FLOW, INVENTORY LEVELS, CAPITAL EXPENDITURES, BUSINESS TRENDS, MATERIALS COSTS AND PRICING INCREASES, CLEAN ENERGY MARKET OPPORTUNITIES, GOVERNMENTAL INITIATIVES, INCLUDING EXECUTIVE ORDERS 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," 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: RISKS RELATING TO THE OUTBREAK AND CONTINUED UNCERTAINTY ASSOCIATED WITH THE CORONAVIRUS (COVID-19), AND THE CONFLICT BETWEEN RUSSIA AND UKRAINE; THE COMPANY'S ABILITY TO SUCCESSFUL INTEGRATE RECENT ACQUISITIONS, AND ACHIEVE THE ANTICIPATED REVENUE, EARNINGS, ACCRETION AND OTHER BENEFITS FROM THESE ACQUISITIONS; SLOWER THAN ANTICIPATED GROWTH AND MARKET ACCEPTANCE OF NEW CLEAN ENERGY PRODUCT OFFERINGS; INABILITY TO ACHIEVE EXPECTED PRICING INCREASES OR CONTINUED SUPPLY CHAIN CHALLENGES INCLUDING VOLATILITY IN RAW MATERIAL COST AND SUPPLY; AND THE OTHER FACTORS DISCUSSED IN ITEM 1A (RISK FACTORS) IN THE COMPANY'S MOST RECENT ANNUAL REPORT ON FORM 10-K FILED WITH THE SEC, WHICH SHOULD BE REVIEWED CAREFULLY. THE COMPANY UNDERTAKES NO OBLIGATION TO UPDATE OR REVISE ANY FORWARD-LOOKING STATEMENT. THIS PRESENTATION CONTAINS NON-GAAP FINANCIAL INFORMATION FOR THE FULL YEAR 2022, INCLUDING ADJUSTED NON-DILUTED EPS AND ADJUSTED FREE CASH FLOW. THE COMPANY IS NOT ABLE TO PROVIDE A RECONCILIATION OF THE ADJUSTED EPS OR FREE CASH FLOW BECAUSE CERTAIN ITEMS MAY HAVE NOT YET OCCURRED OR ARE OUT OF THE COMPANY'S CONTROL AND/OR CANNOT BE REASONABLY PREDICTED.

CHART IS A LEADING DIVERSIFIED GLOBAL MANUFACTURER OF HIGHLY ENGINEERED EQUIPMENT SERVICING MULTIPLE MARKET APPLICATIONS IN ENERGY AND INDUSTRIAL GAS. THE MAJORITY OF CHART'S PRODUCTS ARE USED THROUGHOUT THE LIQUID GAS SUPPLY CHAIN FOR PURIFICATION, LIQUEFACTION, DISTRIBUTION, STORAGE AND END-USE APPLICATIONS, A LARGE PORTION OF WHICH ARE ENERGY-RELATED. CHART HAS DOMESTIC OPERATIONS LOCATED ACROSS THE UNITED STATES AND AN INTERNATIONAL PRESENCE IN ASIA, AUSTRALIA, EUROPE AND THE AMERICAS. FOR MORE INFORMATION, VISIT: HTTP://WWW.CHARTINDUSTRIES.COM.

Agenda

- About Us
- The Inflation Reduction Act of 2022
- Navigating the Inflation Reduction Act with Our Solutions
- Questions

About Chart Industries and the Nexus of Clean

“Chart’s vision is to be the global leader in design, engineering and manufacturing of cryogenic process technology and equipment to the clean energy, industrial gas and diversified specialty markets regardless of molecule. We focus on leveraging our organic solution offering, manufacturing footprint and inorganically adding technologies and equipment to round it out for full solutions what we call “ The Nexus of Clean™” – clean power, clean water, clean food, and clean industrials.”

Jillian Evanko
President & Chief Executive Officer

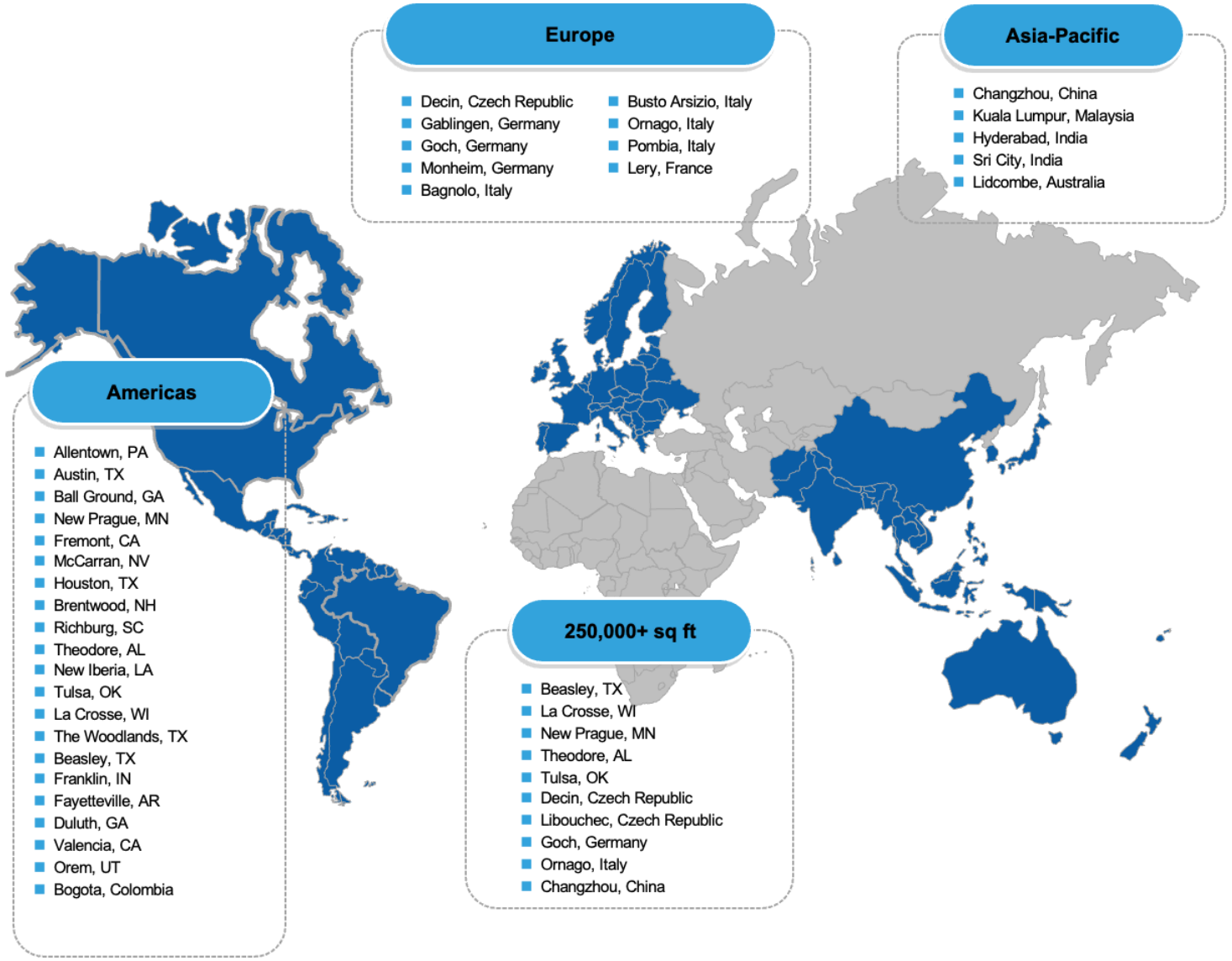
GTLS: Gas to Liquid Systems®

Doing Business Responsibly and Ethically

Chart is committed to reducing our carbon intensity 30% by 2030 and achieving carbon neutrality by 2050.

Chart Industries

- **NYSE:** GTLS
- **Revenues (2021A):** ~$1.3B
- **Headquarters:** Ball Ground, GA
- **Team Members:** ~5,000 (50-50% U.S./International)
- **Global Footprint:** > 25 Locations Worldwide



Full Solutions Platforms Across the Nexus of Clean™

Clean End Market	Solution	GTLS Process Technologies (Owned in Full)	GTLS Process Technologies Through Minority Ownership	GTLS Equipment
Clean Power	• Hydrogen • Helium • LNG • Biogas	CHART Cooler By Design. Cryo Technologies	TRANSFORM MATERIALS McPhy	• BAHX • ACHX • Bulk & Microbulk • Fans • Transports • Valves / Vaporizers • Expanders • Liquefiers • Cold Boxes
Clean Water	• Water& Wastewater Treatment • Desalination	BlueInGreen solutions for water quality AdEdge water technologies		• Bulk tanks • Dissolution equipment • Vaporizers • Cryo-lease
Clean Food, Beverages & Agriculture	• Small-Scale Carbon Capture • Clean Beverages	Earthly Labs		• Microbulk tanks • Dosers • Vaporizers • Transports
Clean Industrials	• Post Combustion Carbon Capture • Hydrogen/He	SES INNOVATION A Chart Industries Company	Svante TRANSFORM MATERIALS	• Heat exchangers • Storage tanks • Vaporizers • VIP/VJP • Transports • Liquefiers • Cold Boxes • Expanders

Offering of Highly Engineered Cryogenic Equipment

CHART
Cooler By Design.®

Brazed Aluminum Heat Exchangers

Cold Boxes

Gas Pre-Treatment and Nitrogen Rejection Units

Specialty Pressure & Heat Transfer Equipment

Air Cooled Heat Exchangers

Axial Flow Fans

Integrated Energy Systems

Lifecycle Services

Cryogenic Bulk Storage Tanks

Vaporizers

Cryogenic Storage & Regasification Systems

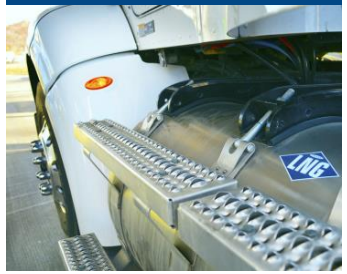
Packaged Gas Systems

Cryogenic Launch Umbilicals & Storage

Nitrogen Dosing & Food Preservation

Fueling Stations

HLNG Vehicle Tanks



Cryogenic Transport Trailers

Virtual Pipeline Solutions

Rail Tender and Transport

FEMA Valve Portfolio

Servicing & Repairs

Clean and Sustainable Chart City

1. LNG and hydrogen liquefaction
2. LNG bunkering and receiving terminals
3. Satellite LNG Stations
4. Air cooled heat exchangers
5. Vaporizers
6. Cryogenic bulk storage tanks
7. Mobile cryogenic trailers and trucks
8. LNG and hydrogen vehicle fuel tanks
9. Marine LNG fueling systems
10. ChartWater™
11. Turn-key oxygen systems
12. MicroBulk delivery systems
13. Chart CO_2 cylinders and supply systems
14. LNG/CNG/hydrogen fueling stations
15. LNG and hydrogen fueling dispensers
16. Axial flow fans
17. Specialty heat exchangers and reactors
18. Brazed aluminum heat exchangers
19. Cold Boxes
20. Chart Lifecycle
21. Packaged gas systems
22. Liquid nitrogen dosing systems
23. Cryogenic ISO containers
24. Chart Parts distribution center
25. Vacuum Insulated Pipe (VIP)
26. Chart process technology
27. Safety and process valves
28. Carbon capture
29. Turboexpanders

The Chart Family

BlueInGreen · VRV · Air-X-Changers · HUDSON · SMITHCO · HAC · GOFA · flow · FEMA · CRYO DIFFUSION · SES INNOVATION · LA Turbine · cosimco · AdEdge · Cryo Technologies · Earthly Labs

The Inflation Reduction Act of 2022

The Inflation Reduction Act of 2022 Overview

Status: Passed Senate and House, Signed by President Biden

- $300B in Investments for Energy and Climate Reform: Carbon Capture, Hydrogen, Water Treatment, Fueling Solutions, Clean Energy, Industrial Facilities & Clean Manufacturing
- Investment in Climate: Target reduction of carbon emissions by 40% by 2030 by expanding access to clean energy by extending tax credits by 10 years and increasing accessibility of clean energy tax credits
- Creates Manufacturing Jobs: $60B+ invested to create domestic clean manufacturing jobs
- Investment in Disadvantaged Communities: $60B in funding for reducing environmental injustice in disadvantaged communities including $9B in home energy rebate programs
- Investment in Transportation: $5B to transition vehicles from fossil fuels to zero-emissions transportation
- 15% minimum tax for corporations making more than $1B in income
- 1% excise tax on stock buybacks

Inflation Reduction Act of 2022 Key Policies

Hydrogen

- ***Clean Hydrogen Tax Credit – Section 45V***
  - Choice of Hydrogen Production Tax Credit or Energy Investment Tax Credit
  - Credit Rates: $0.60/kg - Lifecycle GHG emissions rate between 4kg – 2.5kg CO2e per 1kg H
    - $0.75/kg - Lifecycle GHG emissions rate between 2.5kg – 1.5kg CO2e per 1kg H
    - $1/kg - Lifecycle GHG emissions rate between 1.5kg – 0.45kg CO2e per 1kg H
    - $3/kg - Lifecycle GHG emissions rate of less than 0.45kg CO2e per 1kg H
  - Facilities must begin construction by the end of 2032.
  - 10 year tax credit after a facility is placed in service.
    - Direct Pay option for first 5 years after a facility is placed in service.
  - Can be stacked with certain other tax credits.
  - Cannot be stacked with Section 45Q tax credit.
  - Option to monetize the credits by transferring them to others.
  - May claim the PTC for electricity produced from renewable resources by the owner if the electricity is used at a qualified clean hydrogen facility to produce qualified clean hydrogen.
  - For highest credit rate H2 must be produced at a facility that meets prevailing wage and registered apprenticeship requirements.

Fuel Refueling

- ***Alternative Fuel Refueling Property Tax Credit***
  - Credit Rate: 30% up to $100,000 per charging station or refueling pump installed *[Prevailing Wage and Apprenticeship Requirements]*
  - Starting in 2023, charging or refueling property is only eligible if placed in service within a low-income or rural census tract
  - Expires: 2032

Carbon Capture

- ***Extension and Modification of Section 45Q Tax Credit for CCUS***
  - Facilities must begin construction by the end of 2032.
  - 12 year tax credit after a facility is placed in service.
    - Direct Pay option for first 5 years after a facility is placed in service.
  - Credit Rates for CCS:
    - Point Source: $85 per metric ton of CO2
    - DAC: $180 per metric ton of CO2
  - Credit Rates for CCU:
    - Point Source: $60 per metric ton of CO2
    - DAC: $130 per metric ton of CO2

Inflation Reduction Act of 2022 Key Policies

DOE Loans

- ***$3 Billion in Funding for the DOE Loan Programs Office***
  - To provide loans for:
    - Renewable energy systems
    - Advancing fossil energy technology
    - Hydrogen fuel cell technology
    - Advanced nuclear energy facilities
    - Carbon capture and sequestration projects
    - Efficient electric generation and end-use energy technologies
    - Producing fuel efficient vehicles
    - Pollution control equipment and refineries
  - This section also allows the Secretary of Energy to make commitments to guarantee loans for the aforementioned programs up to a total principal amount of $40 billion.
  - Money to remain available through September 30, 2028.

Industrial Facilities

- ***$5.8 Billion in Funding for DOE Advanced Industrial Facilities Deployment Program***
  - For the Office of Clean Energy Demonstrations to support:
    - The purchase and installation of advanced industrial technology
    - Retrofits and improvements to eligible facilities
    - Installation or implementation of advanced industrial technology
    - Studies needed to prepare for such projects.
  - Applicants must outline expected GHG emission reductions to be achieved by the project, with priority being given to projects that expect to reduce greater amounts of GHG emissions, provide the greatest benefit to the area in which the facility is located and participate in partnerships with purchasers.
  - Eligible entities include owners or operators of a domestic, non-federal, non-power industrial or manufacturing facility that engages in energy-intensive processes.
  - Money to remain available through September 30, 2026.

Infrastructure Investment and Jobs Act

- ***Clean Hydrogen Hubs***
  - Establishes four DOE regional clean hydrogen hubs and requires DOE to establish a technologically and economically feasible national strategy and roadmap to facilitate a clean hydrogen economy.
  - Lead Agency: DOE.
  - Funding: $8 billion.
- ***Carbon Capture Technology Program***
  - A front-end engineering and design program that provides funds for carbon dioxide transport infrastructure necessary to enable deployment of carbon capture, utilization, and storage technologies.
  - Lead Agency: DOE.
  - Funding: $100 million until FY 2026.
- ***Carbon Dioxide Transportation Infrastructure Finance and Innovation***
  - A newly established program to provide a loan and grant opportunities for carbon dioxide transportation infrastructure projects.
  - Lead Agency: DOE.
  - Funding: $600 million for FYs 2022-2023 and $300 million for FYs 2024-2026.
- ***Port Infrastructure Development Program***
  - Funding for projects that improve resiliency of ports, including hydrogen refueling infrastructure for medium- or heavy-duty trucks.
  - Lead Agency: DOT.
  - Funding: $450 million each FYs 2022-26, to remain available until 2036.
  - Eligible Entities: Authorities with jurisdiction over ports (e.g., states, local governments, private businesses).

Navigating the Inflation Reduction Act with Chart's Hydrogen Solutions

Chart Industries – NYSE:GTLS

Recognized global brand for the design and manufacture of highly engineered equipment used across the liquid gas supply chain.

Heat Transfer Systems

- Air cooled heat exchangers and fans
- Brazed aluminum heat exchangers and cold boxes
- LNG liquefaction
- Nitrogen rejection units
- Specialty heat exchangers

Cryo Tank Solutions

- Bulk and MicroBulk storage tanks
- Small-scale LNG
- ISO containers
- Packaged gas systems
- LNG and H2 fueling systems and stations
- Mobile equipment
- Vaporizers

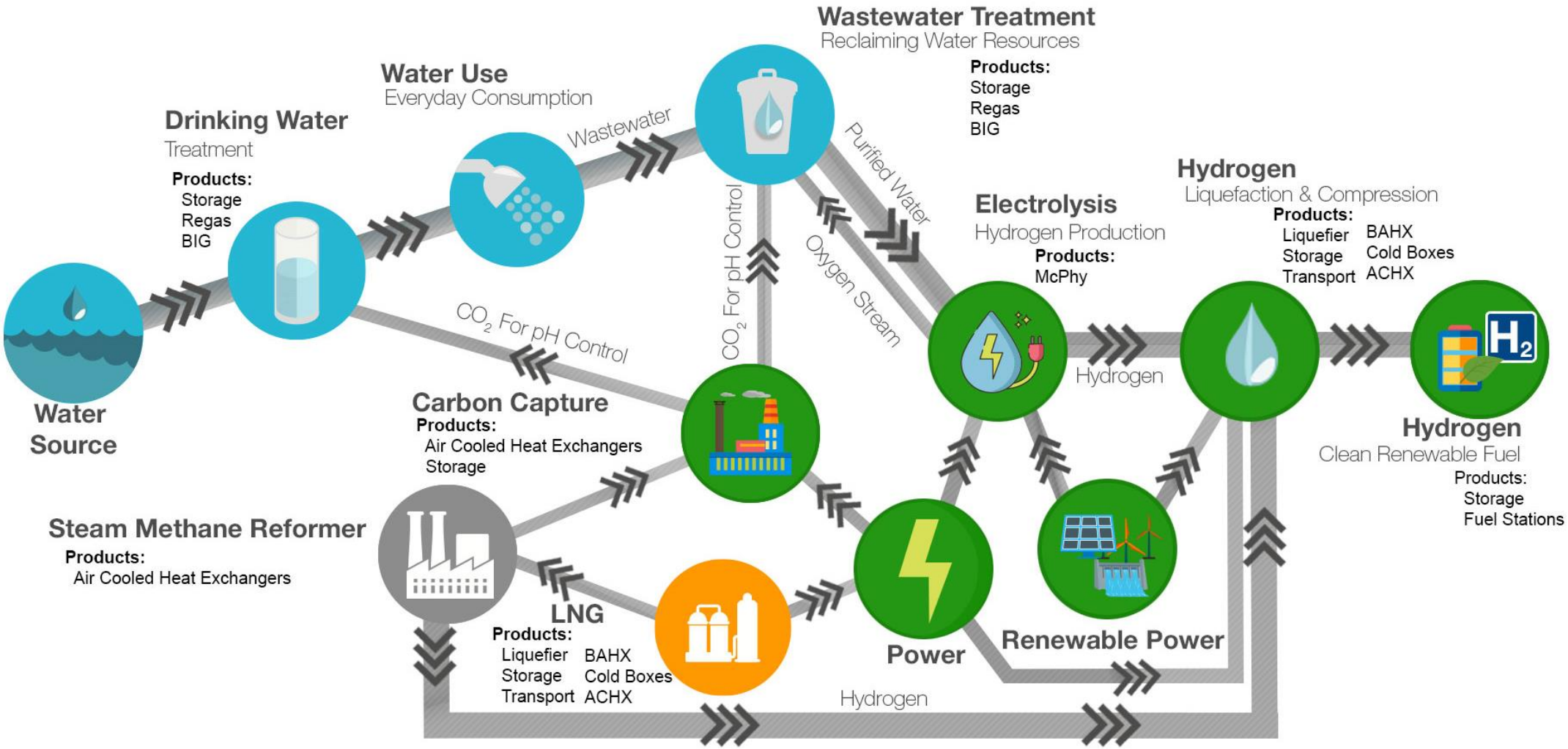
Repair, Service, & Leasing

- Repair and service
- Aftermarket parts and maintenance
- Cryo-Lease – global leasing solutions
- Installations
- Full lifecycle
- Service agreements

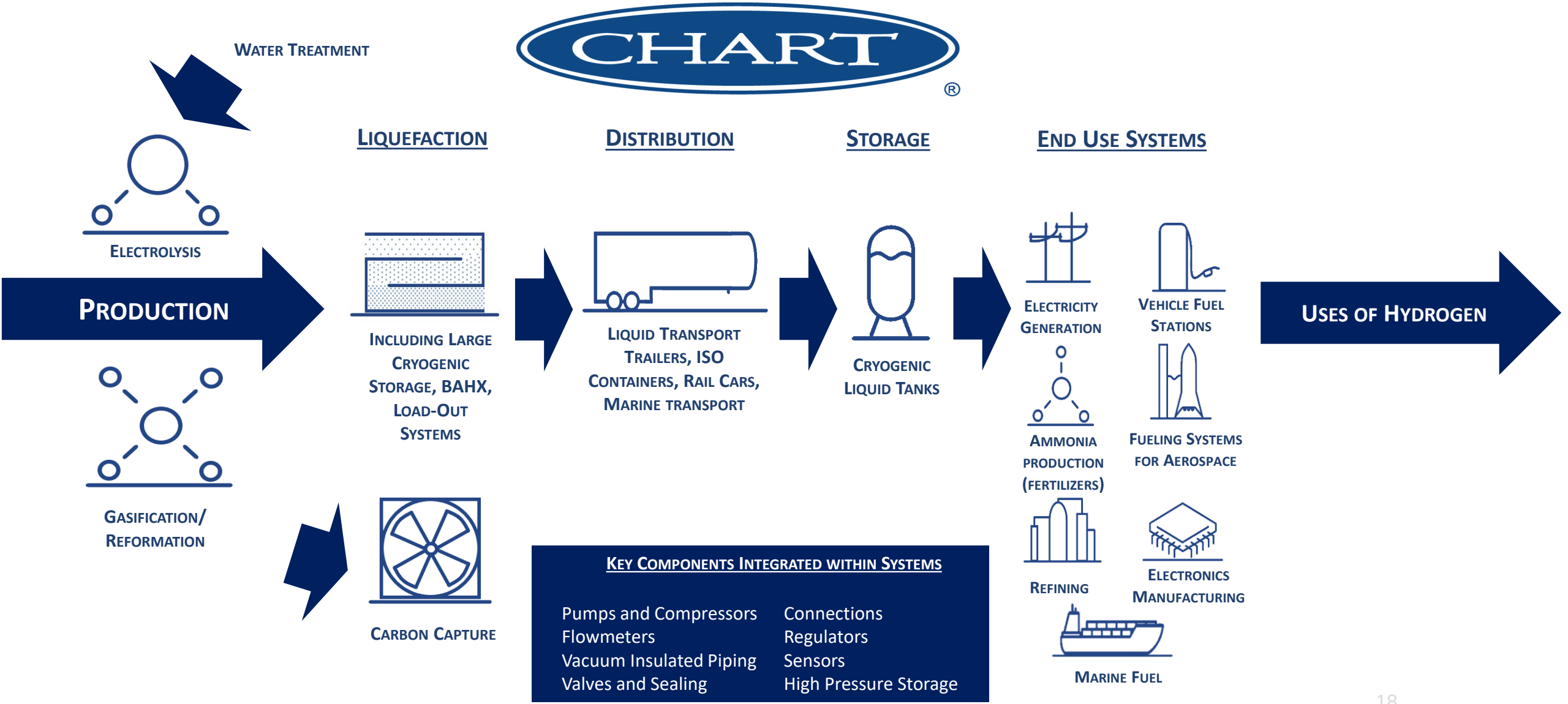
Specialty Markets

- Aerospace
- Beverage carbonation
- Biogas liquefaction
- Carbon capture
- Critical care
- Hydrogen energy
- Laser cutting
- Liquid air energy systems
- ChartWater™

Hydrogen Upstream Needs



Hydrogen Supply Chain



Key Components Integrated within Systems

Pumps and Compressors	Connections
Flowmeters	Regulators
Vacuum Insulated Piping	Sensors
Valves and Sealing	High Pressure Storage

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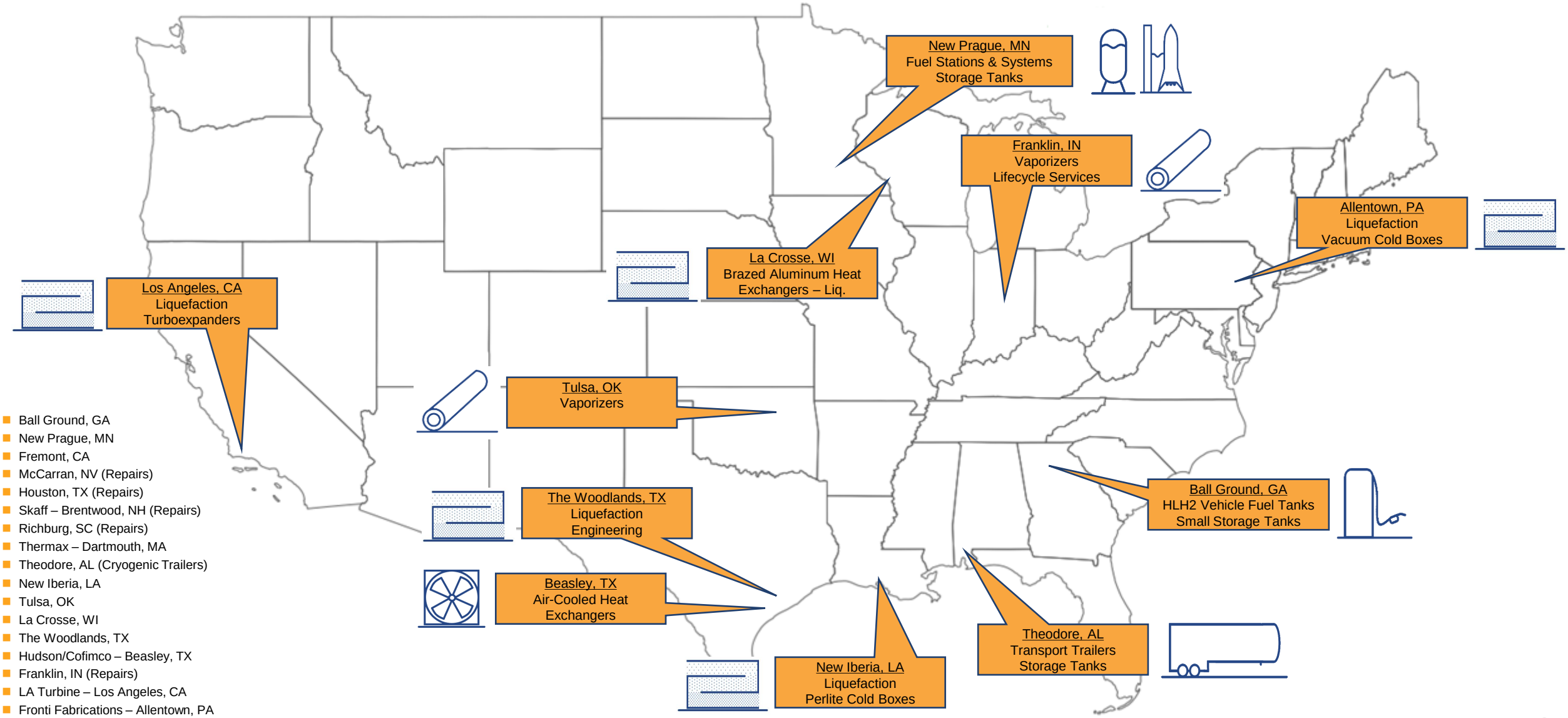
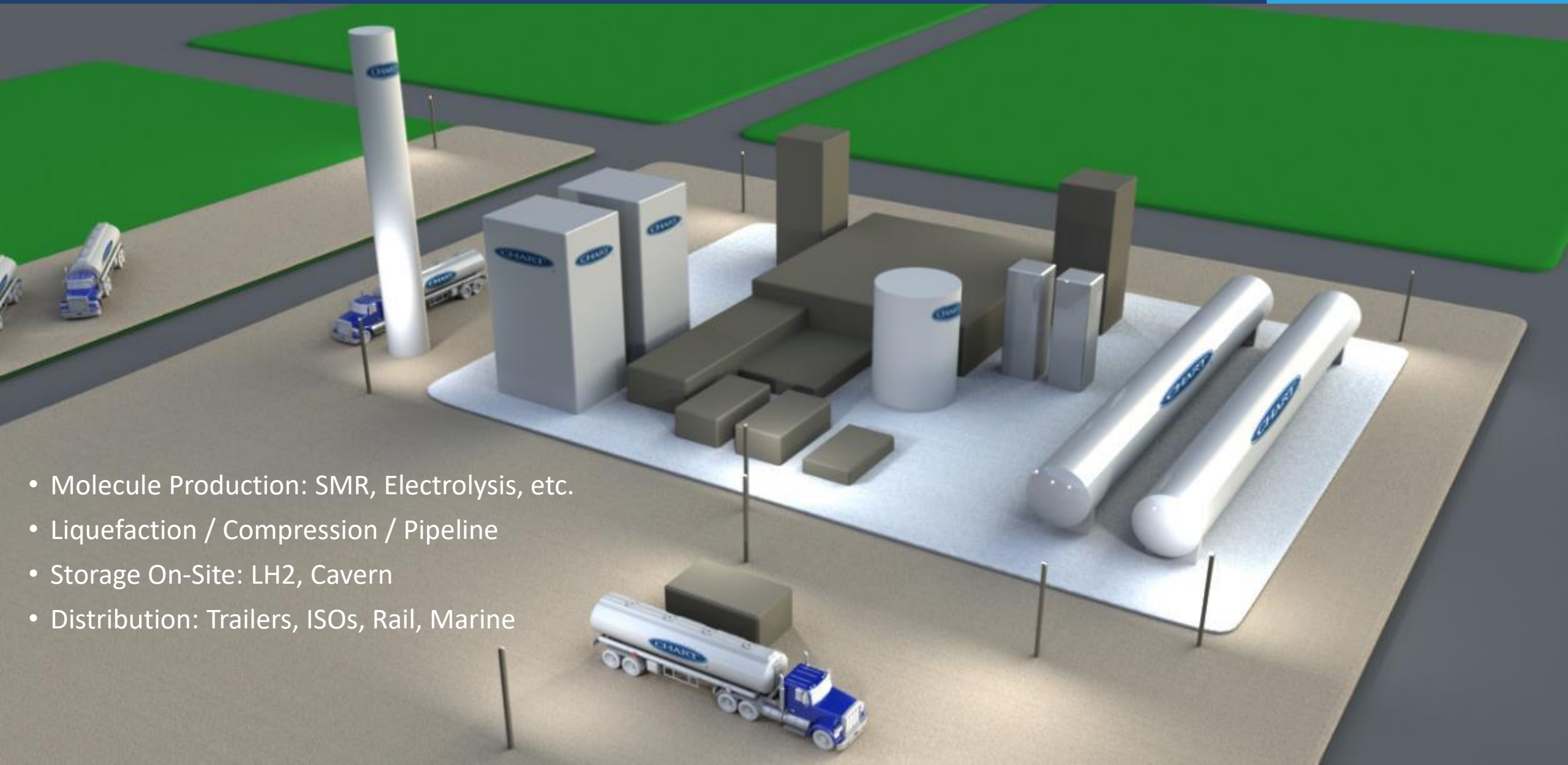
Domestic Manufacturing



- Ball Ground, GA
- New Prague, MN
- Fremont, CA
- McCarran, NV (Repairs)
- Houston, TX (Repairs)
- Skaff – Brentwood, NH (Repairs)
- Richburg, SC (Repairs)
- Thermax – Dartmouth, MA
- Theodore, AL (Cryogenic Trailers)
- New Iberia, LA
- Tulsa, OK
- La Crosse, WI
- The Woodlands, TX
- Hudson/Cofimco – Beasley, TX
- Franklin, IN (Repairs)
- LA Turbine – Los Angeles, CA
- Fronti Fabrications – Allentown, PA

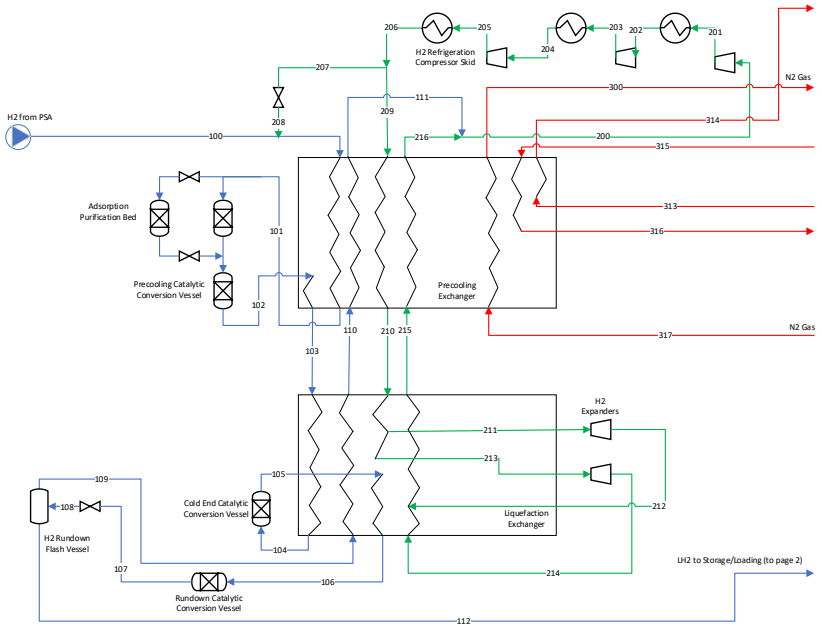
Hydrogen Hubs / Production and Distribution



- Molecule Production: SMR, Electrolysis, etc.
- Liquefaction / Compression / Pipeline
- Storage On-Site: LH2, Cavern
- Distribution: Trailers, ISOs, Rail, Marine

Hydrogen Liquefaction

- Chart is a leader in liquefaction solutions & Mission Critical Equipment
- Brazed Aluminum Heat Exchangers (BAHX) and Cold Boxes for multiple gases
- Decades of experience in hydrogen and helium liquefaction
- Hydrogen liquefaction – 5 tpd, 12 tpd, 15 tpd, 22.5 tpd and 30 tpd
  - Hydrogen or helium cooling
  - Precooling – sacrificial N2, closed loop N2 or mixed refrigerant



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Global Leader in Hydrogen Tanks

- The leader in liquid hydrogen storage tanks globally
  - FCEV fuel stations, FC forklift fueling, liquefaction, aerospace and industrial applications
  - >900 LH2 bulk tanks built
  - Complete line of liquid hydrogen storage tanks – 3,000 to 175,000 gallons (11 to 662 m^3) and up
  - Engineering expertise for unique applications
- Superior performance and quality
  - Chart Super Insulation
  - Pipe layouts designed with operations and maintenance in mind
  - Helium Mass-Spectrometer leak test detection used on all tanks
  - ASME Section IX certified welders

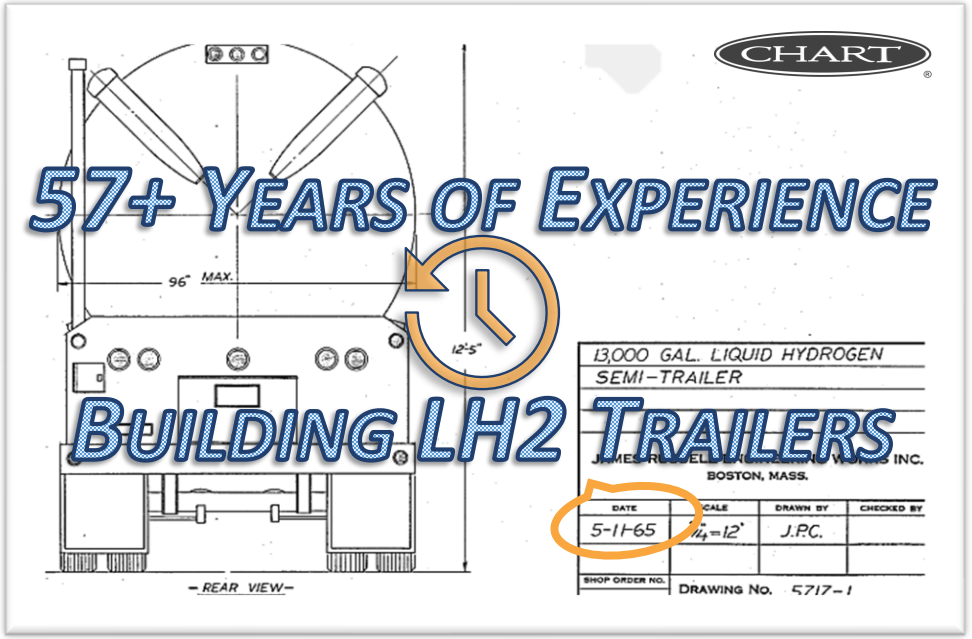
Liquid Hydrogen Trailers

Trailer Model	17600STL155P	8500STL110P
Capacity (water volume)	17,600 gal	8,500 gal
Payload	9,665 lbs	4,608 lbs
Tare Trailer Weight	50,560 lbs	26,740 lbs
Tractor Weight (est)	17,000 lbs	17,000 lbs
Total Weight (tractor + trailer(s) + payload)	77,225 lbs	79,696 lbs
MAWP	155 psi	110 psi
Overall Length	50’-1” (53’ Class)	27’-11” (28’ Class)
Width	8’-6.25”	8’-6.25”
Height	13’-0”	13’-0”

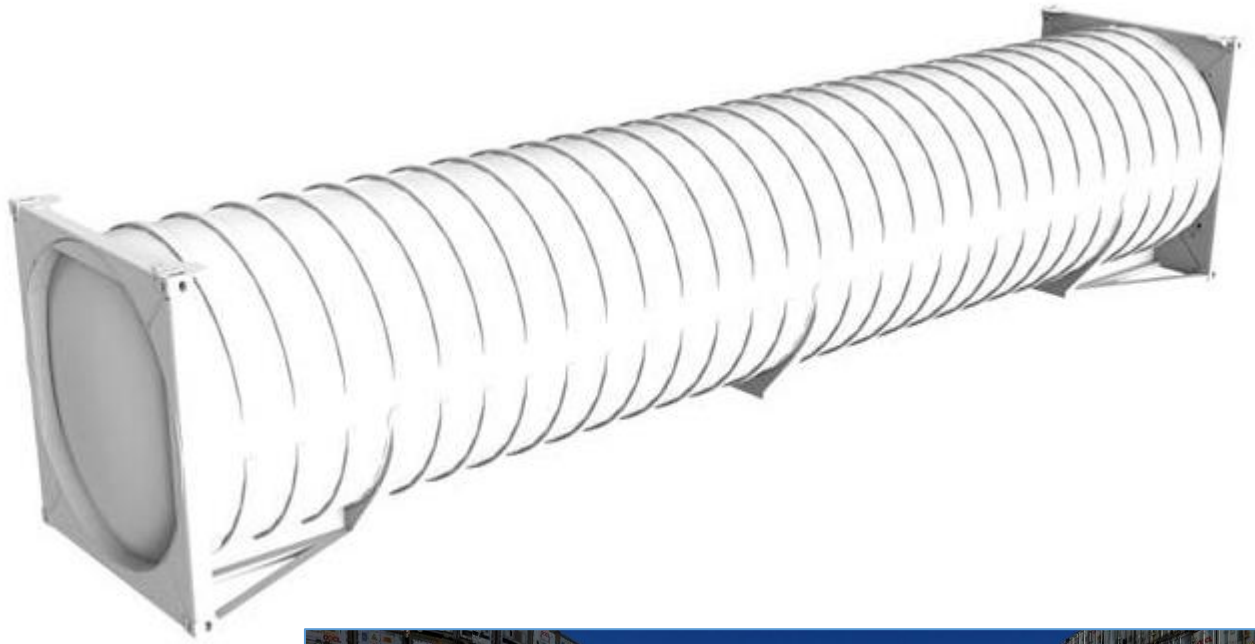
And custom sizes!

Cryogenic Transportation

- Leading designer and manufacturer of cryogenic trailers with over 300 built each year
  - LH2, LNG, LIN, LOX, LAR, microbulk, unique trailer designs
- Broad line of other cryogenic transportation applications
  - ISO containers
  - Railcars
  - Marine transport tanks



Liquid Hydrogen ISO Containers



ISO Model	UN T75 40 ft ISO
Capacity (water volume)	11,300 gal
Payload at 90%	~3,000 kg
Tare Weight	~12,000 lbs
MAWP	145 psig
Length	40’
Width	8’
Height	8’-6”
Hold Time	30+ days

- Reviewing option for LIN shield to provide longer hold times

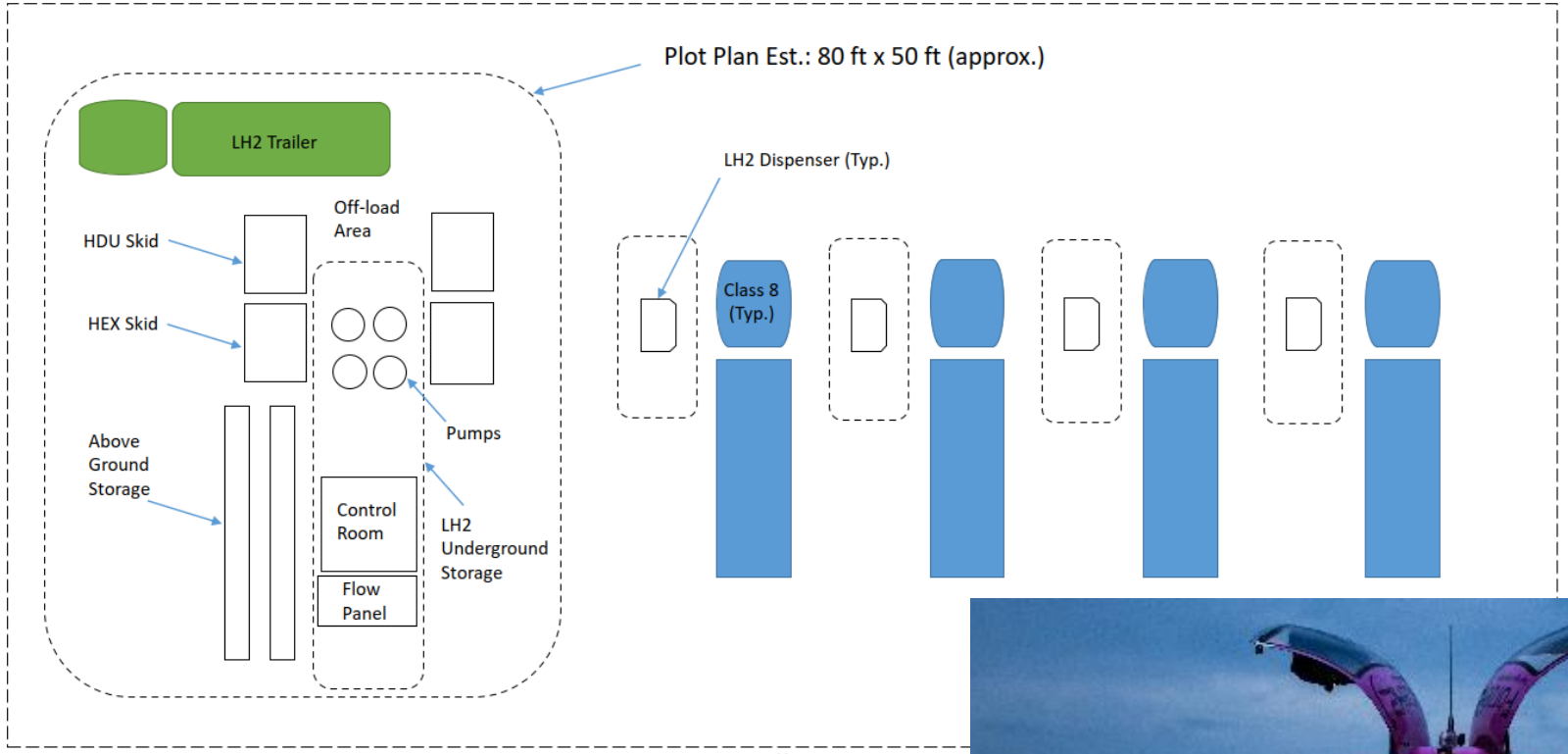
Liquid Hydrogen Rail Cars

Design Basis	DOT-113A60W*
Capacity (water volume)	~34,500 Gallons
Payload at 90%	~17,700 lbs (8 mt)
Footprint	Plate ‘C’ clearance diagram; ~82’ coupled length
Hold Time	20+ days
Features	Remote telemetry to track inner tank pressure and GPS

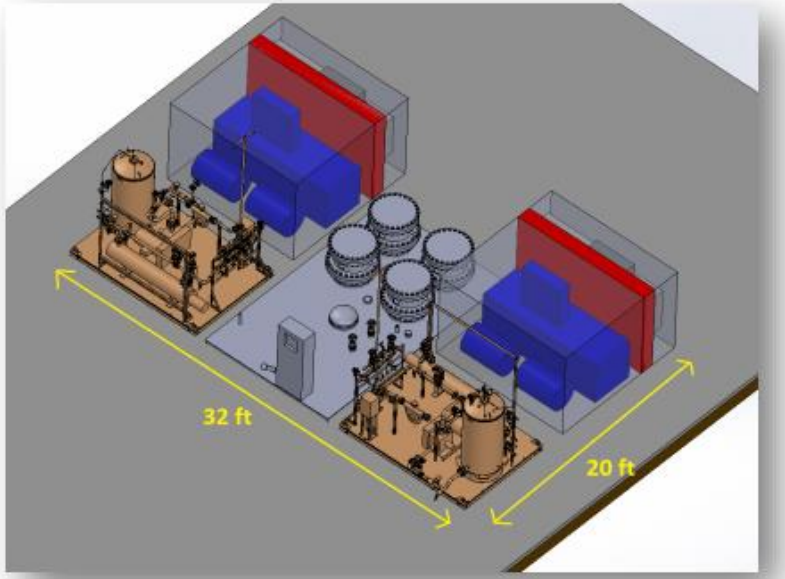
- 49 CFR allows Hydrogen, Refrigerated Liquid, UN 1966, to be shipped by rail in DOT-113A60W tank cars
- Changes to code requirements will likely occur to modernize LH2 rail cars that were last produced in the 1960s/70s

Hydrogen Fuel Stations

- Delivery: Transport Trailer
- Fuel Station Equipment
- Vehicles
  - Heavy/Medium Duty FCETs
  - Light Duty FCEVs

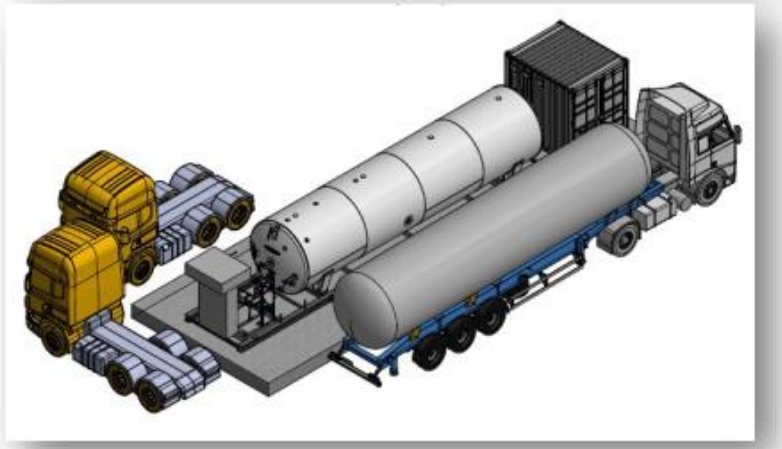


Hydrogen Fuel Station Equipment



H70 Station Solution

- Direct fills with high flow 700 bar liquid dispense pumps, allows for back-to-back fills
- Optimized station footprint with bury-able LH2 storage tank
- Efficient station heat management for low-cost operation
- Effectively planned layout allows for ease of access for refueling, refilling and maintenance



LH2 Vehicle Station Solution

- Compact hydrogen refueling station that stores liquid hydrogen and dispenses metered liquid hydrogen into onboard liquid hydrogen vehicle tanks

HLH2 On-Board Vehicle Fuel Systems

HLH2 (Horizontal Liquefied Hydrogen) Fuel Systems

- Add hydrogen to a conventional truck design, just like LNG
- Similar footprint and mounting as diesel tanks
- Less space and weight than compressed hydrogen (H70)
- Faster filling time (vs. compressed), similar to diesel

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Developing Integrated Solutions and Technologies

- Hydrogen Testing Site at New Prague, MN factory
  Supporting:
  - On-board liquid hydrogen fuel tanks (HLH2)
  - Fuel station design and integration
    - LH2 fuel station development for FCEVs
    - 25+ years experience providing LNG stations – developed most of the early technology
    - Integrated pumping, vaporization, and control systems

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Thank you!