The Safe Hydrogen Project

Empowering the Energy Economy

Richard Gottwald
President and CEO
Compressed Gas Association

CGA
Compressed Gas Association
The Standard For Safety Since 1913

What is CGA?

Founded in 1913, the Compressed Gas Association (CGA) is dedicated to the development and promotion of safety standards and safe practices in the industrial, medical, and food gases industries.

Hydrogen is CLEAN

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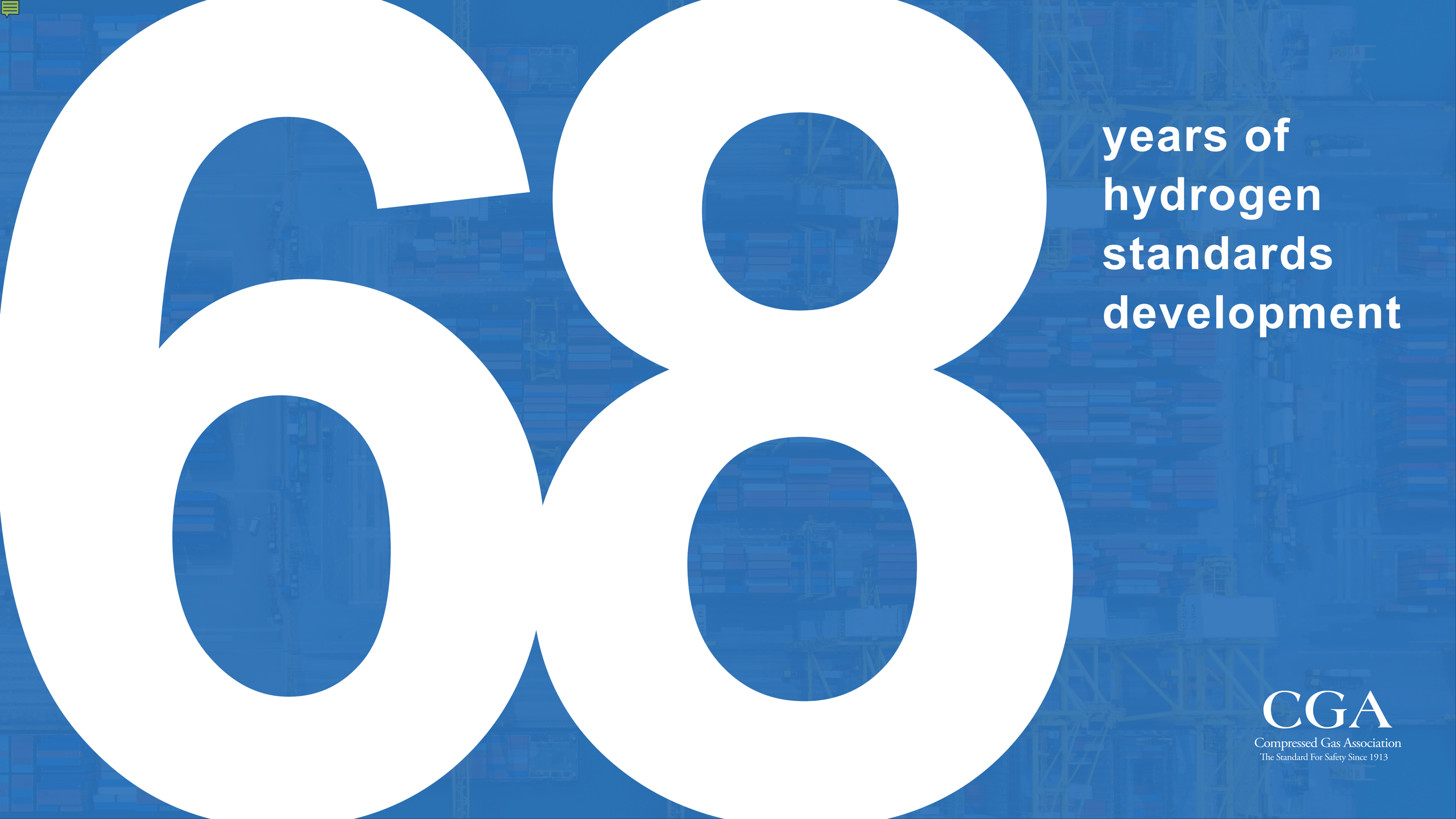
68
years of
hydrogen
standards
development
CGA
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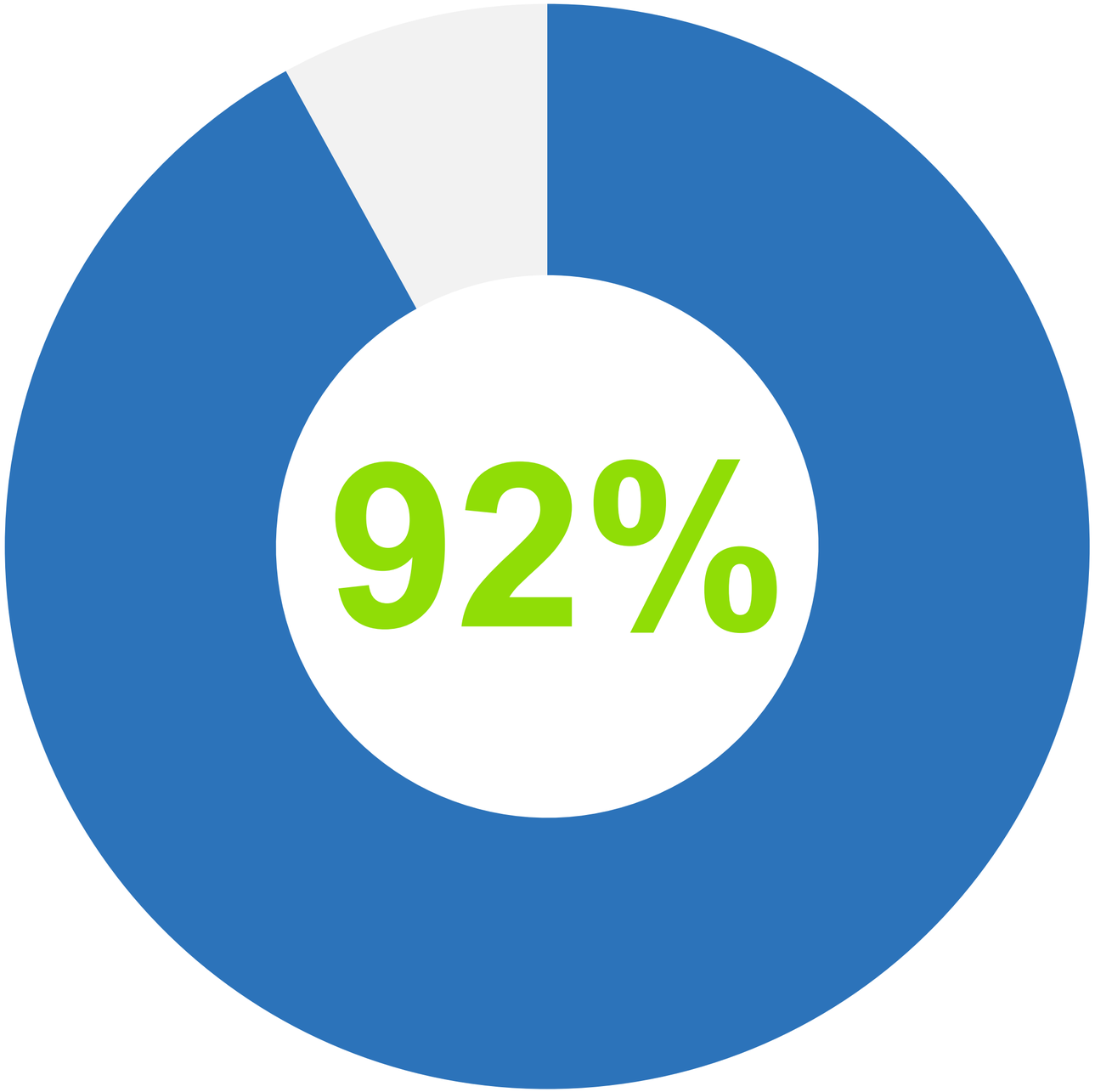

of consumers want to know that hydrogen fuel cell technology is safe before they’d consider using or supporting it.

Golin, Hydrogen Consumer Research 2021

Safe hydrogen Project

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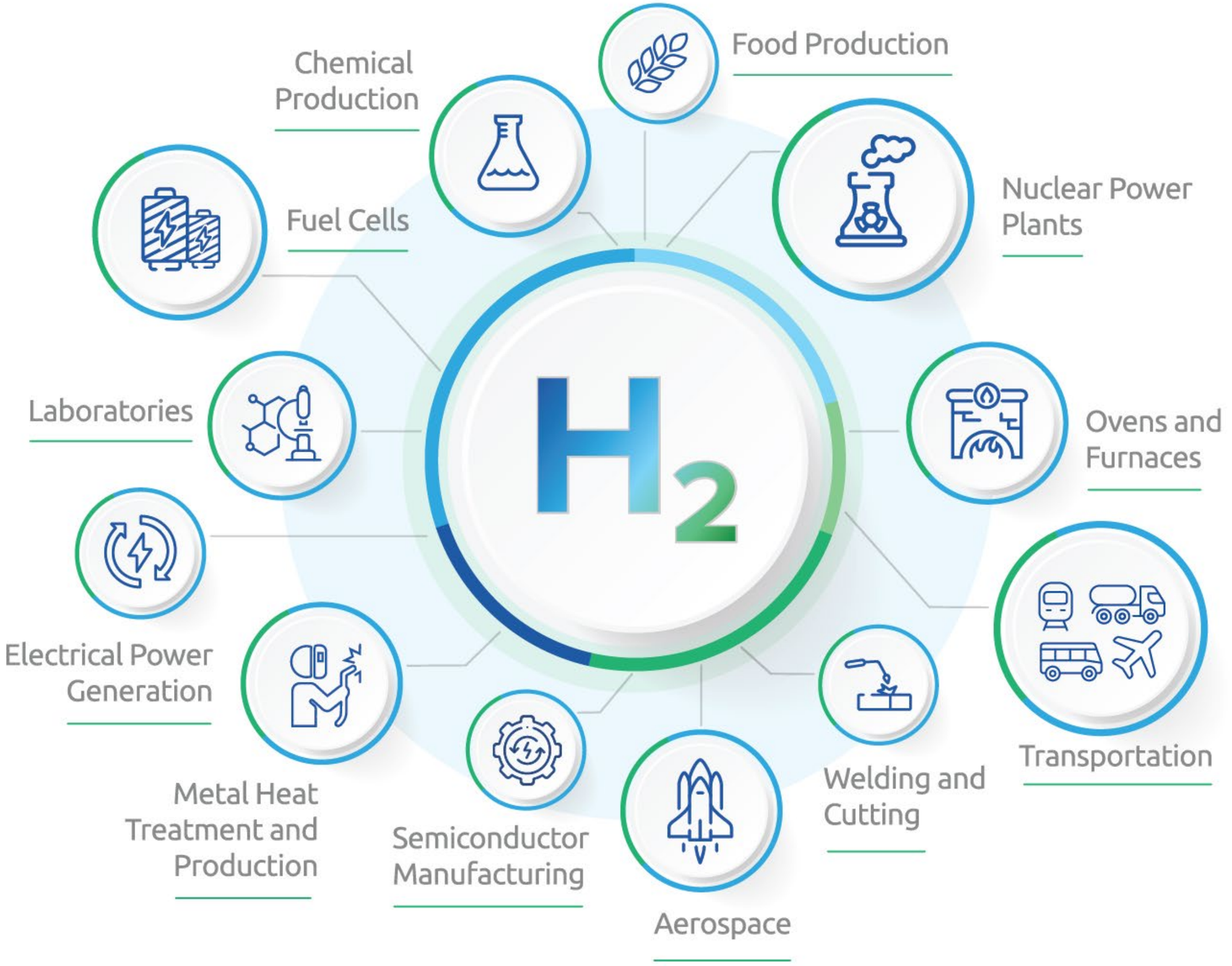


Hydrogen Sectors

Mapping Safe Hydrogen Standards

Storage

Hydrogen can be stored as a gas, a liquid, and in solid form. At customer locations, depending on how much hydrogen is used, gas and liquid hydrogen is stored in various tanks that require special attention to specifications like spacing, venting, and roof systems.

Learn more →

Application

A hydrogen fueled future for transportation, energy storage, heating, space exploration, and more, is a rapidly approaching reality. 75 years of standards have built a strong foundation for the expansion of hydrogen use and applications of hydrogen.

Learn more →

Production, Operations & Maintenance

Because of hydrogen's unique properties, liquid and gaseous hydrogen production and storage systems require careful planning, and execution. As hydrogen use expands to new areas it is vital to ensure safe and standardized use.

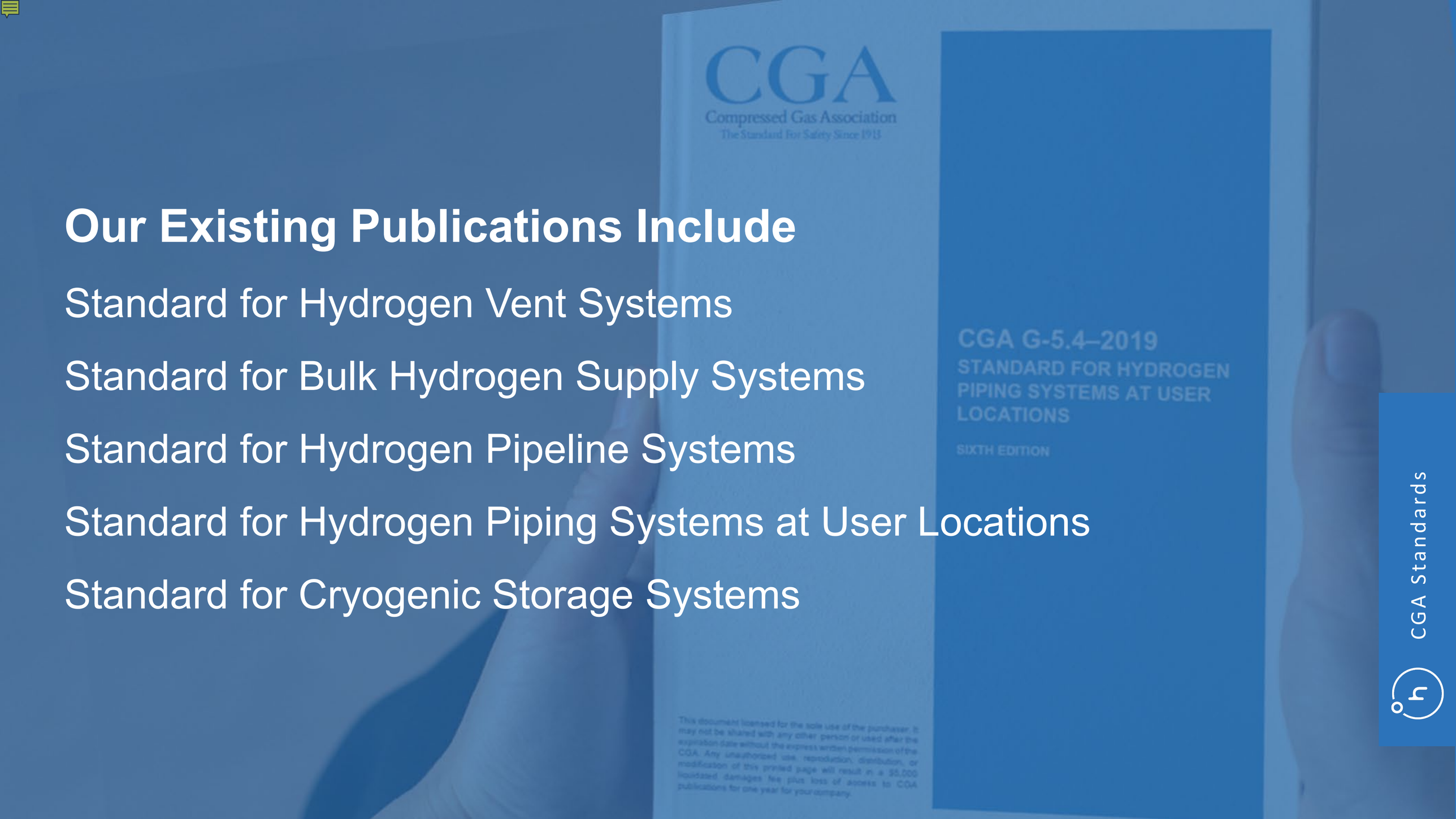
Learn more →

Delivery

A sustainable hydrogen ecosystem requires that hydrogen be delivered from where it is produced to the point of end use, such as an industrial facility, power generator, or fueling station. Currently, the main methods for transporting and delivering hydrogen are by truck and through pipelines.

Learn more →

CGA Standards



Our Existing Publications Include

Standard for Hydrogen Vent Systems

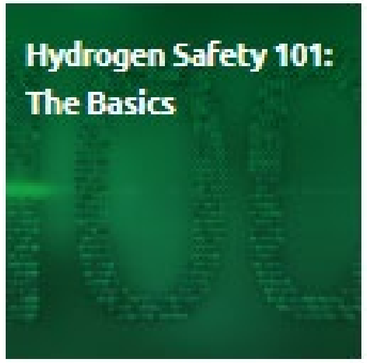
Standard for Bulk Hydrogen Supply Systems

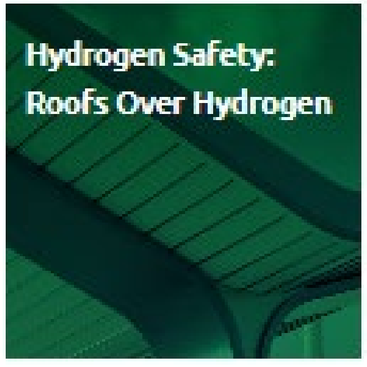
Standard for Hydrogen Pipeline Systems

Standard for Hydrogen Piping Systems at User Locations

Standard for Cryogenic Storage Systems

CGA Standards





Explore Our Hydrogen Resources

Hydrogen Resources

CGA®

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The Standard For Safety Since 1913

Hydrogen Resources

Let’s put safe hydrogen to work.


Hydrogen
H2


Park Ave
Main Ave
Bank Street

Q: How close can hydrogen re-fueling facilities be to gas and diesel pumps?

A: With appropriate mitigations, they could be as close as 25 feet


JAPAN AIRLINES
JAL
015


Harmonization
+
Interoperability


Safe
hydrogen Project
EMPOWERING THE ENERGY ECONOMY

Join Us

We are currently developing new standards for:

- Small Scale Hydrogen Production and Delivery
- Standard Procedures for Hydrogen System
- Safe Operation of Hydrogen Pipeline Systems
- Design of Bulk Liquid Hydrogen Loading and Unloading Connections
- Hydrogen Plant Integrity Management

Our H2 Members

CHART
Cooler By Design.

Linde

AIR PRODUCTS

cavagna group
Wherever gas is used we are there

plug™

MATHESON

Air Liquide

ACME CRYOGENICS
PART OF OPW | a DOVER company

FCHEA
Fuel Cell & Hydrogen Energy Association

Iwatani
Iwatani Corporation

MESSER
Gases for Life

ACT Applied Cryo TECHNOLOGIES

What Can You Do?

Get Informed: Visit SafeHydrogenProject.org

Get Talking: Make safety a part of every conversation you have about hydrogen

Get Involved: Join CGA as a Hydrogen Member and share your perspective as we set the standard for safety

THANK YOU

Visit us at: SafeHydrogenProject.org

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