



# ONBOARD DYNAMICS

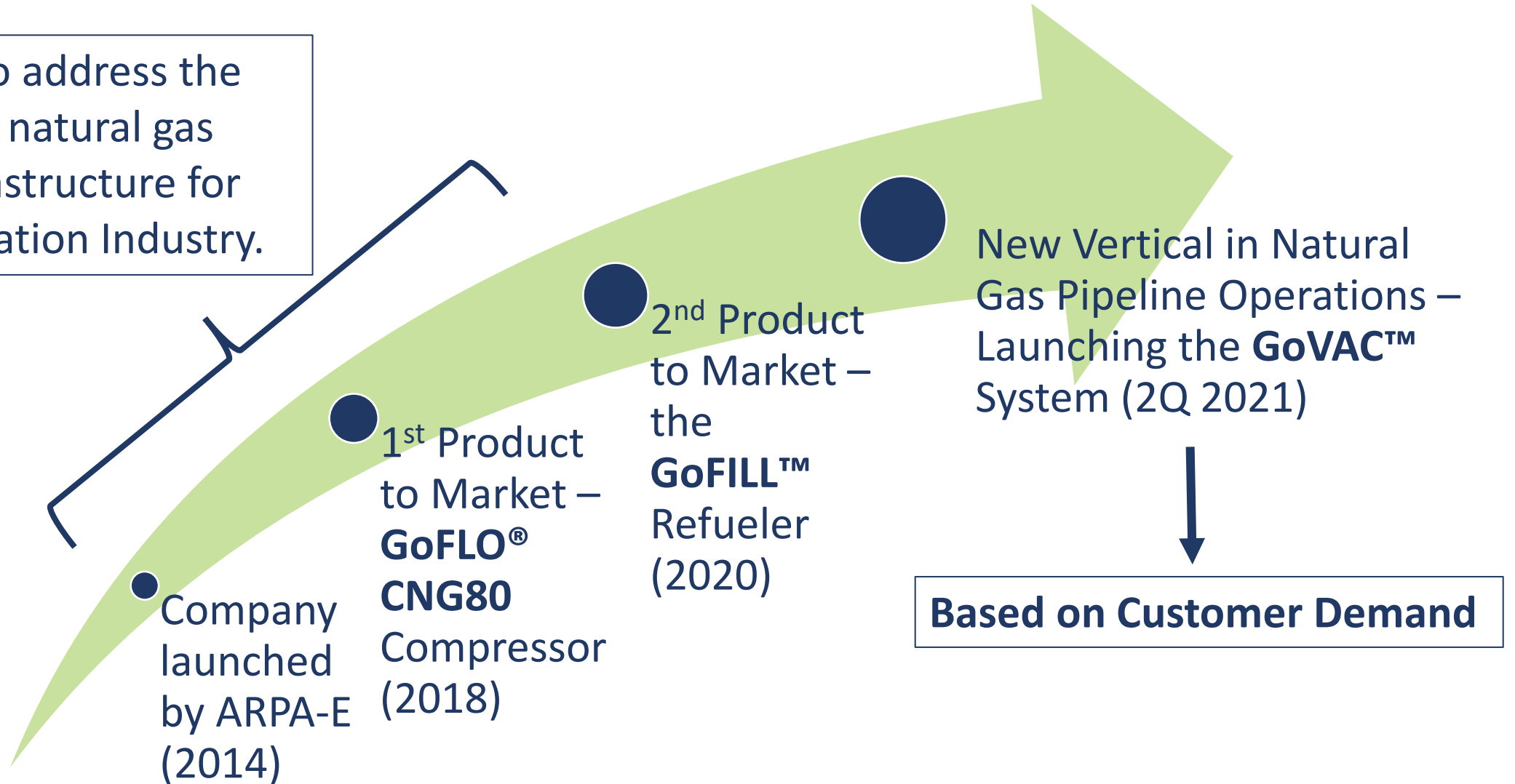
*Natural Gas Technology  
for Driving Down Emissions*

**Rita Hansen, CEO**

[www.onboarddynamics.com](http://www.onboarddynamics.com)

# Who is Onboard Dynamics? The Road We've Traveled

**OBJECTIVE:** To address the critical lack of natural gas refueling infrastructure for the Transportation Industry.



# What is the Problem?

**Methane is released into the atmosphere from natural gas pipeline operations.**

## PIPELINE EMISSIONS

- ~**12MMT\***(US) and ~**14.5MMT\*** (EU) of CO<sub>2</sub>e\* emissions/yr from distribution system
- ~**55.7 BCF\*** methane released/year
- **\$1.6B** cost to natural gas utilities/year

## CHALLENGES FACING INDUSTRY

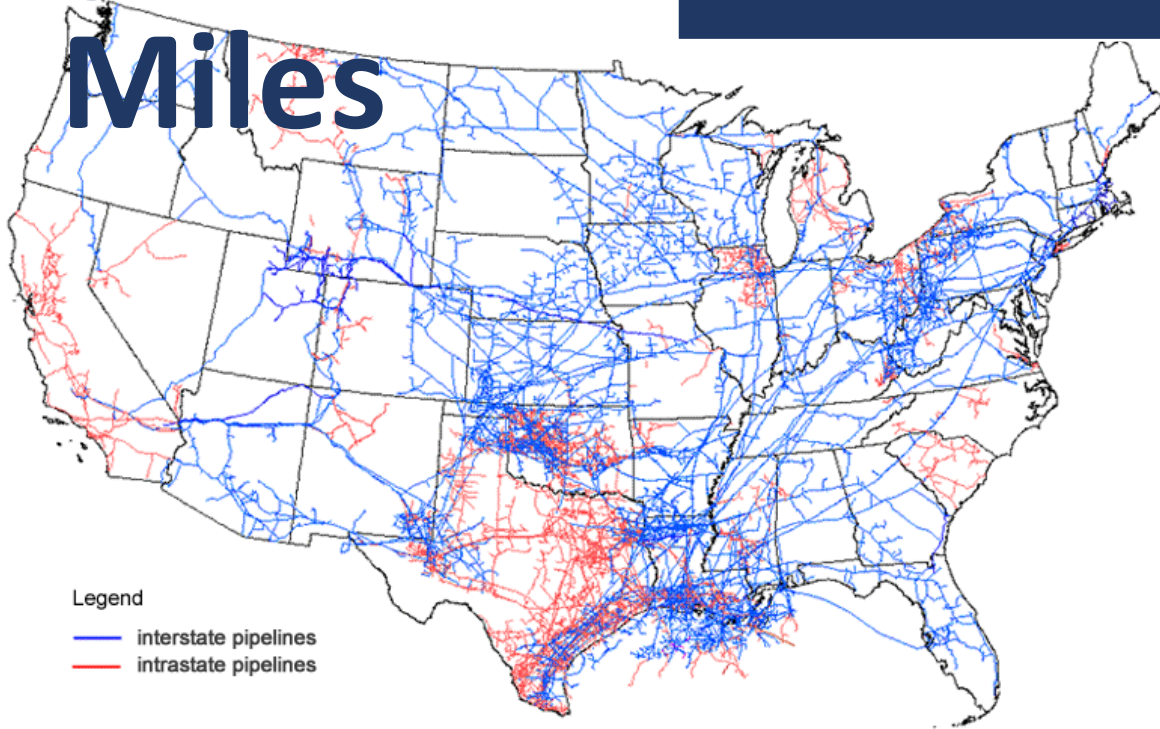
- Increasing regulation (Biden Administration, etc.)
- Aging pipeline infrastructure
- Repairing in urban areas
- Costs, time, and permitting issues



# How Big is the Pipeline Operations Opportunity?

## NATURAL GAS PIPELINE NETWORK Transmission and Distribution

**3M  
Miles**



Source: U.S. Energy Information Administration, *About U.S. Natural Gas Pipelines*

**3.4M  
Miles**



**\$16 Billion Total Available Market**

# Solution Requires These Characteristics



## Clean Environmental Profile

- Runs on natural gas
- No external electricity or diesel required
- Low noise pollution when operating in sound sensitive areas



## Operational Advantages

- Cost effective, especially for short repair segments
- Portable, self-contained, small footprint
- Easy to deploy and operate
- Remote monitoring and environmental reporting



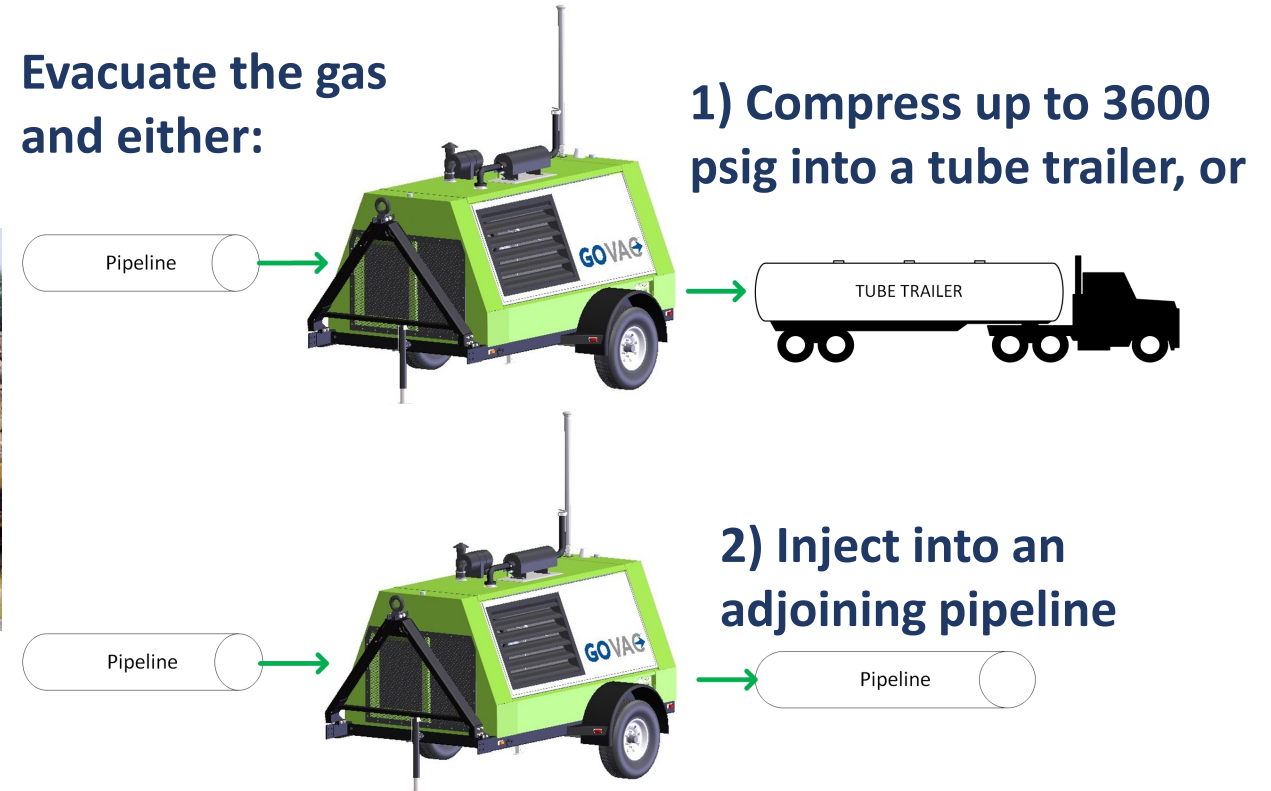
## Regulatory Compliance

- NFPA, EPA, SCAQMD, CSA (2021)

# Introducing the GoVAC™ System



Evacuate the gas  
and either:



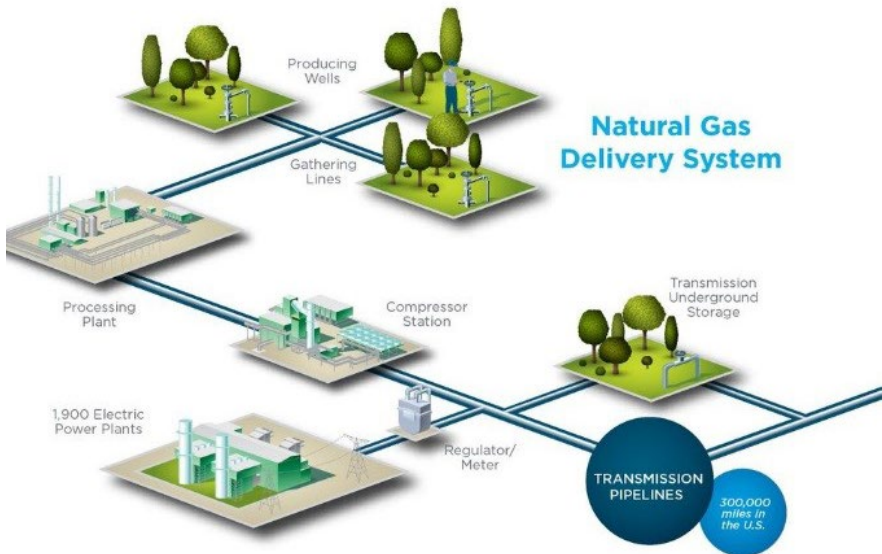
**Successfully demonstrated in field operations for pipeline evacuation.  
Ready for sale in 2Q 2021!**

# Competitive Analysis against current Market Leader

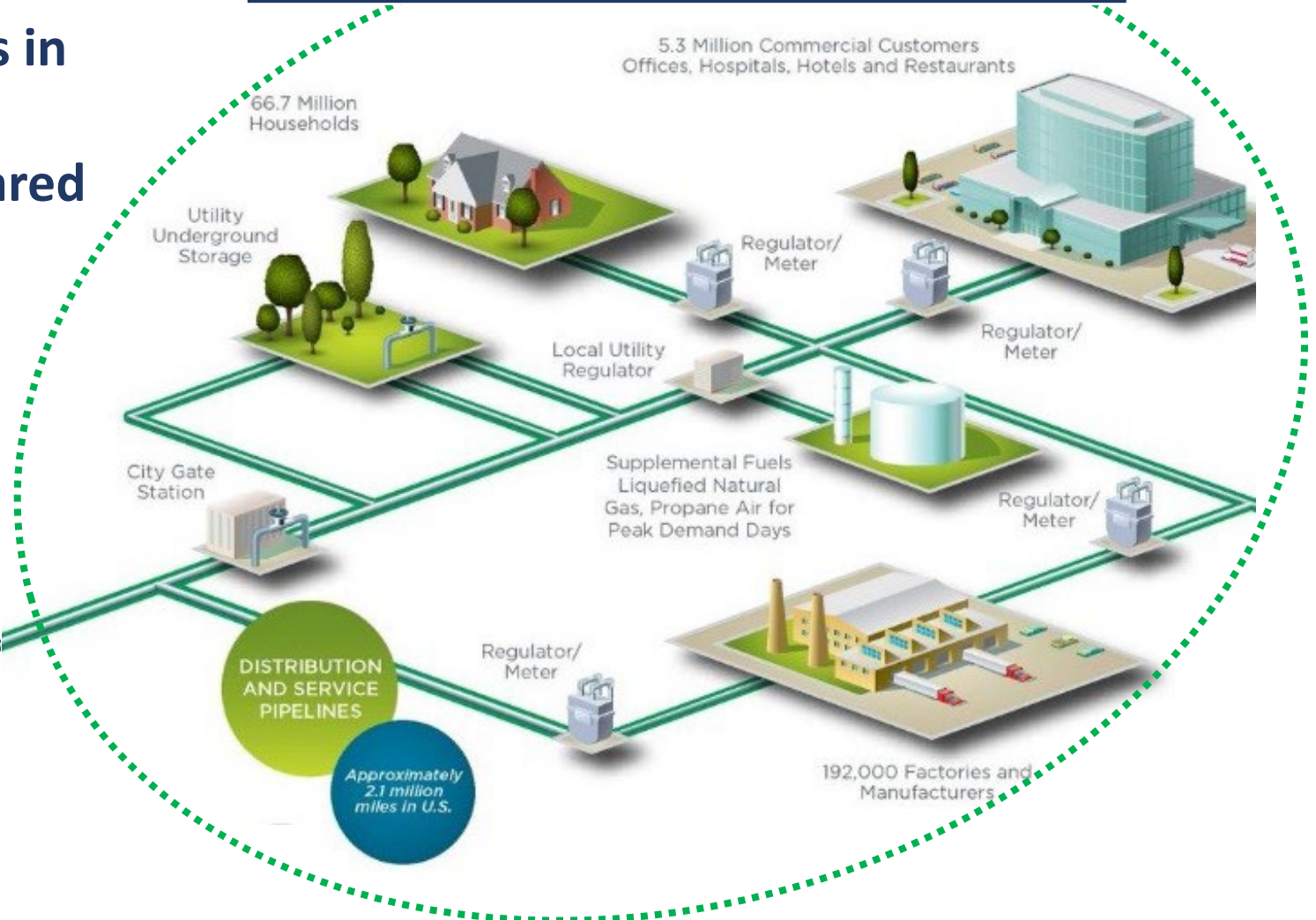
Customer Benefits	Top Competitor	GoVAC™
No Diesel or Electricity	X	✓
Inclusive Integrated Package	X	✓
Ease of Installation (& redeployment)	X	✓
Mobile, Trailer-Mounted, Self-contained	X	✓
Environmental Impact	~190 lbs of CO <sub>2</sub> e emissions/hr	~30 lbs of CO <sub>2</sub> e emissions/hr

# Go-To-Market Strategy for GoVAC™ System

- ✓ Deploy 1<sup>st</sup> system in 2Q 2021 & confirm metrics/performance.
- ✓ Focus on our existing partners in natural gas distribution.
- ✓ Participate in conferences geared towards pipeline operations.



## NATURAL GAS DISTRIBUTION SYSTEM





# Our Traction in the Field (\$1.9M Revenues to Date)



Filling Tube Trailers



Pipeline Evacuation



School Districts



Waste Haulers

## Natural Gas Utility Operations



Fueling Station Backup



Southern California Gas Company®



NW Natural®

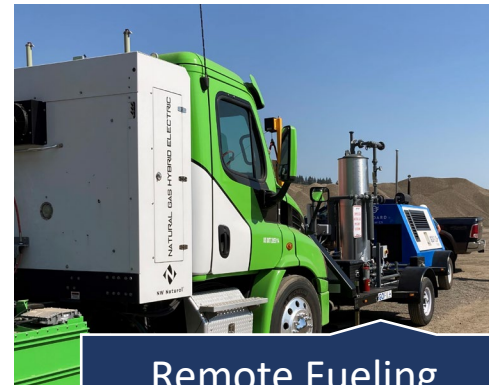


Southern Company

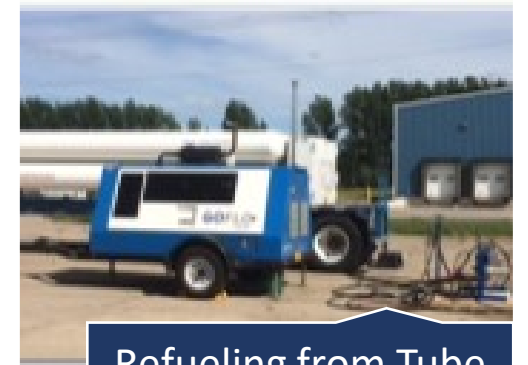


FORTIS BC™

## Fleet Refueling Projects



Remote Fueling (GoFLO + GoFILL)



Refueling from Tube Trailer

# Our Product Offerings and Business Model

## - Direct Sales:

- GoFLO<sup>®</sup> Compressor
- GoVAC<sup>™</sup> System
- GoFILL<sup>™</sup> Refueler
- Add-ons

## - CNG-as-a-Service/Leasing\*

## - Service & Support Contracts

## - Installation & System Integration

## - Data Offerings & Reporting

\* *Company not currently capitalized to offer but this is a preferred business model for the future.*



# Environmental Impact & Value Prop with Customers



## Natural Gas Utilities

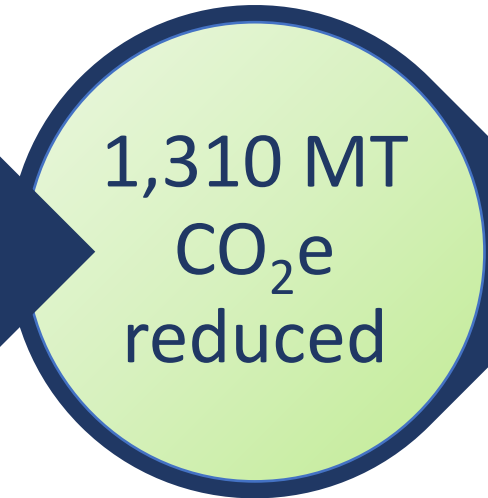
- Meeting Environmental, Social, Governance goals
- Enabling responsible pipeline operations
- Tube trailer refilling
- Backup of CNG stations

2019 - 2020



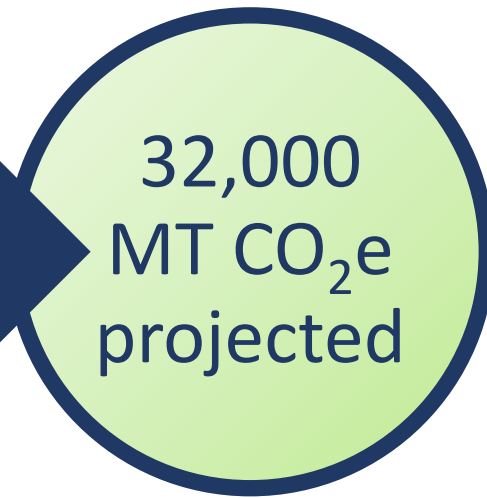
**Total Actual**  
Hours of operation

2019 - 2020



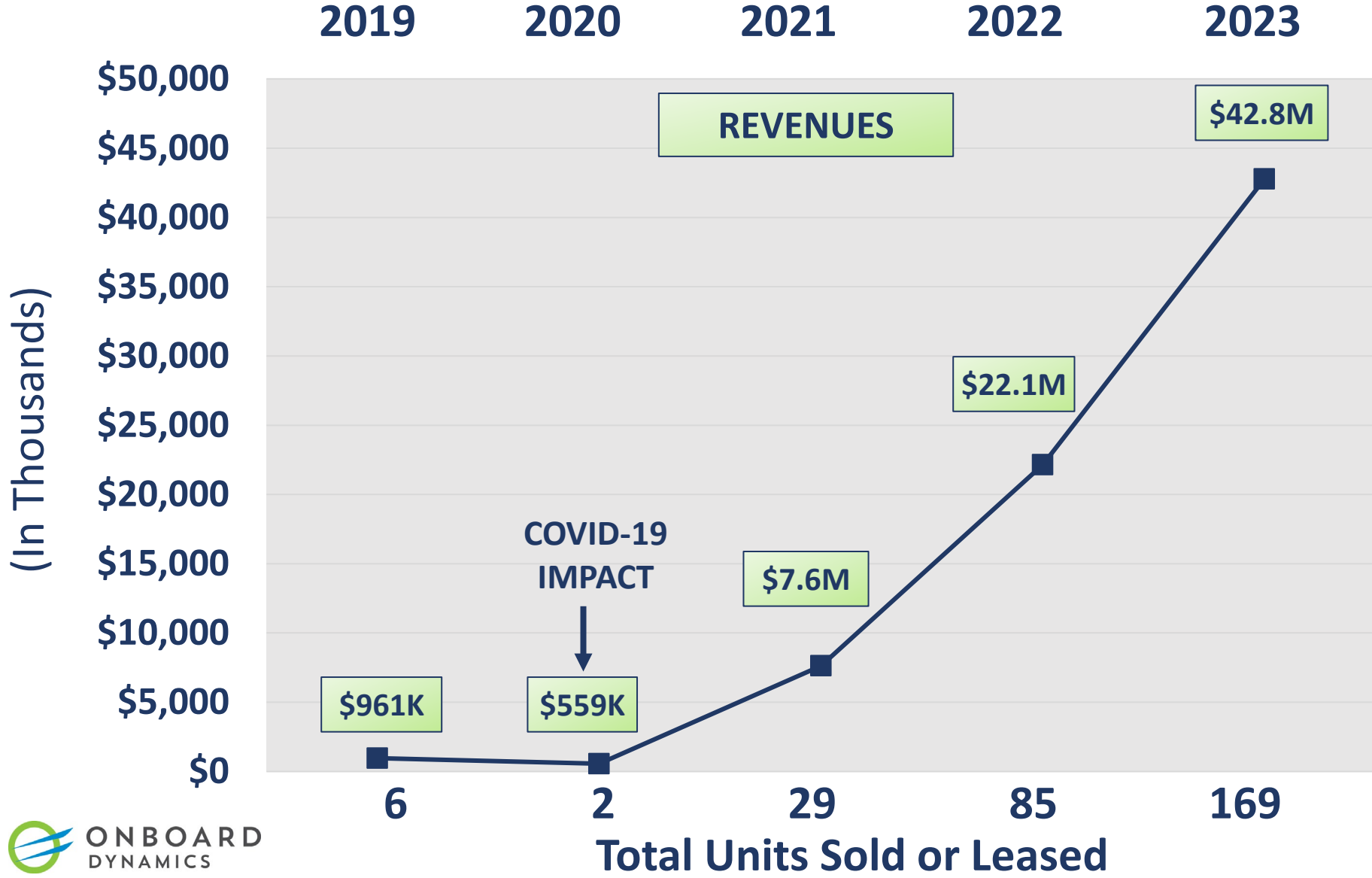
**Total Actual**  
CO<sub>2</sub>e emissions reduction (in metric tons)

2021 - 2023



**Projected**  
CO<sub>2</sub>e emissions reduction (in metric tons)

# Financial History and Projections



### Going Forward:

- Bringing on channel partners
- Adapting sales to COVID environment
- Shorter sales cycle with GoVAC product
- Improved product margins with GoVAC

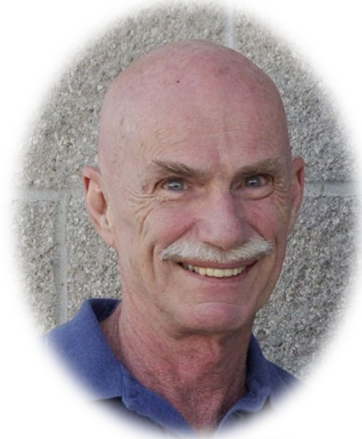
# Team

Rita Hansen

Chief Executive Officer, Co-Founder & BoD  
*Serial Entrepreneur in Energy Startups*

**Dr. Jeff Witwer**

Chief Product Strategist  
Co-Founder & BoD  
*Energy Technologist*



**Rick Kay**

Chief Operating Officer  
*Leader in Bringing Products to Market*



**David Berokoff**

Business Development  
*Natural Gas Utility Veteran*



**Alan Hansen**

Director of Projects  
*Execution & Operations*



**Todd Pendexter**

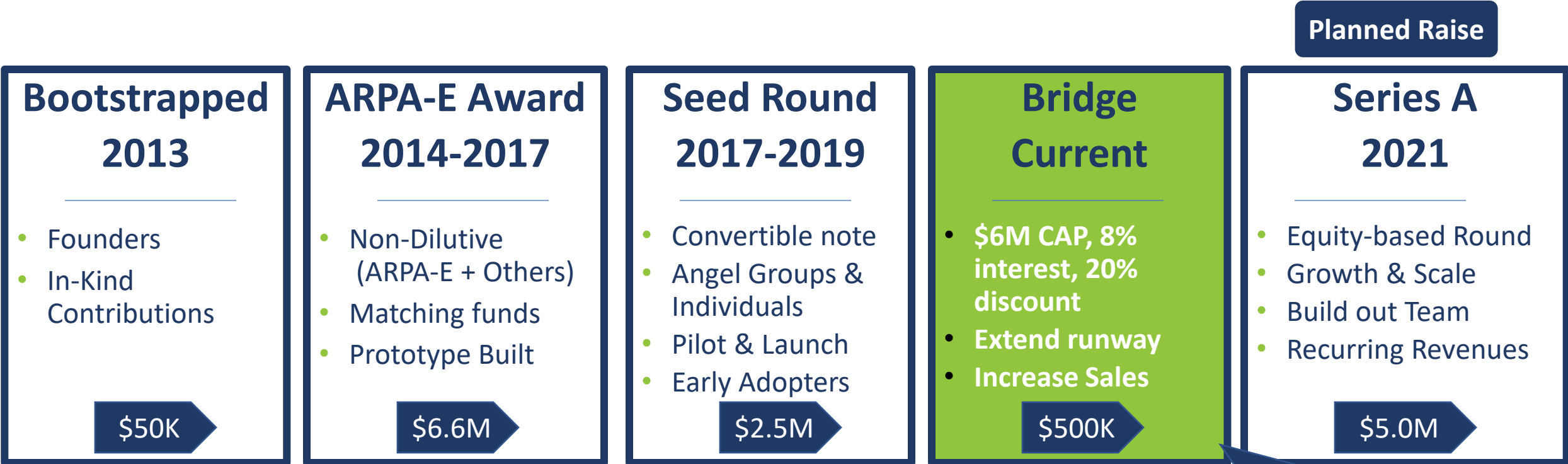
Director of Sales  
*Customer Success*



**Karen Anderson**

Chief Financial Officer  
*Experienced Financial Executive & Leader*


# Capital Scale-Up Strategy and Ask



**Bridge Round Status = \$280K remaining  
Closing March 31, 2021**

- Use of Funds:**
- 1<sup>st</sup> GoVAC Deployment
  - Marketing collateral to support GoVAC
  - Participate in Operations Conference (s)
  - Hire key engineer

# Smart technology for a transition to clean energy

- 
- 1. GHG emissions reduction has world focus.**
  - 2. Practical, scalable, and economical options are limited in the natural gas industry.**
  - 3. Our disruptive technology is the smart answer.**
  - 4. We are the seasoned team that knows how to execute.**

**Onboard Dynamics –  
an ESG investment**



### Contact Us:

Rita Hansen  
CEO and Co-Founder  
1-206-291-3206  
[rita.hansen@onboarddynamics.com](mailto:rita.hansen@onboarddynamics.com)

Karen Anderson  
CFO  
1-541-815-1333  
[karen.anderson@onboarddynamics.com](mailto:karen.anderson@onboarddynamics.com)

### Onboard Dynamics, Inc.

62958 Layton Avenue, Suite 2  
Bend, OR 97701  
USA  
1-541-550-3632  
[info@onboarddynamics.com](mailto:info@onboarddynamics.com)

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