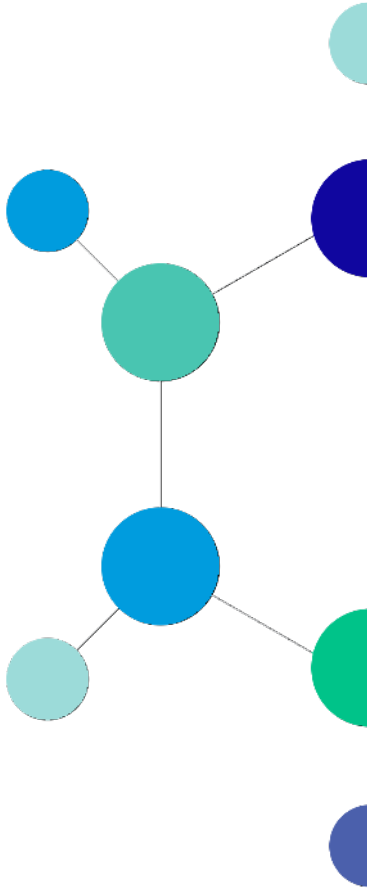
Toolbox Talks

Sustainability Journeys
Are You On Track?



Monument Chemical

CHEM GROUP

VERANOVA®

INTEGRITY BIOCHEM

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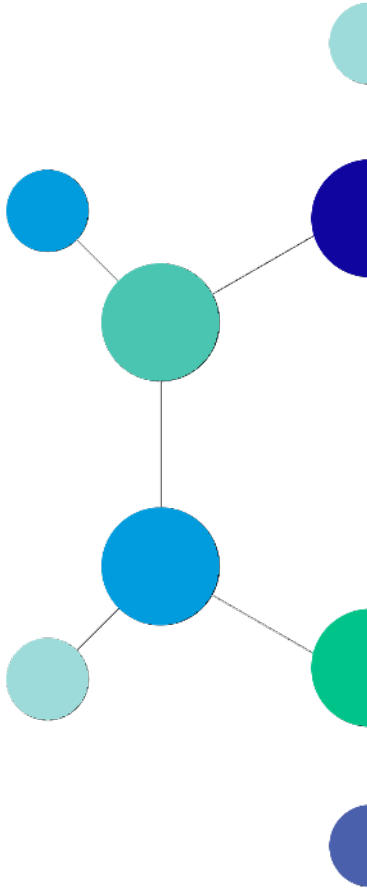
Monument Chemical

Monument Chemical Sustainability Journey



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Connecting Sustainability and Savings

April 2, 2025 | SOCMA

Agenda

- Team Formation
- Brainstorming
- Prioritization Methods
- Project Ideas

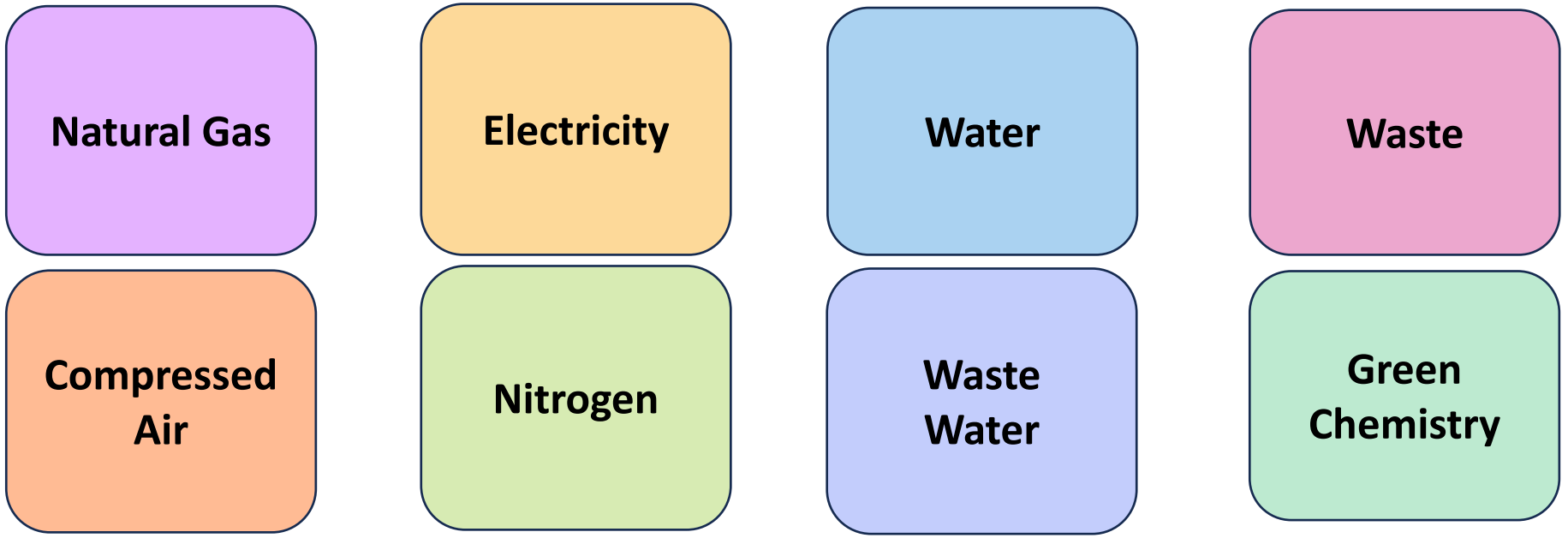
Team Formation

- Goals
  - Create site long-term sustainability plan
  - Identify and execute sustainability projects

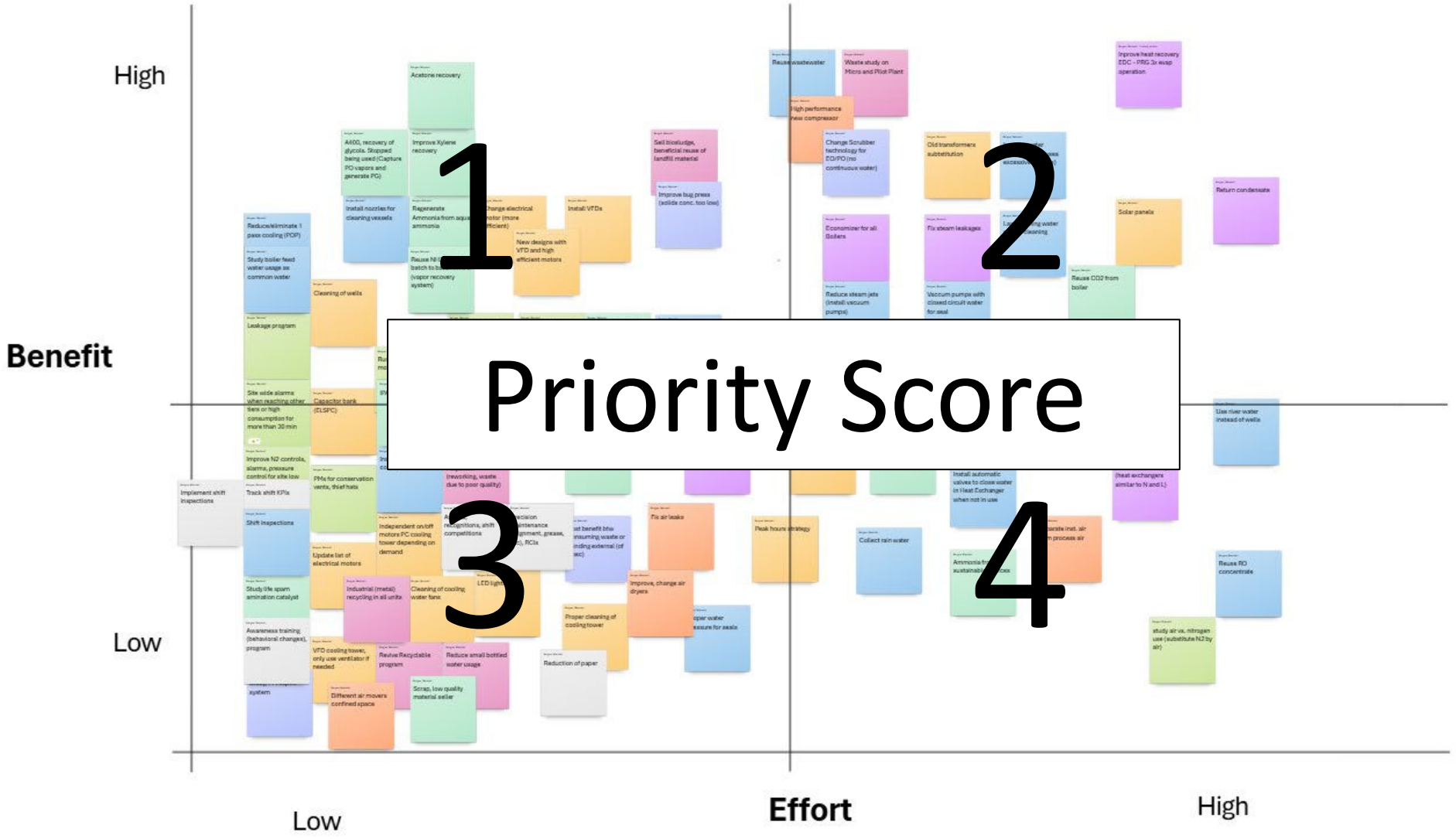
- Team Composition
  - Process experts
  - Decision maker with big picture business outlook

Brainstorming Process

- Identify focus areas
- Brainstorm project ideas
- Prioritization



Brainstorming Process



Project Ideas

Fuel

- Utilization of biomass
- Cross exchanger addition/efficiency improvements
- Electrification of exchangers/reboilers
- Steam leaks/Steam trap management
- Condensate management

Electricity

- Capacitor banks
- High efficiency motors/VFDs
- LED light conversion/motion sensor lights
- Solar

Water

- 1 pass water use
- Wash up hoses
- Tank cleaning

Thank you!

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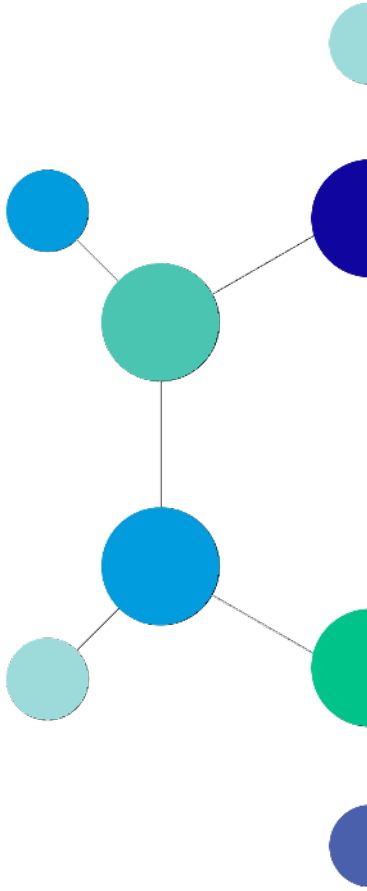
Sustainability Journey



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Corporate Responsibility Program Development

SOCMA ESG Meeting

02APR2025

Development of ESG Strategy

- Primary driver for development was direction from parent company and customers
- Buy-in from Veranova Leadership Team
- Engage with a consultant on development of strategy
  - Development of our program would not have been possible without engaging with a consultant with experience with ESG program development
- Develop recommendations for ESG Program
  - Materiality Assessment based on input from key stakeholders (parent company, VLT, customers. Employees)
  - Benchmark against competitors' ESG programs
  - Establish & integrate ESG strategy into Veranova strategic plan
- Approval of ESG strategy by Board of Directors
- Implementation
  - Policy Development
  - Committee Development (Sustainability, Inclusion, and Green Chemistry)

Veranova's Values

People

Our people are our most important asset, and we are dedicated to building the most talented and diverse workforce in our industry. We are committed to the growth and well-being of our team, and expect them to work collaboratively and act with the highest level of integrity.

Patients

Recognizing that each product we touch directly impacts a patient's life, we maintain an uncompromising focus on quality, compliance, and excellence in delivery.

Innovation

We strive to be better every 30 days. We challenge our people to continually find ways to improve how we deliver the best service to our customers, and to leverage our scientific and technical expertise to advance industry-leading technology.

Veranova's Corporate Responsibility Strategy

Investing in People

We invest in our people and communities, prioritize safety and foster an inclusive culture that ensures personal and business growth.

Innovating for Patients

We innovate for patients, maintaining an uncompromising focus on quality, compliance, efficiency and excellence in delivery.

Protecting the Planet

We seek to minimize impact on the environment, securing a healthier, sustainable future.

A foundation of ethics and strong governance

Communicate Externally

External Website:

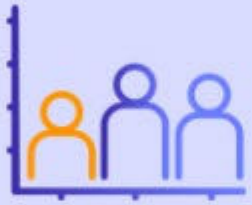
Corporate Responsibility

As a growing service provider to the pharmaceutical and biopharma sector, we recognize our role in advancing human health with our customers and for patients, while ensuring that our operations align with the well-being of our employees, communities, and the planet. From reducing our environmental footprint and ensuring the highest standards of product safety to upholding ethical practices and promoting inclusion, our commitment to growth, environmental sustainability and responsible innovation is core to achieving our mission and creating long-term value.

Our corporate responsibility strategy and commitments represent our values in action and guide *how* we operate as we grow our business and achieve our mission to improve and save the lives of patients. We report on the impact of our corporate responsibility strategy in alignment with global ESG standards.

LinkedIn:

Focus on People and Inclusion

Share our Journey	Drive with Data	Culture of Inclusion	Accelerate Talent Acquisition & Development
			
Communicate progress against our Inclusion commitments.	Leverage representation and engagement data to define goals and measure progress.	Energize the organization through employee-led and executive-supported groups and activities.	Partner with external organizations to help us attract and develop the best team.

Global Sustainability Team

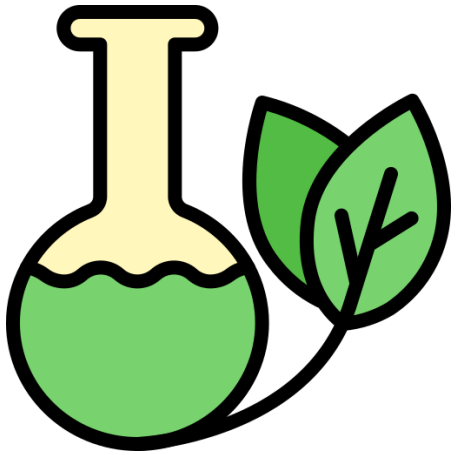
- Composed of:
  - Site VP/General Manager
  - Global EHS Director
  - VP Global Engineering
  - VP Process R&D
  - Assistant General Counsel
  - Environmental Site Lead

- Develop goals and objectives for 2025:
  - Develop baseline sustainability data
  - Set reduction goals to start in 2026
  - Implement Green Chemistry Team
  - Engage with site teams to drive initiatives

- Site Sustainability Teams

Green Chemistry Initiative

- Form a Green Chemistry Team comprised of R&D personnel
- Commercial Processes
  - Develop Green Chemistry Scorecard
  - Develop before and after scorecards for recent process improvement projects
  - Develop methodology for scoring incoming process transfers
- Development Projects
  - Develop scorecard and metrics for tracking improvements in completed originator development projects
  - Pilot a development project for scoring
- Participate in an Industry Group

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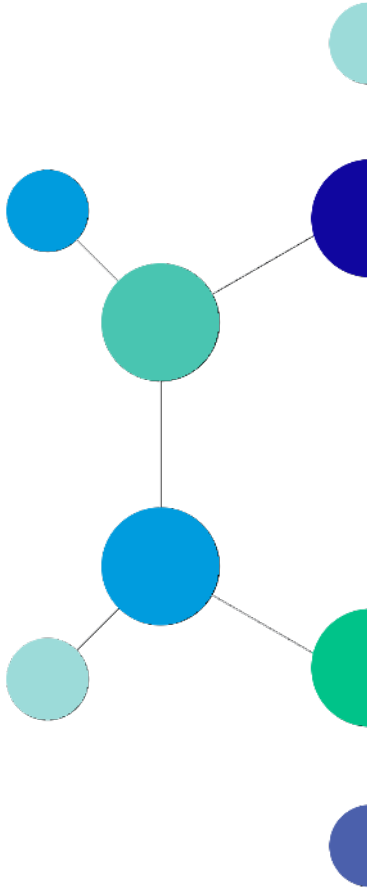
Integrity BioChem Sustainability Journey



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SUSTAINABLE
SCIENCE
FOR THE
WHOLE WORLD™

SUSTAINABLE SCIENCE FOR THE WHOLE WORLD™

Capacity

Fully automated **production facilities capable of producing 10M lbs per month** with expansion up to 25M lbs per month.

Performance

Surface Tension, Contact Angle, Wetting, and CMC are on par with, or better than, industry leading synthetics

Economics

Consumers are demanding more sustainable ingredients in their products, but they are not willing to sacrifice performance and/or price.

Sustainability

Renewable Carbon Index rating of 65-100 and non detectable 1,4 Dioxane Levels.

Founded in 2017, Integrity Bio-Chemicals (IBC) is a technology-driven company with a deep bench of industry experts producing next-generation modified biopolymers for the specialty, industrial, and energy markets using renewable and sustainable practices.

www.integritybiochem.com

A Cradle to Gate study Life Cycle Analysis on EdenSurf 1200HA resulted in total emissions of **1.05 kg CO2e/kg.**

Our production process accounts for only 0.002 kg CO2e/kg of the life cycle.

Sustainability, Scalability, & Performance

Our headquarters and R&D Facility are located in Cresson, TX

Scalability- Integrity BioChem's manufacturing process has changed the way bio-based surfactants are produced.

- *Faster production rates allow for quicker turnarounds to meet current and future demand*
- *Reliable feedstocks allow for consistent quality*
- *Uses abundant raw materials that can be sourced globally and domestically, granting supply chain stability.*
- ***Biosurfactant Manufacturing Facility*** *- Expandable to 4 lines allowing* ***20M+ lbs. per month***

Our base of operations in Cresson, Texas is located on a 65-acre facility; and our elite scientists consistently work to develop and modify custom solutions for our customers across the specialty, industrial, and energy markets.

Fueled by Nature

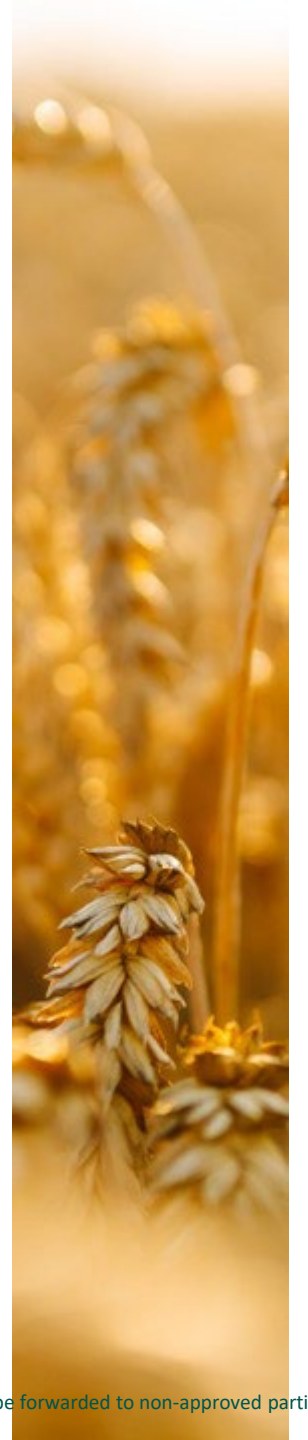
We source our products locally or regionally based on our manufacturing locations, supporting local economies and ensuring a reliable supply chain. By utilizing by-products from the agricultural industry, we avoid impacting food production or competing with the food industry. This sustainable approach not only promotes **environmental conservation** but also guarantees a **stable and consistent supply of raw materials** for our production processes. By leveraging agricultural by-products, we reinforce our commitment to sustainability and community support.

SILVER | Top 15%
ecovadis
Sustainability Rating
APR 2024

Fermentation

- Sugar-based or plant-based feedstock
- Higher product cost due to intense processing
- 2-5 week process time
- Large amount of waste per cycle – Liquid waste, unconsumed carbon & nitrogen sources, and in some cases there is a further need to breakdown waste using hydrolysis, centrifugation, filtration, or distillation), all of which can produce additional waste streams
- Large-scale fermentation requires medium heat and a continuous supply of energy – downstream processing (drying, filtration) also contributes to additional energy consumption
- Fermentation products typically have a broad spec range and performance inconsistencies as a result

General Fermentation Carbon Emissions:
0.5 to 3.5 kg/CO_2 per kg of product



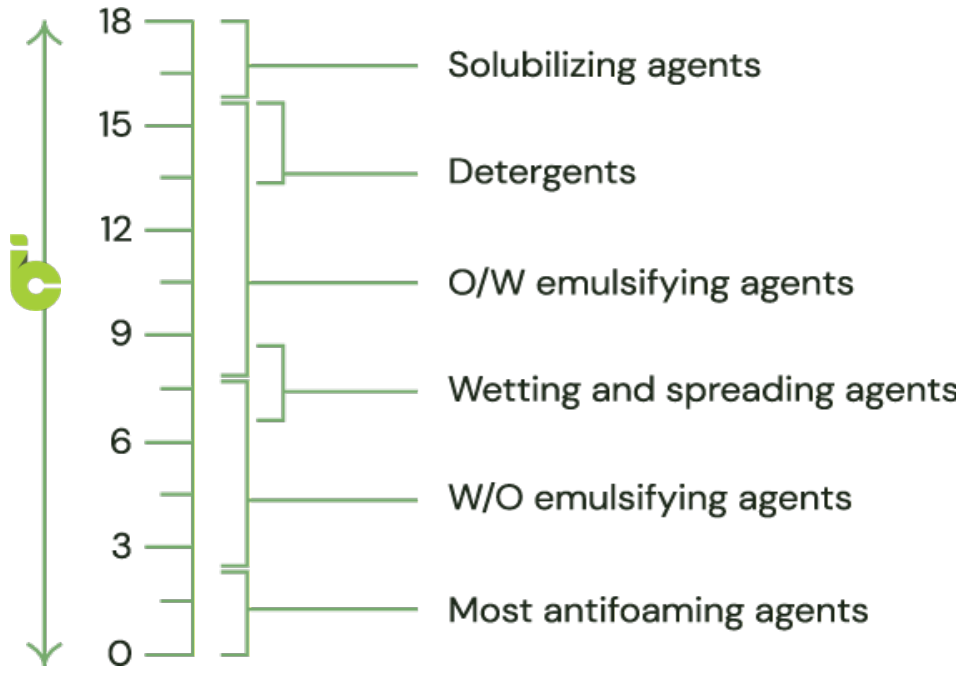
IBC Patented Process

- Upcycled, abundant feedstock
- Patented, novel sugar-based chemistry
- Lower product cost – consistent pricing
- Fast processing time – same day shipment
- Zero waste
- Low Energy intensity
- Low Chemical intensity
- Narrower spec range and consistent performance making it easier to formulate with

IBC Carbon Emissions (LCA Production):
0.002 kg/CO_2 per kg of product

FORMULATING WITH IBC PRODUCTS

Broad Tunable HLB Range



IBC Bio-Based Surfactants allow formulators to remove a variety of problematic intermediates without compromising product performance. Our novel molecule can uniquely enhance many traditional surfactants in a variety of industries.

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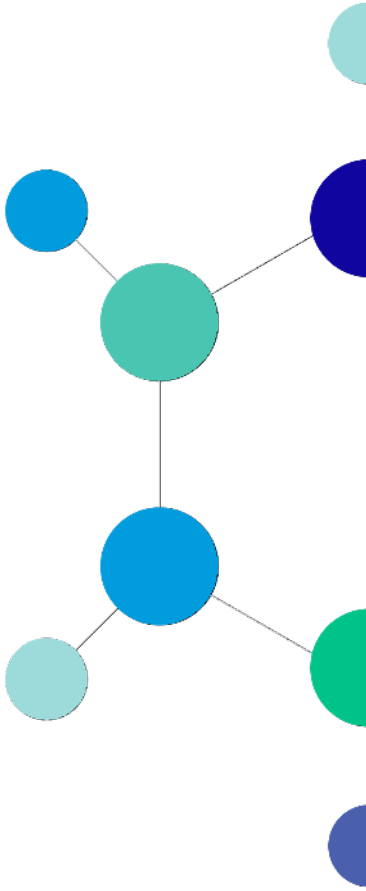
Sustainability Journey



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CHEM Group

Tolling and Separations

SOCMA
April 2025

chem-group.com

Presented by:
Kelley Elder
Director, Health, Safety, and Environment
kelder@chemgroupus.com
812-759-8354

Company Overview – CGH-EV, Inc.

1979

Troy, IN
Founded by
Dave Carson
MEG 2, LLC

1995

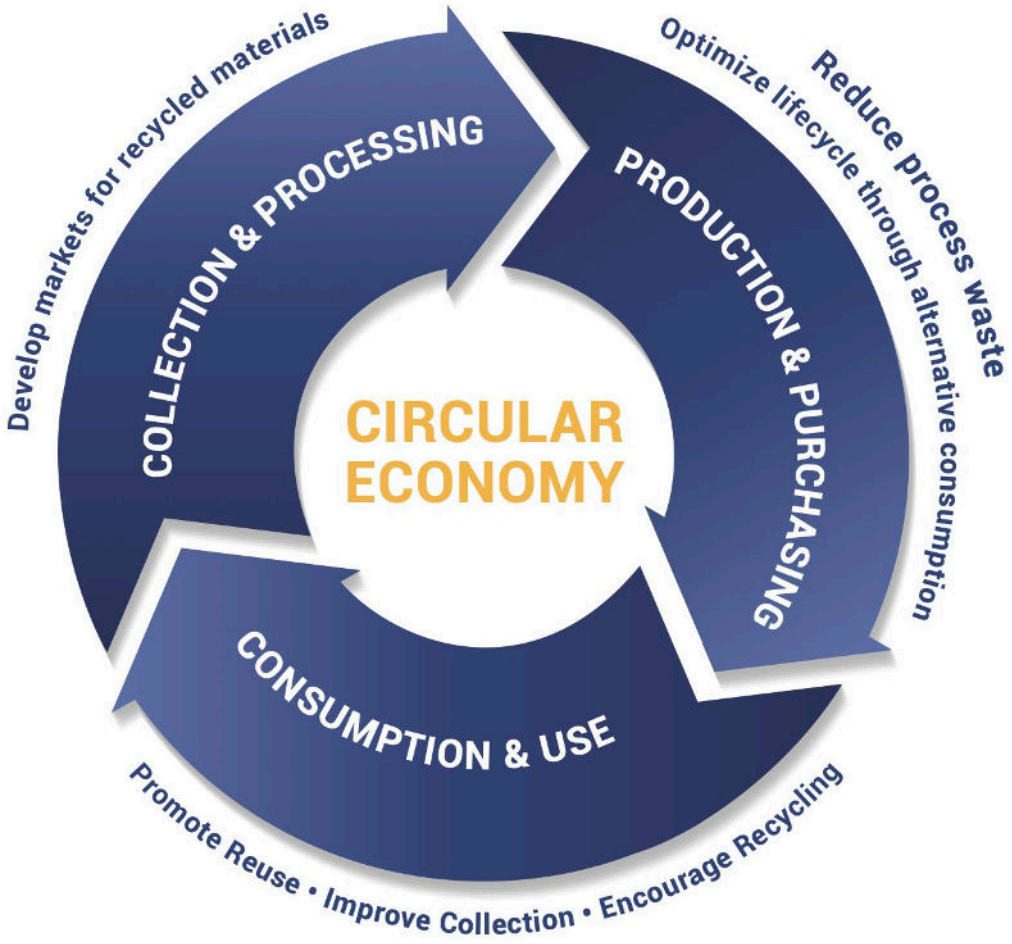
Evansville, IN
Plant and HQ
CGH-EV, Inc (dba CHEM Group)

2025

On January 17, 2025 after several years of private equity ownership Dave and Paul Carson are now sole owners of CGH-EV, Inc.

84 employees

Circular Economy

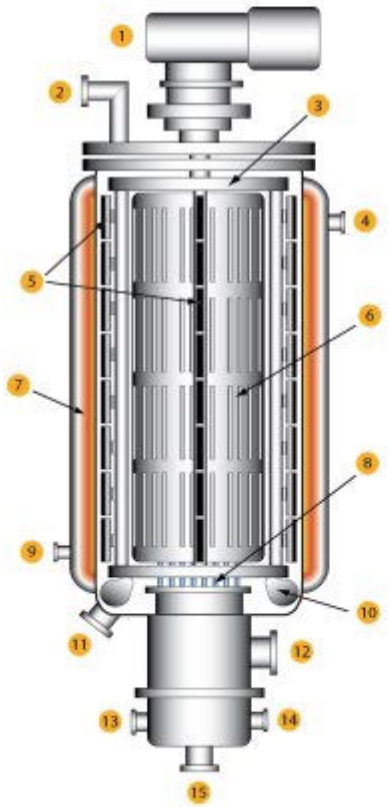


Giving you back the molecule that you've already paid for.

Chemical recycling is crucial to making this industry more economically and environmentally viable, a mission we've been committed to since long before it started trending.

CHEM Group can help you become a driving force towards a brighter future for this industry. The model is simple, we renew fluids and remove unwanted components and give you back the valued molecules you already paid for, the rest speaks for itself.

TECHNOLOGY – WIPED FILM EVAPORATOR



- ✓ High Temperature (600F)
- ✓ Low Vacuum (<100 microns)
- ✓ Low Residence Time
- ✓ Tolerant of salts and solids

Benefits

- Removes light ends and high boilers
- High yield of return (70-95%)
- Directly impacts company sustainability initiatives
- Saves on EPA reporting
- Reduction of chemical footprint and landfill waste participation

- ✓ Also available: Reactors, Distillation Columns, heated mixing kettles, solidification belt, filtration and carbon beds.
- ✓ We can handle: Rail, Trucks, Drums and Totes

Streams to Reclaim

Many Chemical Plants have 1 or more of these streams which can make good candidates for recovery.

- **Heat Transfer Fluids** – typically used in conjunction with a furnace to heat a process when temperature control is critical, or steam will not easily reach the temperature.
- **Off-spec product** – contaminated due to error, high moisture, processing difficulty, start-up/shut-down material.
- **Glycols** – EG, DEG, TEG, TTEG and PG – often used as heat transfer fluids (anti-freeze), solvent or chemical cleaning. These degrade over-time or become contaminated.
- **Amines** – used in gas treating – these build up salts and reduce the streams effectiveness
- **Lubricating Oils** – machine lubricants can build up heavy contaminants and moisture
- **Catalyst** – typically solid, may contain precious metals and are mixed with a solvent.

What waste streams can you think of?

CONTRACT | TOLLING BUSINESS APPLICATIONS

Recovery and Purification of High-Boiling Materials Heat-Sensitive Materials, Viscous Liquids, Hi-Vacuum Distillations

- Acrylates
- Catalyst Recovery
- Column Bottoms Recovery
- Deodorization
- Drying Applications
- Ethanolamines (DEA,MDEA, DGA)
- Fats and Oils
- Fatty Acids/Amines/Esters
- Glycerin
- Glycols, Diols, Glycol Ethers
- Heat Transfer Fluids
- Herbicides
- Isocyanate Recovery
- Lubricants (Rolling Oils, PolyolEsters)
- Pesticides
- Pharmaceuticals
- Plasticizers
- Solvents (DMF, NMP, THF)
- Monomers, Polymers, Resins
- Vitamin Feedstocks
- VOC Stripping of Urethanes/ Phenolics/Polymers

Heat Transfer Fluids

Example

Heat Transfer Fluids (HTF) – Reclamation Case Study

How does Reclamation Lower the Overall Cost for the End User?

Fluid	Volume (Lbs.)	Transport	Processing ($)	Reclaim Cost	Replacement	Savings
Typical	44,000	$6,000	$46,200	$58,200	$143,800	60%

Giving back the molecule that you've already paid for.