

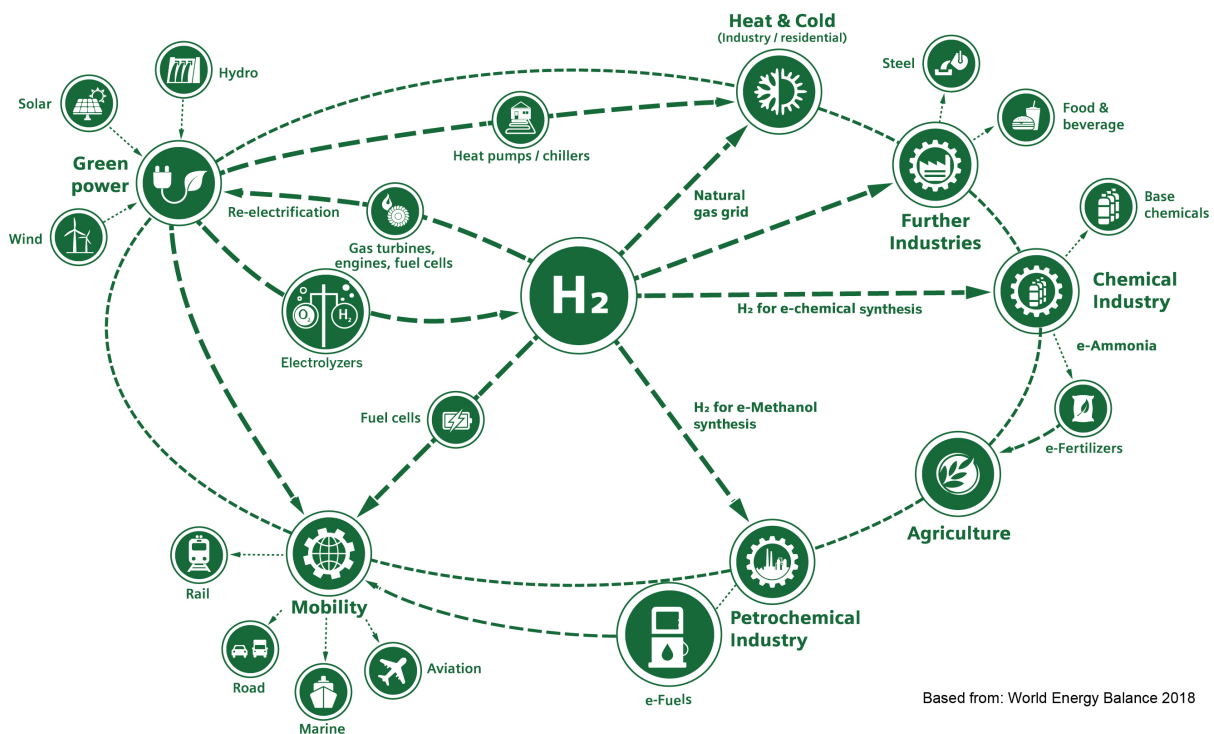
# Decarbonization and Energy Transition

Zachry Group provides customers a unique blend of engineering, procurement, construction, operations and maintenance expertise across the energy market spectrum. Our extensive knowledge and experience allows us to effectively help customers with their decarbonization and energy transition through the integration of diverse technologies and solutions.

## OUR CAPABILITIES INCLUDE:

- Renewables from biomass
- Biomass handling, storage and processing
- Renewable diesel
- Renewable chemicals
- Ethanol
- Sustainable aviation fuel
- High-voltage power systems
- Electrolysis
- Pyrolysis
- Photo-voltaic power systems
- Syngas
- Amine absorption
- Ammonia systems
- Hydrogen / gas treatment and purification
- Hydrogen-ready gas turbines
- Power generation and storage
- Hydrogen production and processing
- Hydrogen from steam methane reformers
- Hydrogen / gas compression
- Gas storage
- Liquefaction
- Cryogenic systems
- Energy storage and scale
- Pumped hydro
- Repowering
- Process Modularization

## Hydrogen has potential application across a wide array of end-markets



# DECARBONIZATION AND ENERGY TRANSITION

## Zachry is helping customers with the next phase of energy and power solutions

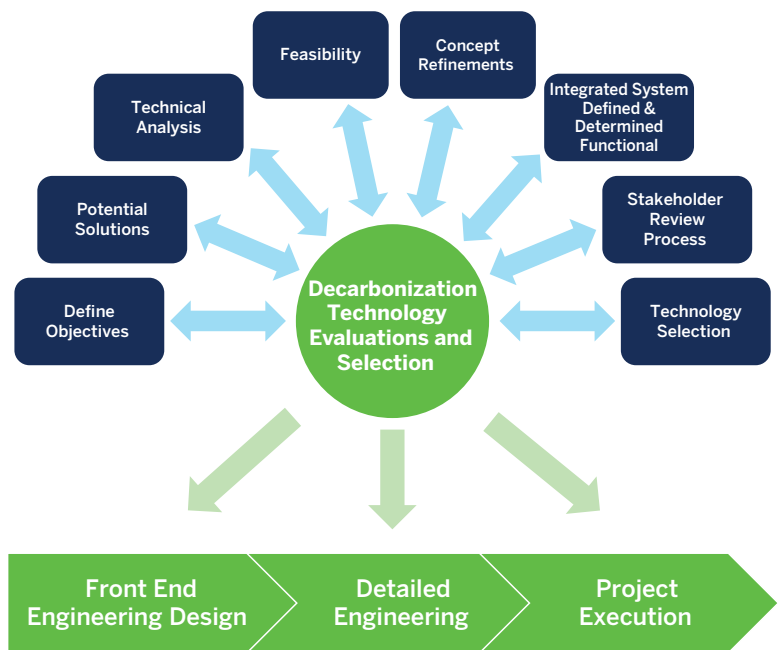
Zachry has helped its customers for more than 95 years meet challenges and recognize opportunities in a wide and diverse array of dynamic end-markets. Our work commonly includes capacity additions, plant modernizations, environmental upgrades, and other technology enhancements for new and existing critical manufacturing and generation assets. Today, we are engaging in important work to help many of our customers navigate the energy transition toward decarbonization.

Our engineering and project execution teams provide our customers with the insights they need to make informed decisions: What are the relevant technologies for the current opportunity or challenge? What potential solutions are most feasible, technically mature and commercially viable? We enable our customers to make these decisions with greater certainty and predictability around cost, time to implement, and ultimate asset performance, and we deliver turnkey solutions spanning the concept, feasibility, definition, and execution phases of these projects.

The journey with Zachry will be defined by your requirements and goals. We can engage early in the process with understanding the business objective, collaborating on concept development, maturing engineering design and successfully completing construction execution. Zachry can join you at any point along the way. We are a flexible, knowledgeable partner for technology acquisition, process engineering, power design and implementation. As always, safety and stewardship are at the front of each engagement and lead our actions on every task we plan and undertake.

### REPRESENTATIVE PROJECTS

- Hydrogen Production Processes – green, blue, gray, brown
- Electrolysis – alkaline & PEM
- Hydrogen liquefaction, storage and truck loading plants
- Renewable fuels and chemicals
- Renewable power-to-methane
- Carbon Capture – amine scrubbing, membrane filtration, cryogenic separation
- Energy storage proforma models and analysis
- Compressed Air Energy Storage (CAES)
- Liquid Air Energy Storage (LAES)
- Methanation (CO<sub>2</sub> to Methane)



Zachry Group is North America's pacesetter in turnkey engineering, procurement, construction, maintenance, turnaround and fabrication services to the energy, chemicals, power, manufacturing and industrial sectors.

### FOR MORE INFORMATION ON DECARBONIZATION AND ENERGY TRANSITION:

#### HYDROGEN

Philippa Coates  
Technology Director, Hydrogen  
630.769.7224  
CoatesP@ZachryGroup.com

#### RENEWABLE FUELS & CHEMICALS

Mike Carlson  
Director of Sales, Renewable Fuels & Chemicals  
402.548.4807  
CarlsonM@ZachryGroup.com

#### CARBON CAPTURE

Doug Rippel  
Director of Sales, Carbon Capture  
210.588.7064  
RippelDA@ZachryGroup.com