

Overview

Grimes Carbon Tech (GCT)

A net negative green technology company changing the world

January 2025



Increasing efficiency of energy production



Reliable, green, baseload power for Data Centers

Grimes Carbon Technologies (GCT): Developer, Owner, Operator

30-75% cheaper, abundant baseload energy for Data Centers

Distributed, on-demand green hydrogen and electricity (CAPER)

Long Duration Energy Storage ('Liquid Grid / CCR')

GCT -- Investment Opportunity:

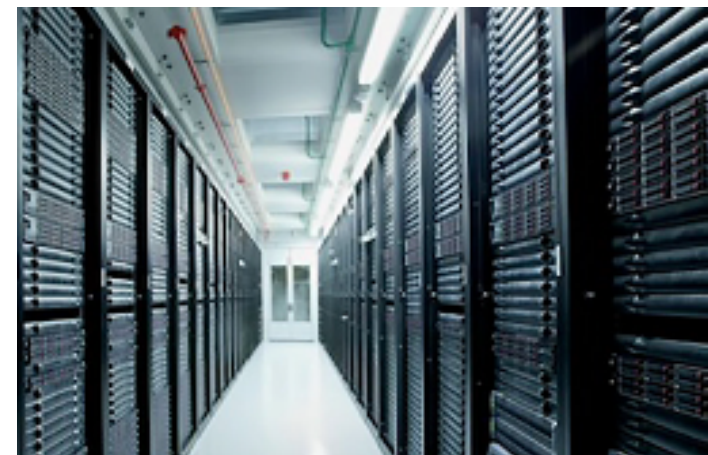
- \$54 million invested since 1987, majority owned by founding team
- **\$2 million SAFE note** at 25% discount for initial US setup
- **\$12 million SAFE note** – Scale up to beta testing and to develop commercial field unit, and hire c-suite

🌱 Problem: The Energy Transition is failing

Energy production & distribution is inefficient & environmentally unsustainable

Energy demand exceeds capacity

- Tesla Supercharger = 500 unit apartment building
- Data Centers = 8% of US Electricity (4x “Miamis”)
- Need **significant build out** of power AND transmission and distribution lines
- Data centers need reliable ‘baseload’ energy



Increasing capacity is expensive & slow

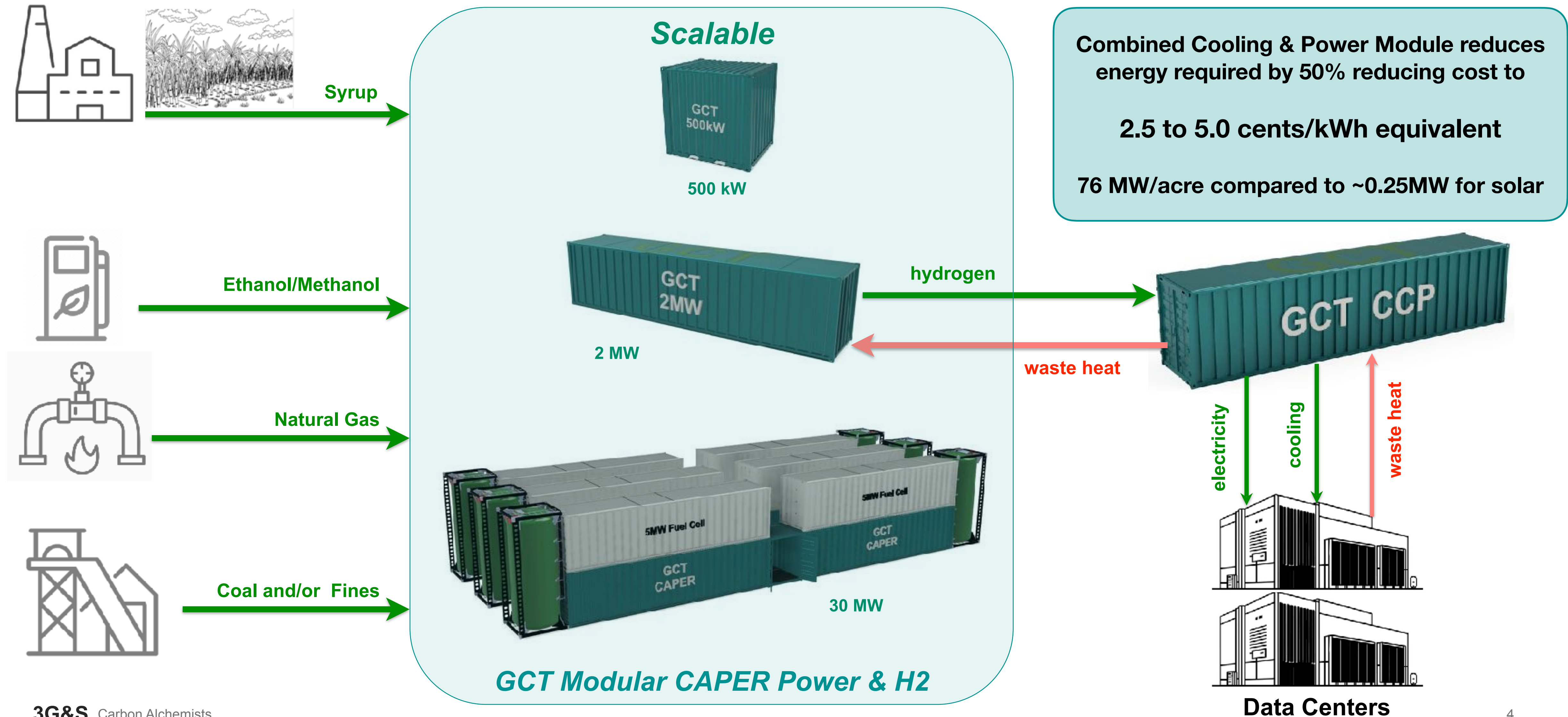
- Cheap renewables can't provide enough reliable electricity (4+ years to develop)
- Natural gas, coal, and nuclear are expensive and even slower to develop
- Burning fuel is 30-40% efficient and harmful



GCT: 70% efficient, distributed, on-demand, cheap net zero energy & fuels profitably *without combustion*

GCT: scalable, high-efficiency energy

On-site, on-demand hydrogen & electricity from multiple feedstocks



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On-site, on-demand hydrogen & electricity from multiple feedstocks

System Coverage = 60%

MW/Hectare ~ 180 MW

MW/Acre ~ 76 MW

(depending on plot shape)



24 MW Module Area:

780.16 m² (8,400 ft²)

0.08 hectares (0.19 acres)

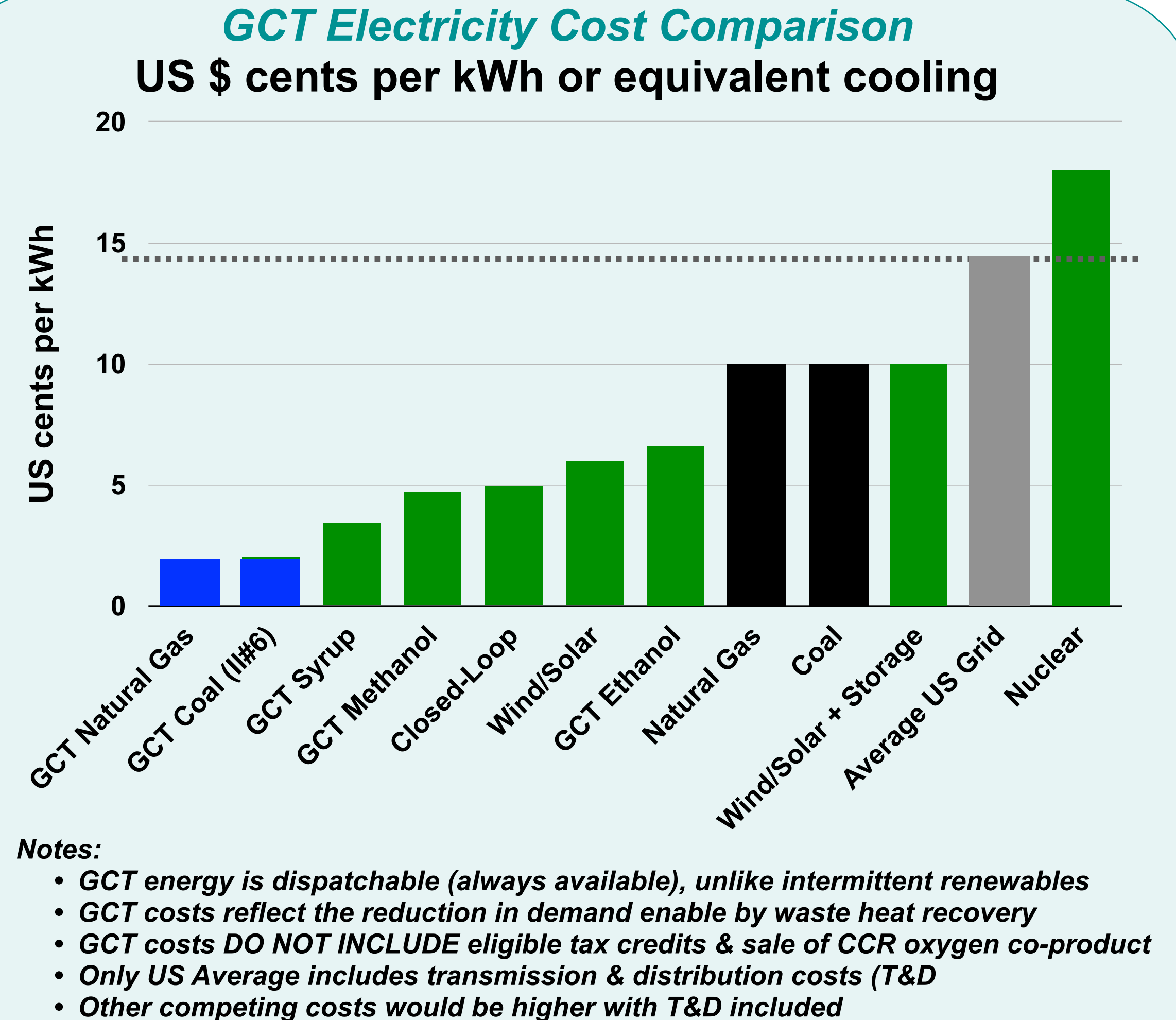
GCT Modular “CAPER” Power (76 MW system per acre)

GCT: US Hydrogen market expected to grow by 70% by 2052

GCT energy is only cheap green energy solution for Data Centers

GCT's Cheap, Distributed Power

- Cheap, on demand (reliable) green energy
- Energy produced directly on-site - no need for transmission or distribution systems
- Scales quickly (add containers) to meet Data Center demands
- Data Center waste heat recovered and used to drive cooling (CCP) reducing energy by 50%
- Requires limited space (1,100 racks per acre). 76MW of power fits on one acre of land

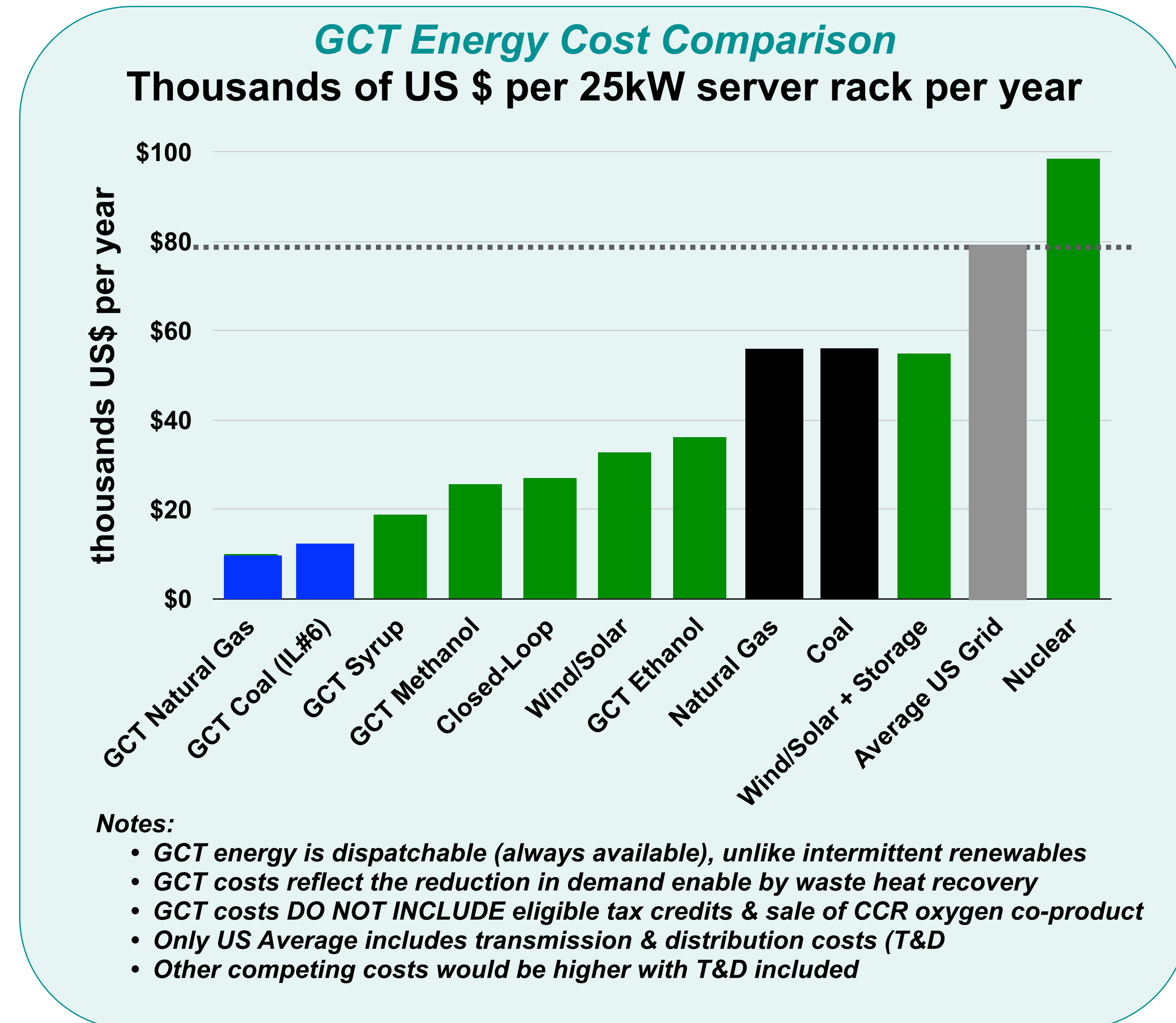


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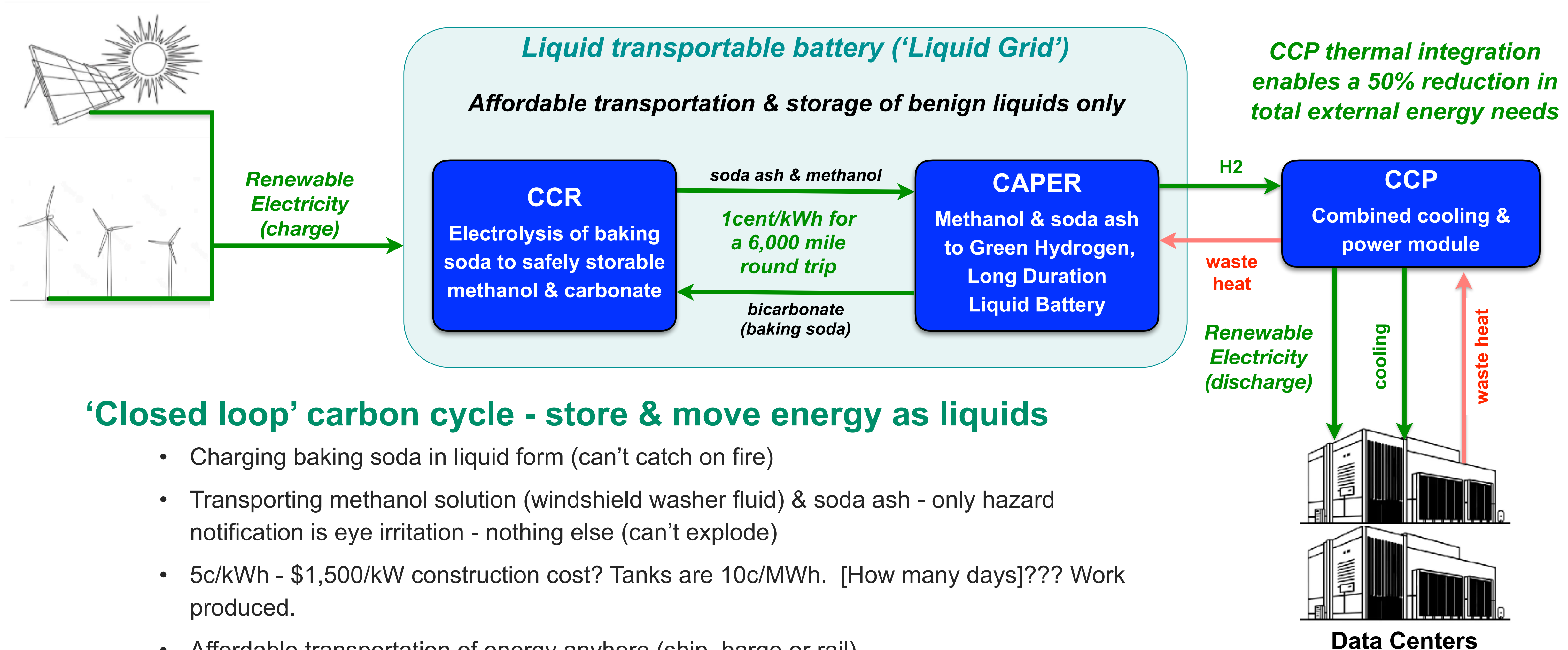
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GCT: Breakthrough chemistry for storing & transporting energy Long duration (moveable) energy storage



'Closed loop' carbon cycle - store & move energy as liquids

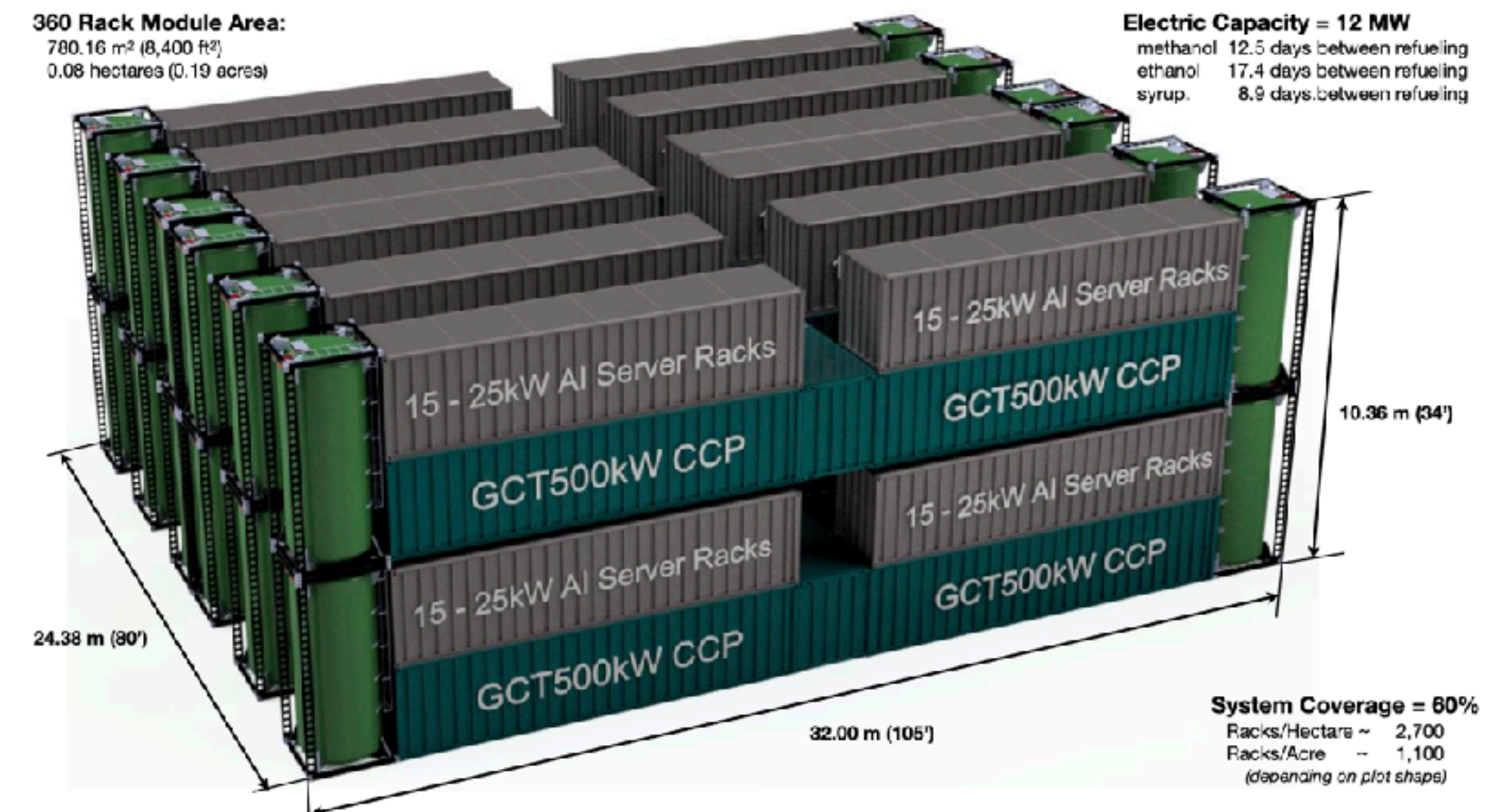
- Charging baking soda in liquid form (can't catch on fire)
- Transporting methanol solution (windshield washer fluid) & soda ash - only hazard notification is eye irritation - nothing else (can't explode)
- 5c/kWh - \$1,500/kW construction cost? Tanks are 10c/MWh. [How many days]??? Work produced.
- Affordable transportation of energy anywhere (ship, barge or rail)
- Affordable on-site storage, < 10 cents per MWh capital cost

GCT: Improving how we energize everything

Carbon emissions reduction of 50-75% or to zero

GCT enables cheap reliable green energy for data centers

- Distributed electricity anywhere, on demand
- Base load electricity between 1.8c-6.6c/kWh
- Scalable and quick to build with benign feedstocks
- Closed-Loop configuration can convert intermittent wind & solar to affordable baseload



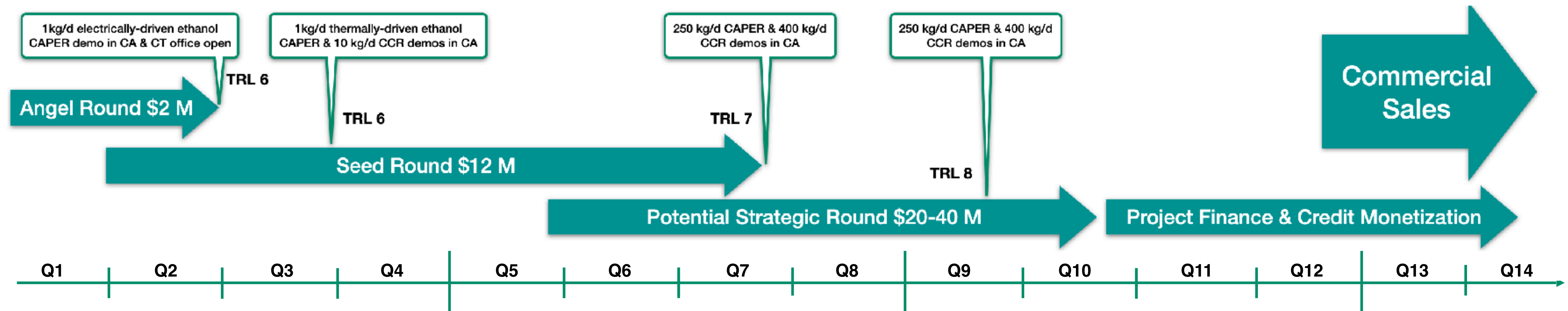
GCT to become a producer of Hydrogen, Electricity, and E-fuels

- Develop, construct, own and operate units to sell Hydrogen, energy, or SAF
- Similar to a traditional power models with Independent Power Producers
- GCT (through holding company 3G&S) owns all IP
- Founders own majority equity - raising capital to make this a reality

GCT: Improving how we energize everything

Carbon emissions reduction of 50-75% or to zero

Funding Needs



Financials and next steps

- Historical spend of \$50m over 30 years with \$110,000/month burn rate
- **\$2m SAFE note at 25% discount:** to establish office, lab and team, business development, and to move 1-2kg/day demos to the US Follow clients / industry to secure offtake
- **\$12 million SAFE note:** to scale up to 250 kg/d, move technology from TRL 6 to TRL 7, develop commercial field unit, and hire c-suite
- High operating margins means operating cashflow can fund majority of future capex

The Current Operating Team: search & recruitment start immediately

Builds on decades of relevant industry experience and innovation

Deep and diverse experience across **carbon recycling, hydrogen, electrochemistry, chemicals, fuel synthesis, biorefining & feedstocks**



Joseph Maceda 
Founder

- Successful serial entrepreneur
- 35 years of experience in carbon recycling & hydrogen



Robert Zhao, PhD
Chief Scientist

- Co-founder of liquid & solid composite hydrogen fuels business
- 35 years of experience in electrochemistry



Frank Nadimi 
Commercial Director

- Biofuel Consultant at S&P Global
- 15 years of experience in biomass, renewables, & chemicals



Gary Noland 
Project Manager

- Lockheed thermal energy conversion technology expert
- 40 years of experience in aerospace, fuel cells, hydrogen & renewables

The Advisory Team

Significant deal track record and industry expertise

Deep and diverse experience across **operations, finance, strategy, risk, law, and technology**



Jonathan Ball
IP & Legal



- Partner/ Shareholder at Greenberg Traurig, LLP
- 20+ years of experience in Intellectual Property law



Beth Browde
Strategic Communication



- Senior Principal Mercers Change Management
- Business Strategy & Leadership



Joseph Godfrey
Risk Management



- 50 years in insurance & risk management
- Exec Compensation Consultant to KPMG
- Author or Co-Author for CCH: CPA Journal



Su Ha
Professor, Science



- Director of School of Chemical & Bioengineering at WA State University
- PhD in Chemical Engineering specializing in catalysis and electrochemistry



Steve Johnson
CFO, Finance



- CFO at Marpai & HillCour
- 25+ years of total corporate finance experience, including 7 years in c-suite



Holger Koehler
Strategy



- Head of Strategy at Electra
- Former Managing Director at Accenture
- 25+ years of experience in consulting & strategy



Haydn Palliser
Finance



- Principal of Pivotal180
- Professor at Columbia/Yale
- 20+ years of experience in renewable energy finance



Candace Quinn
Legal & Tax



- Partner/Shareholder of Buchanan Ingersol PC
- Former Partner in international law & accounting firms
- 35+ years of experience in tax & energy law



Maneesh Sagar
Technology



- CEO of RS Metrics, MD Thynk Ventures
- 25 years of experience as a founder & investor with 10 successful exits



Tifphani White-King
Tax & Legal



- Partner Forvis Mazars
- Global Tax Committee Member
- US Tax Committee Member



Current Partners

Leading industry players and investors attracted to GCT

Government

Awarded a contract for development of ethanol CAPER systems for off-grid charging but announcement must be made by the awarding agency



Academic / Research



THE UNIVERSITY
of LIVERPOOL

Corporate / Financial

Asian Sovereign Wealth Fund disclosed upon signing of NDA



Auto manufacturing partner disclosed upon signing of NDA

Utility partner disclosed upon signing of NDA

EV charging partner disclosed upon signing of NDA



 **For more information about the company or offering documents contact:**

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