RONDO

Breakthrough Energy

ENERGY IMPACT PARTNERS™

The Rondo Team

John O'Donnell

Chief Executive Officer

Cofounder of six innovative technology companies

Delivered positive exits in semiconductors and large-scale solar energy

Developed new applications and markets for renewable energy across industries worldwide

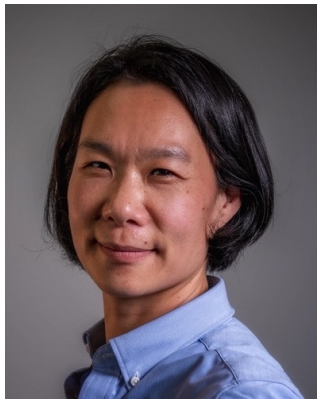
Pete von Behrens

Chief Technology Officer

Developed disruptive technologies now used at global scale in multiple industrial segments

Cofounder and technical leader of four startups in electromechanical devices and solar energy

Holds 15+ patents in energy storage, solar energy, and electromechanical actuators



Chiaki Treynor

VP Research & Development

PhD in Chemistry, with leadership in materials science, characterization, manufacturing, and supply chain partnerships

Intellectual property development, technology transfer, and licensing spanning a variety of industries

Jeremy Keller, P.E.

VP Project Development

Decade of experience developing and leading efficiency and energy projects from concept through execution

Hundreds of projects for commercial and industrial customers leading technical and economic assessments

Degrees in mechanical engineering, physics, and business administration

Robert Ratz

VP Electrical Engineering

PhD in Power Electronics, electrical and electronic innovator

New products from concept through volume manufacturing in automotive, energy storage, and high-power electronic drives

Strong track record building and leading interdisciplinary, international teams

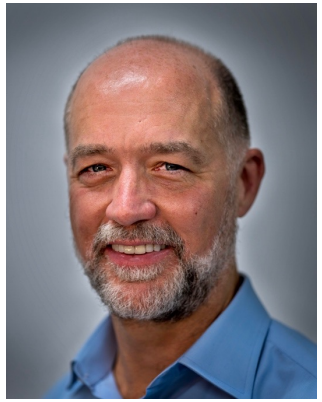
Carlos Ceballos

VP Power Systems

PhD in Applied Physics, energy industry veteran

Led engineering, construction and commissioning of energy infrastructure projects worldwide

Exceptional project and asset manager with expertise in electrical, oil & gas, and petrochemical sectors



Matt Rainey

VP & General Counsel

Nearly 40 years of IP law experience in U.S. and internationally

IP expertise in physics, electronics and control systems, spanning IP procurement, licensing and enforcement

Former Director of the UN's World Intellectual Property Organization

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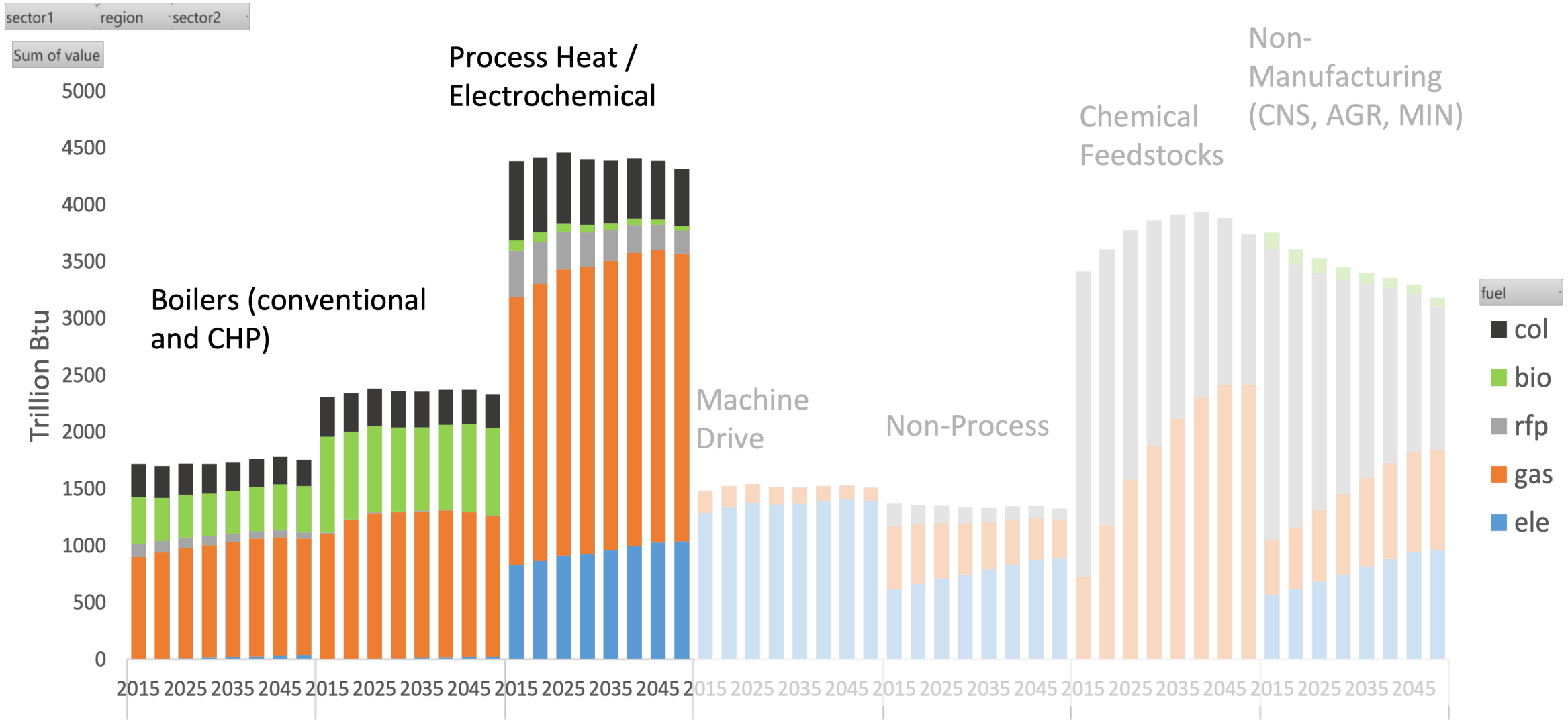
Electrification



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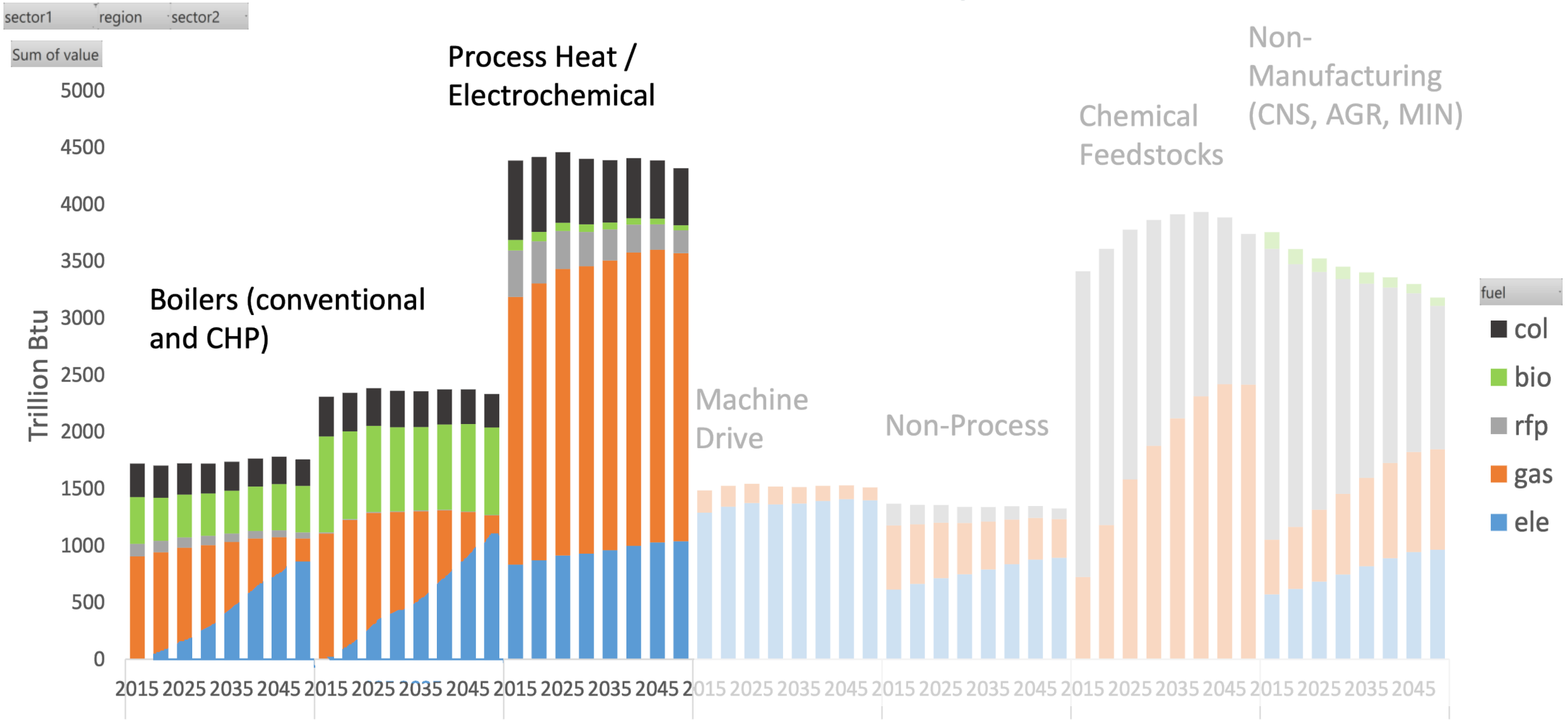
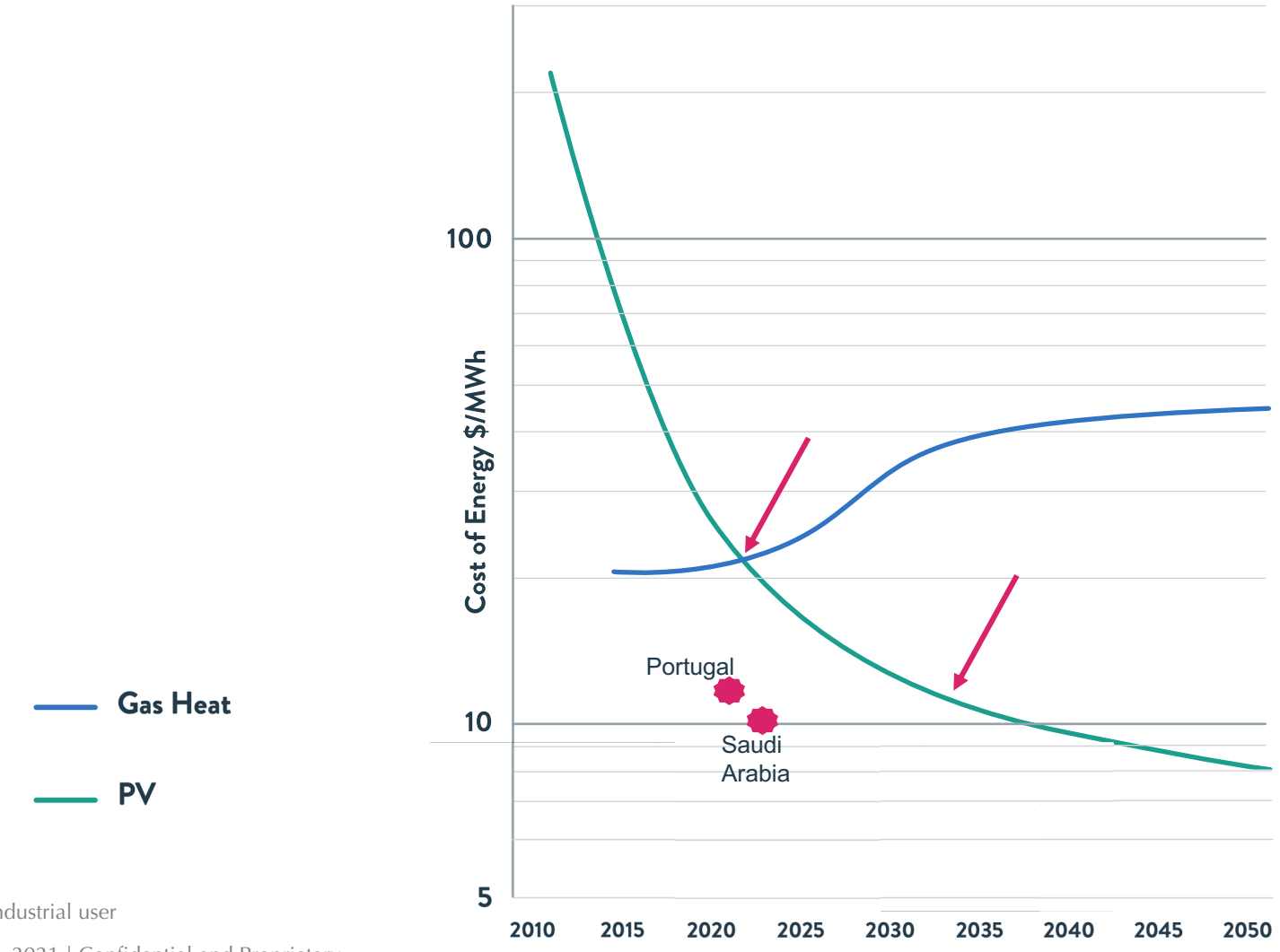
Electrification will go faster



Wind and solar electricity won.



Gas heat in California

NREL ATB 2020, California industrial user

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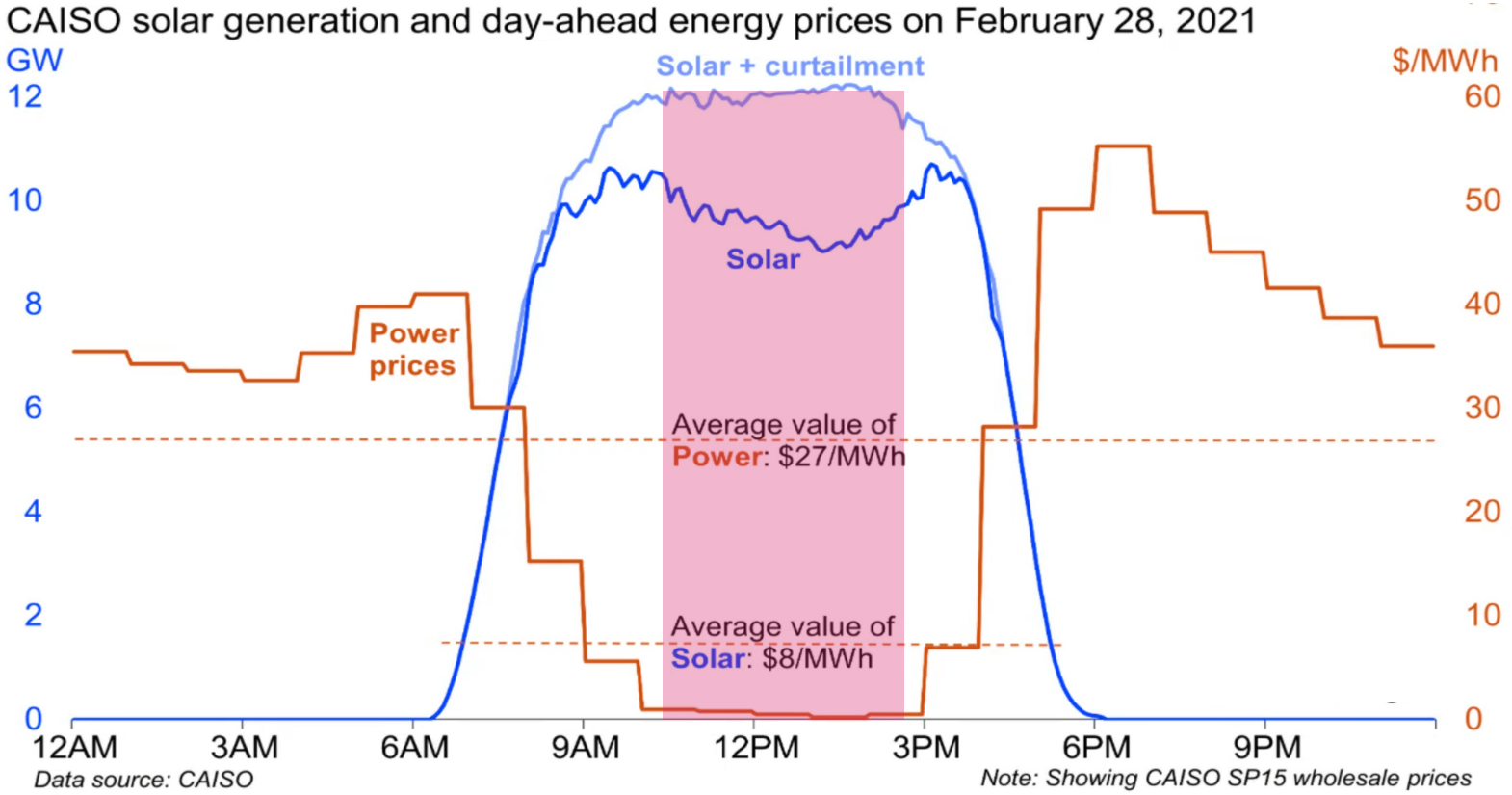
Spot power is much lower cost than gas



NREL ATB 2020, California industrial user

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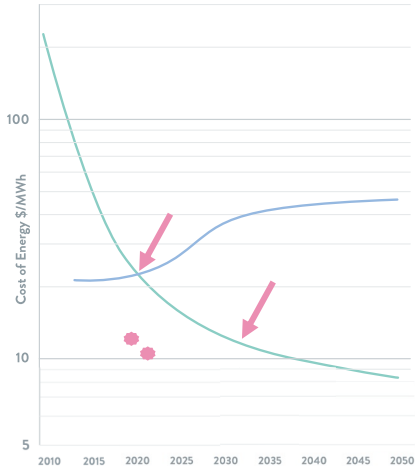
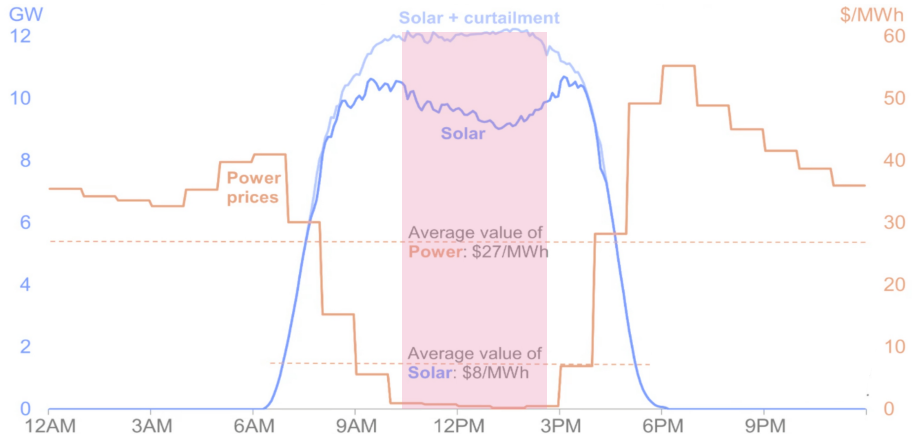
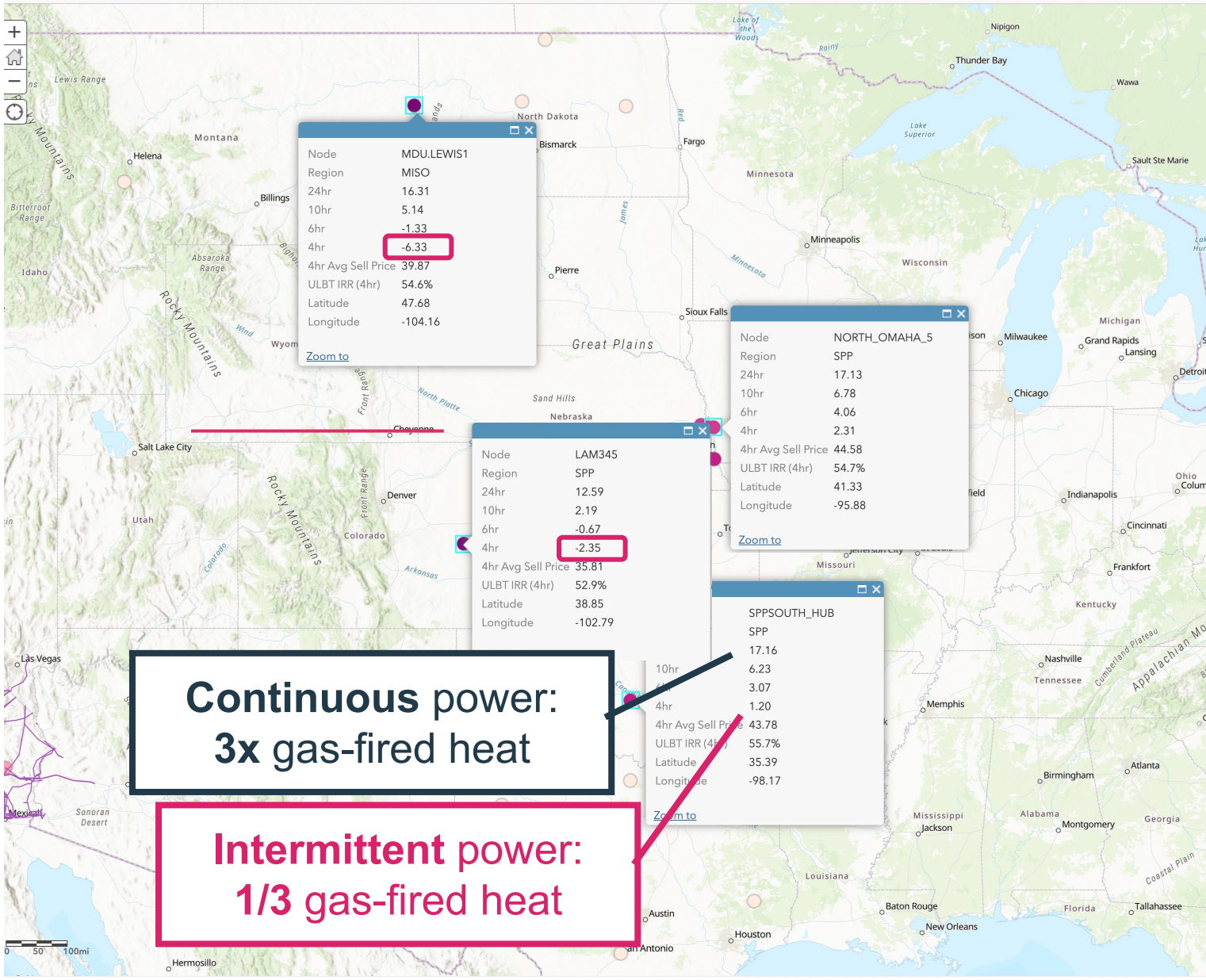
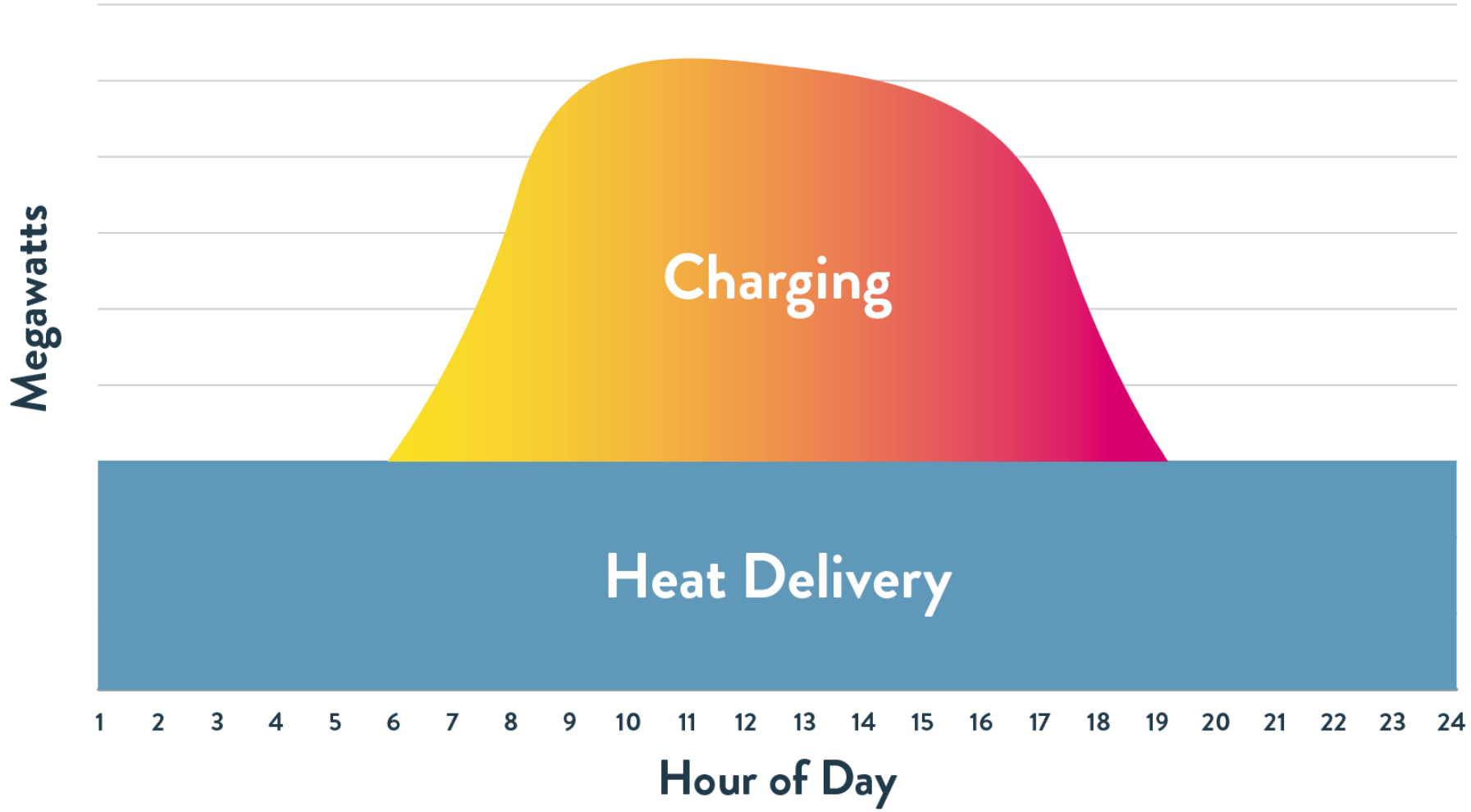






Intermittent power can't serve continuous demand



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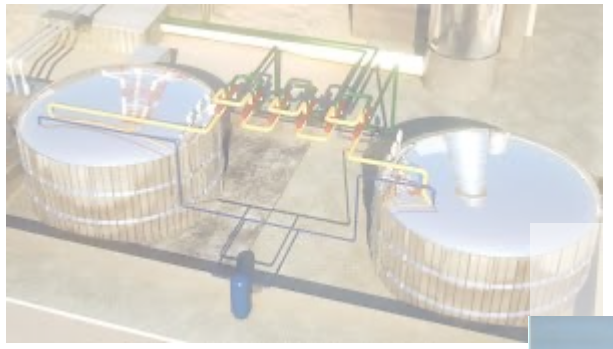
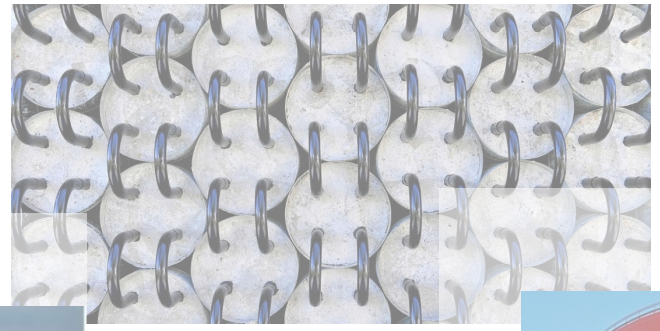
Which thermal storage technology?



Molten Salt

Graphite

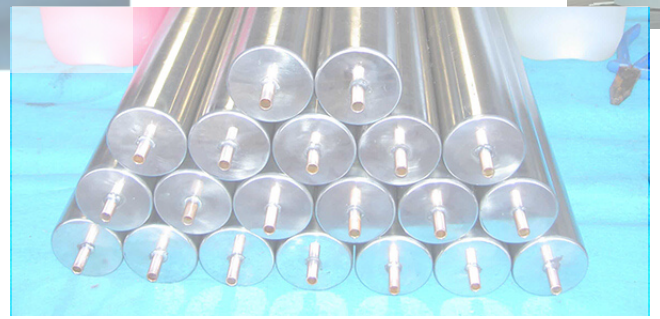


Concrete

Water

Molten silicon

Rocks in a Box



Aluminum/ Phase Change Materials

Refractory Brick…

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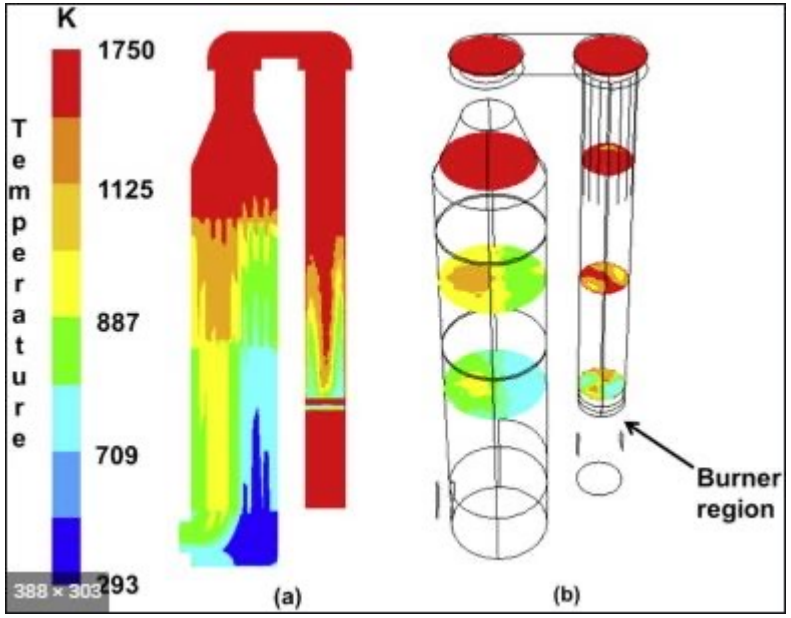
High temperature heat has been stored for 200 years



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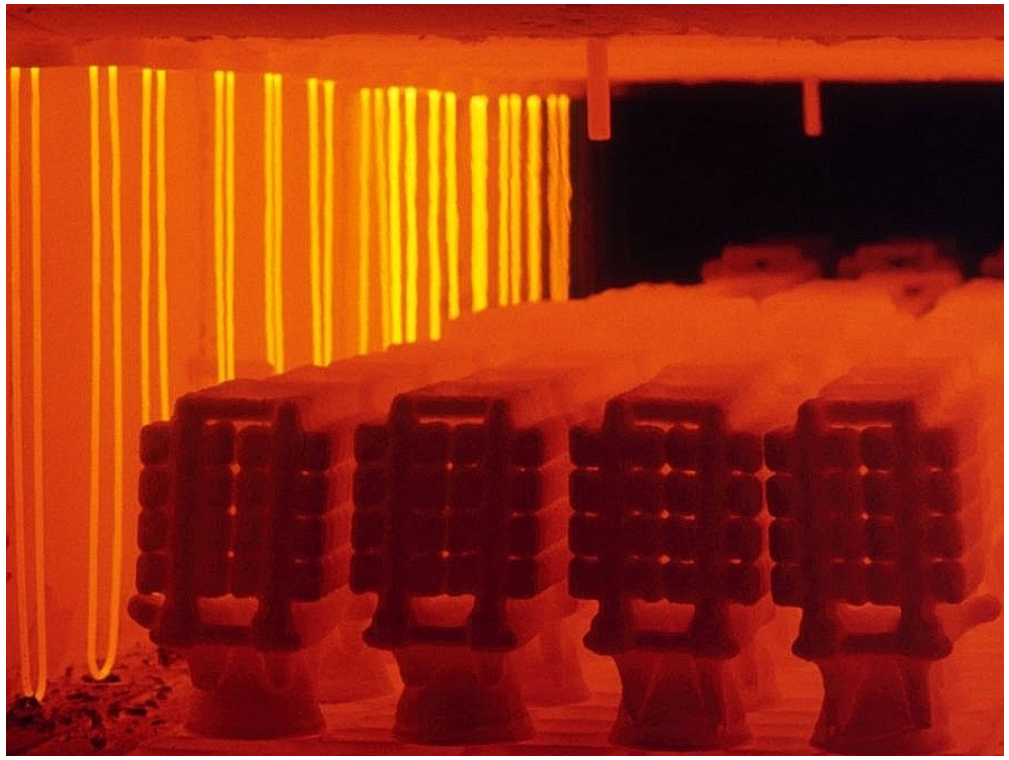
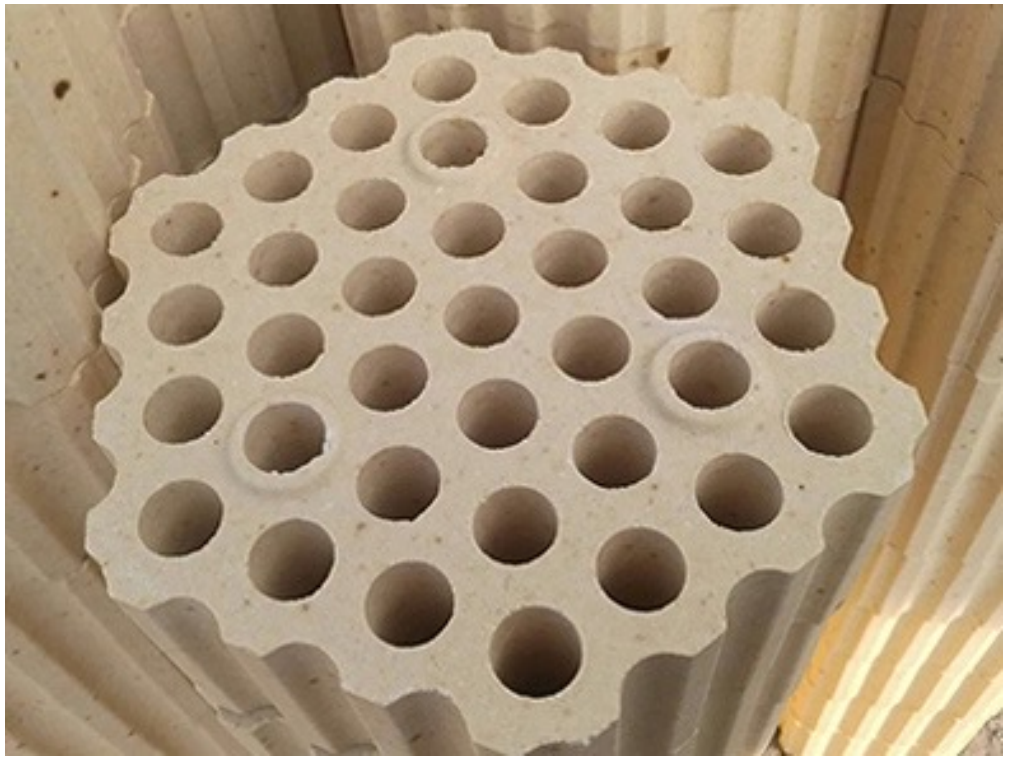
19th & 20th century answers to today's challenge

Heavy industry **electric heaters**



Refractory brick **heat storage**



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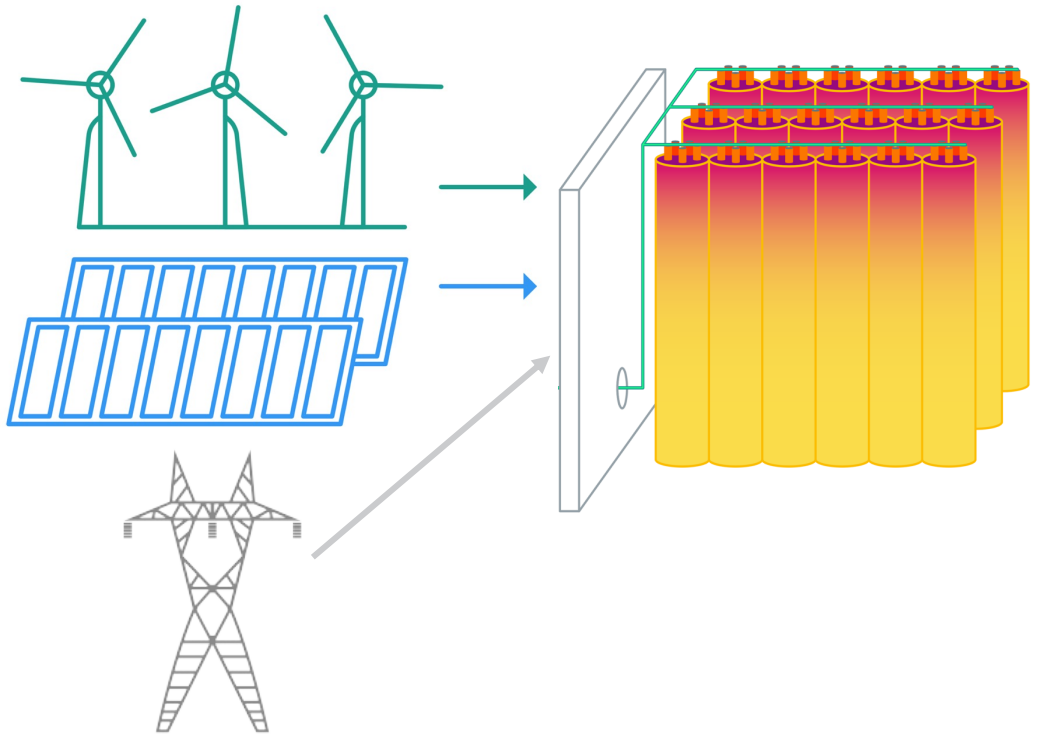
Electricity fast-charges our Heat Battery



Rondo patents pending.

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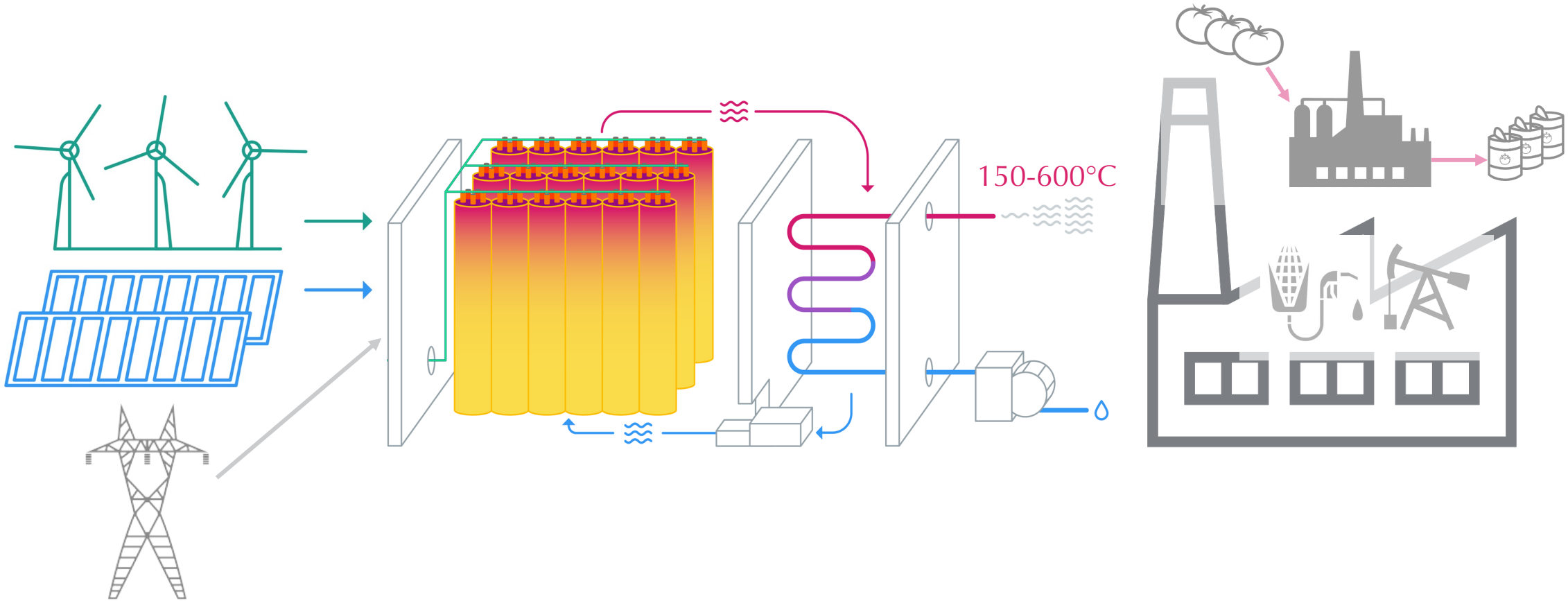
The Heat Battery is a zero carbon high pressure boiler



Rondo patents pending.

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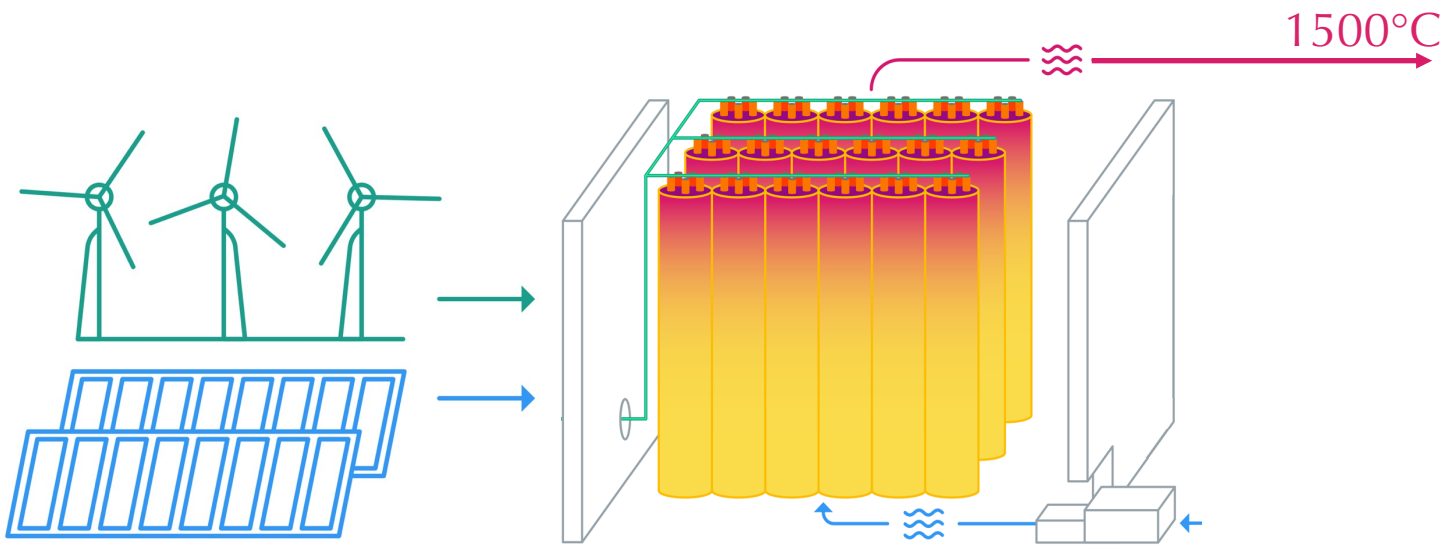
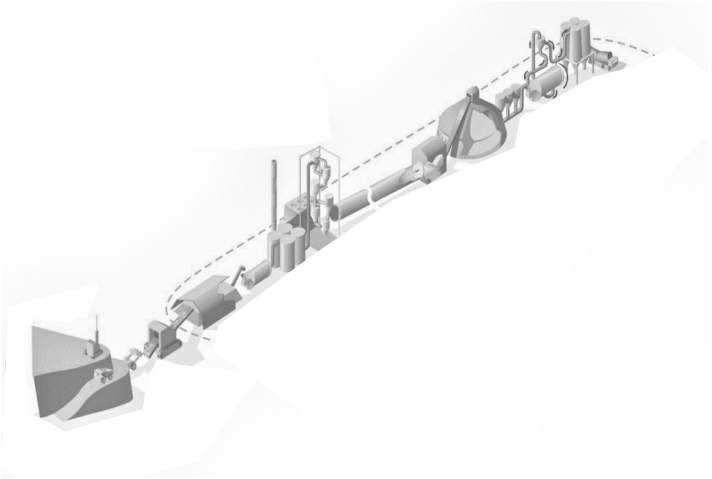
The Heat Battery is a zero carbon 24x365 furnace





Rondo patents pending.

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Total Energy Use vs Temperature

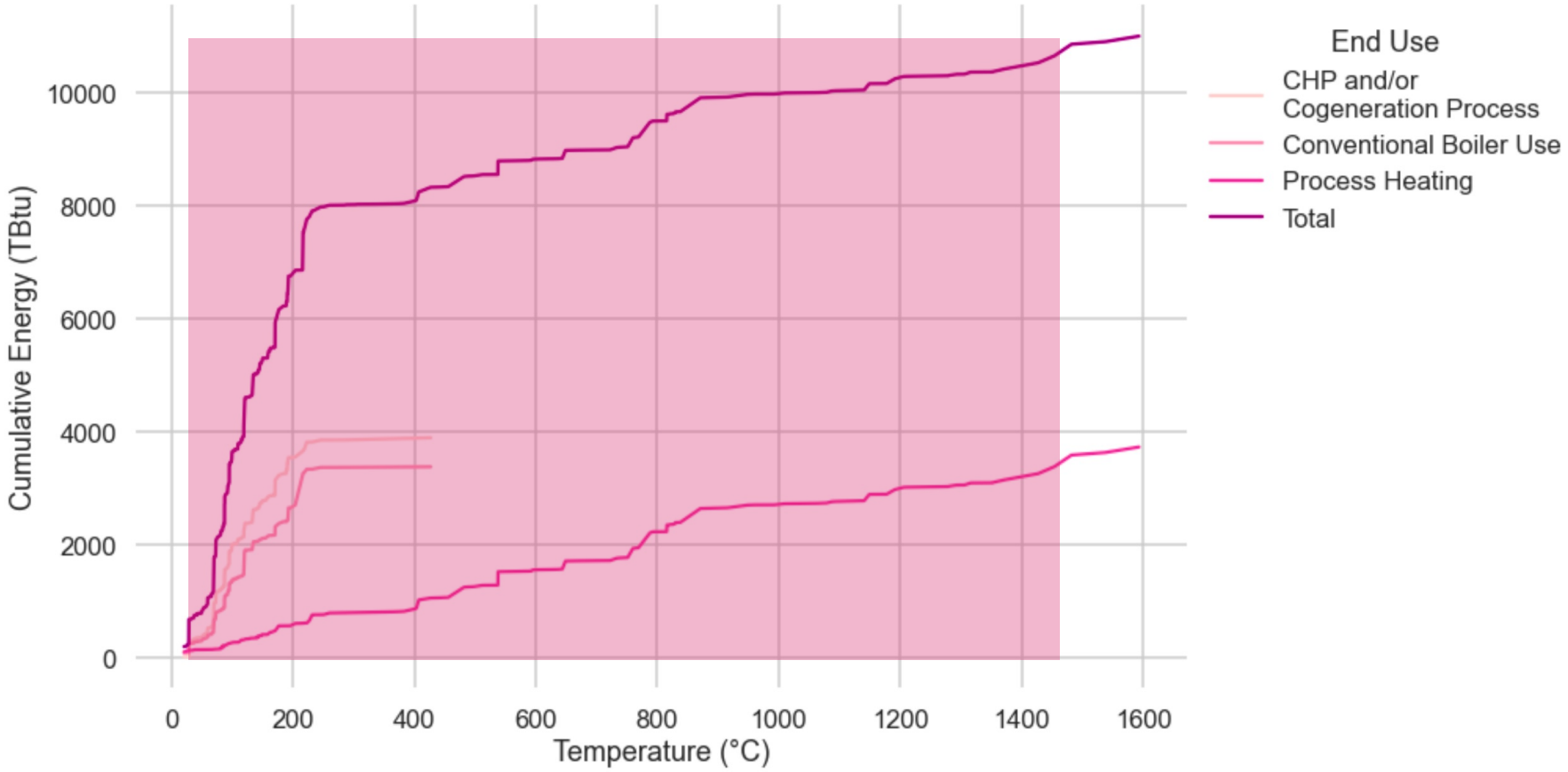

Figure 2. Cumulative industrial process heat demand by end-use category

NREL McMillan et al.

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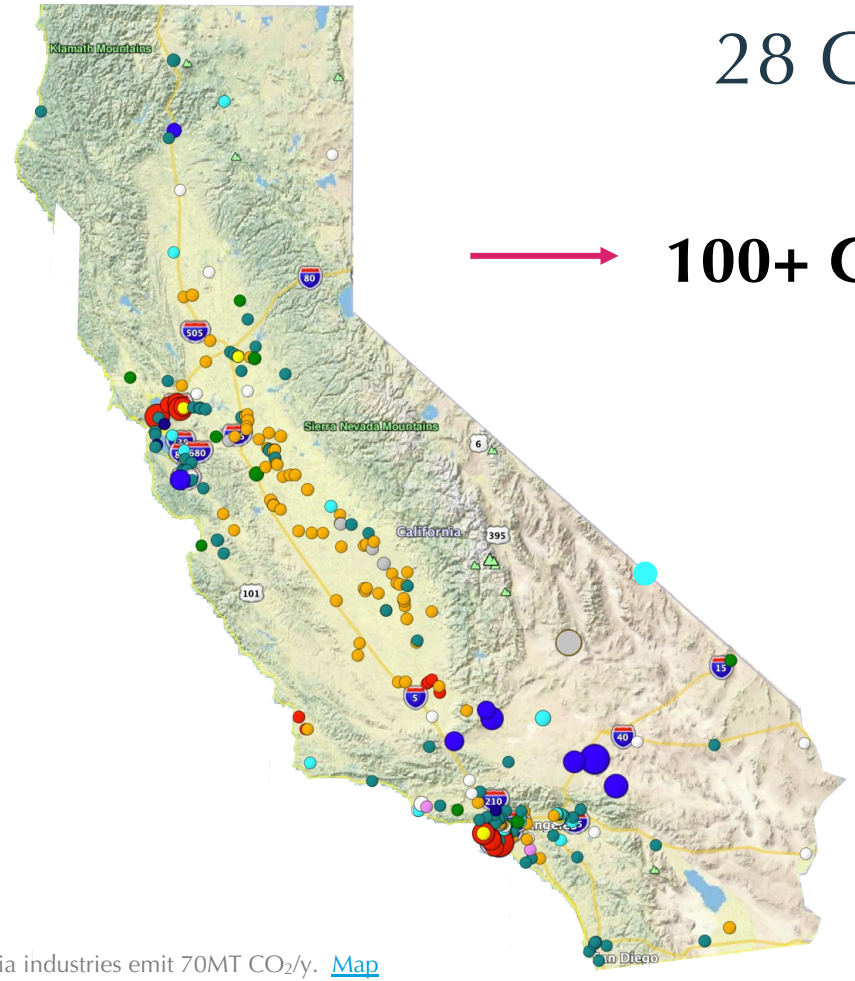
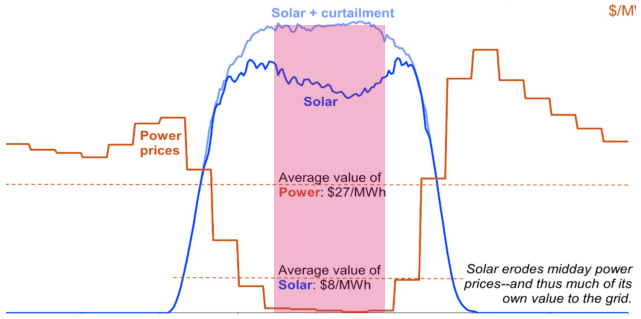
Example: California industrial heat

47 GW system peak
28 GW existing PV



→ **100+ GW** new PV needed →



	TBtu
Refining	478
Oil Production	262
Cement	118
Hydrogen	48
Metals & Minerals	37
Food & Beverage	35
Manufacturing/Other	31
Electricity	18
Paper	13
Glass	9
Cogeneration	1
Biofuel	0.8

California industries emit 70MT CO_2/y. Map

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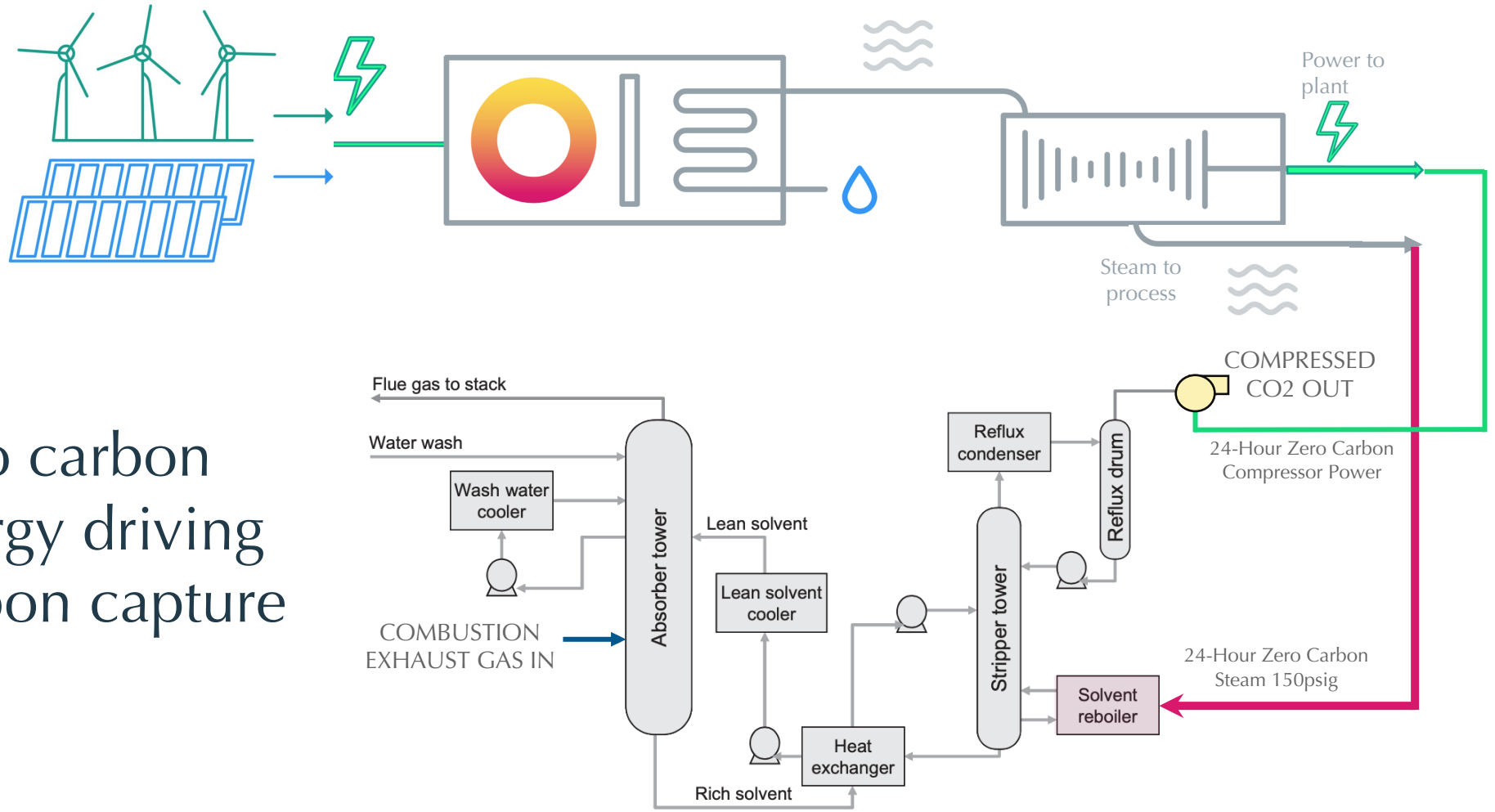
97% efficient cogeneration



Zero carbon energy driving carbon capture

Rondo patent pending.

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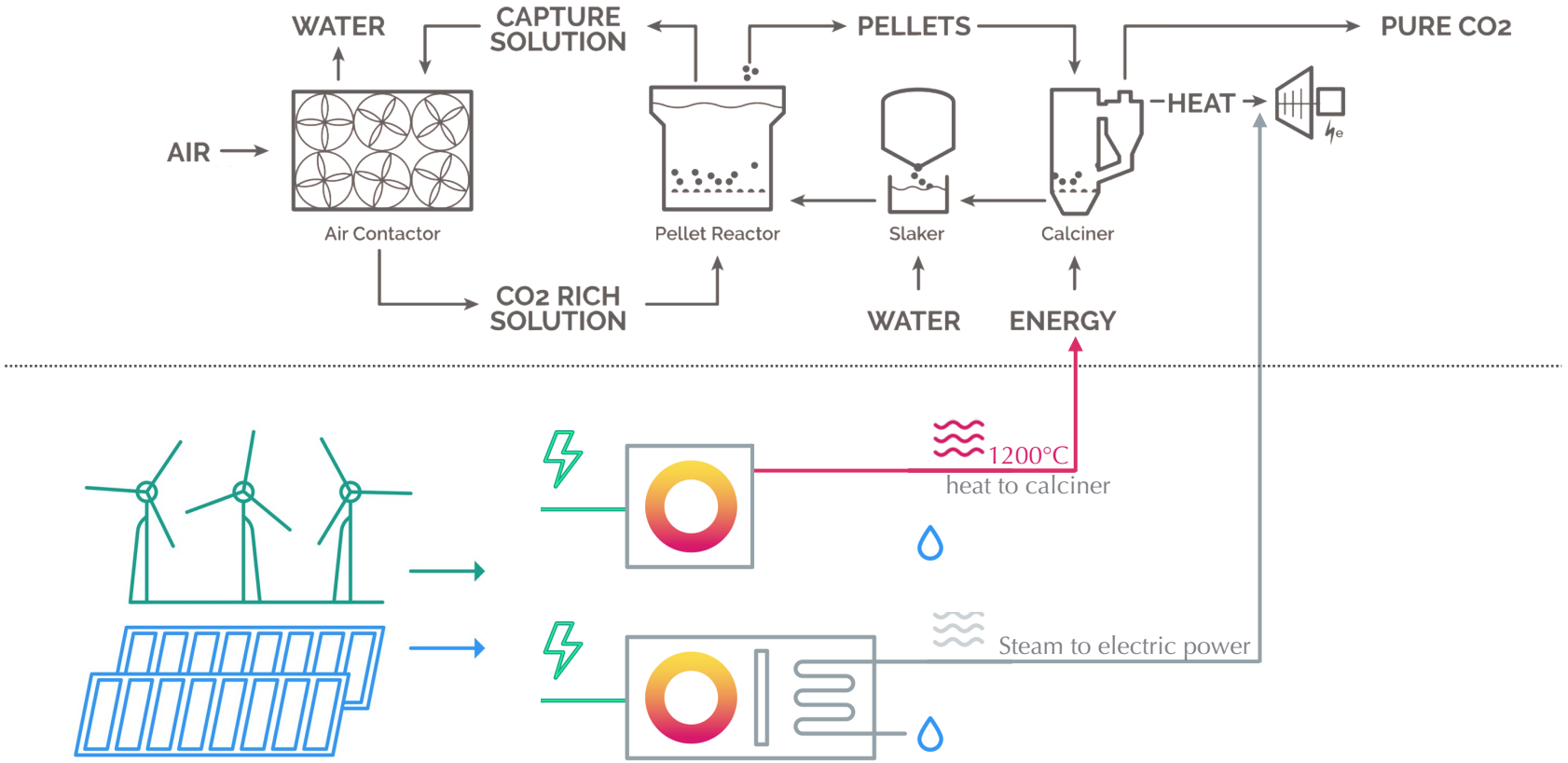
Zero-carbon high-temperature DAC



Zero combustion. Intermittent renewable electricity.
Continuous operation.

Direct Air CO_2 Capture Carbon Engineering process example. Rondo patent pending.

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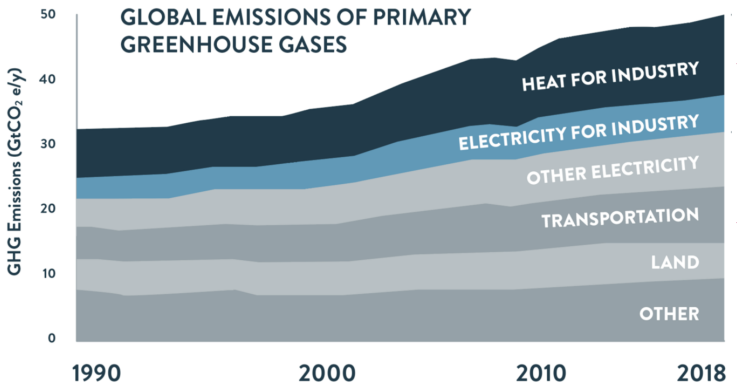
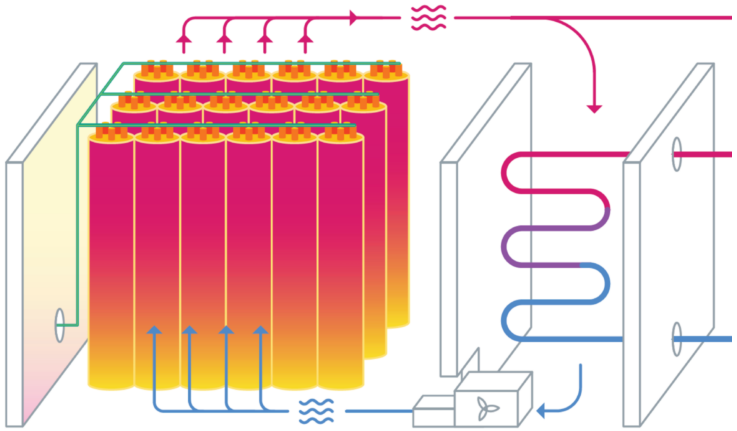
Repowering industrial heat is urgent & efficient





1 boiler = 8,571 EVs

Capex $/tCO$_2$ 1 : 14

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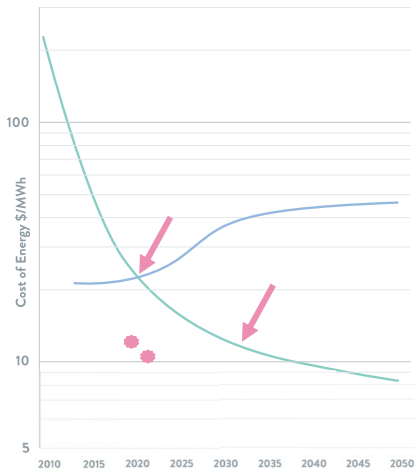
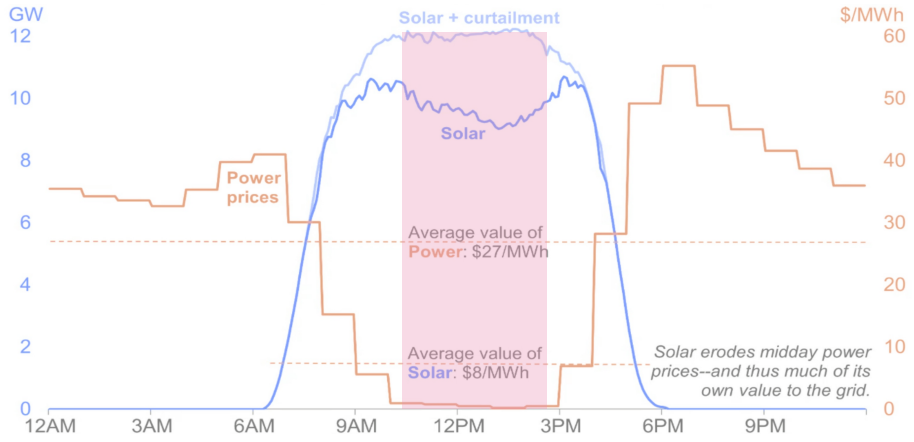
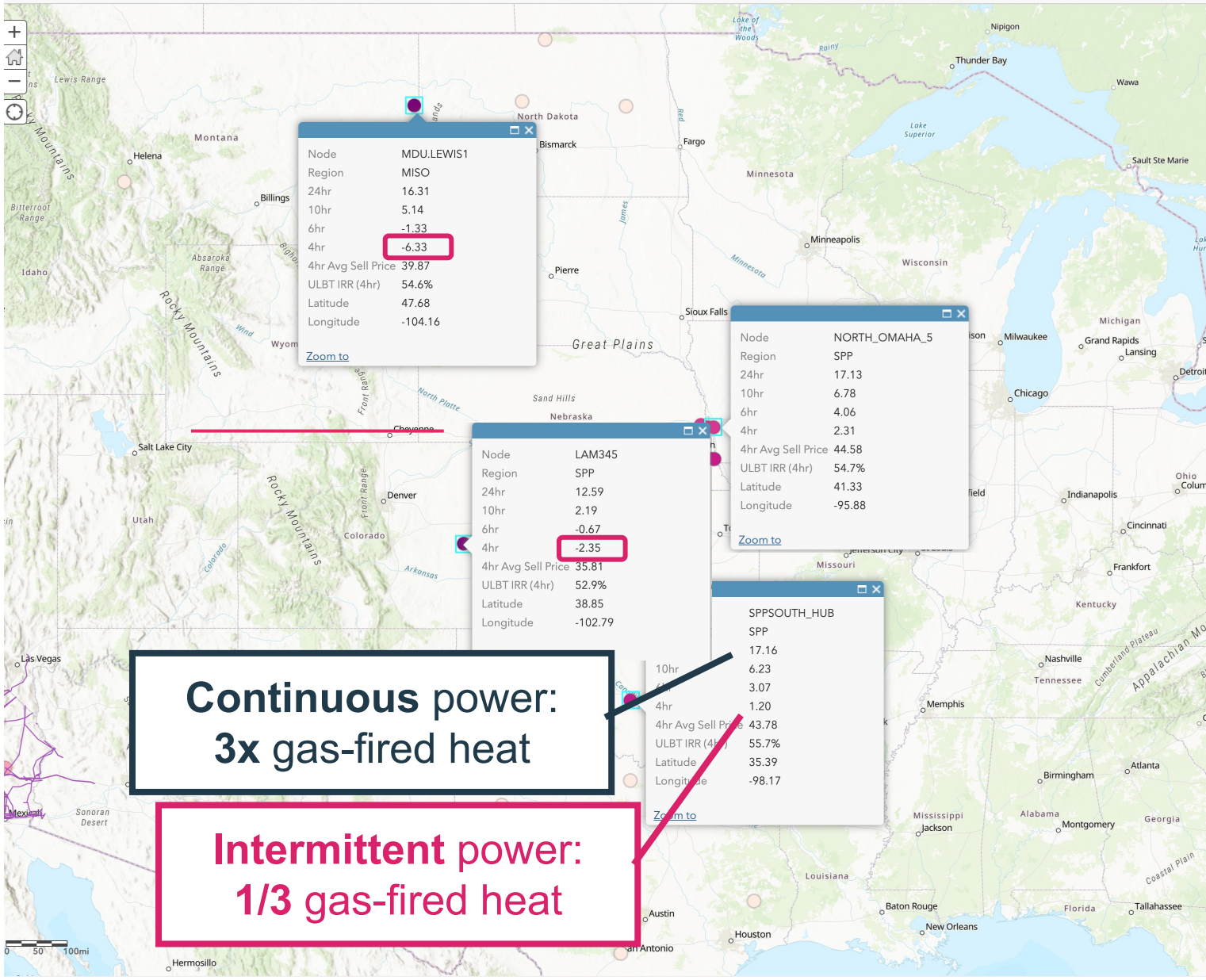
The green premium is history







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