

PACIFIC NW HYDROGEN HUB OVERVIEW

St. Regis Solar/H2
September 4, 2024
Arne Thompson

www.srsh2.com



St. Regis, a community ready to embrace the future.



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St. Regis Solar Hydrogen

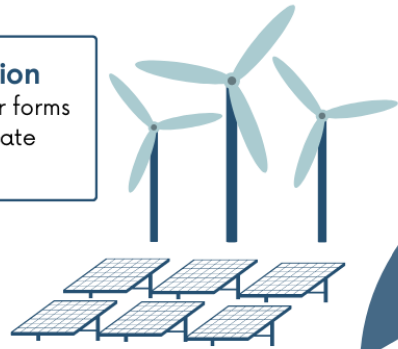
COFFMAN
ENGINEERS



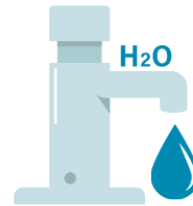
GREEN HYDROGEN PRODUCTION

Clean energy generation

Solar, wind, hydro and other forms of renewable energy generate clean renewable energy.



H₂O



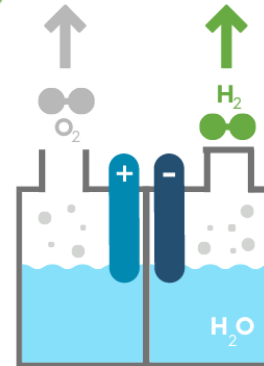
Add water

Energy is fed into the electrolyser with water.



Green hydrogen production

The electrolyser splits the water molecules to create hydrogen and oxygen.



Storage & use

Hydrogen gas is compressed and stored. It can then be transported and used for transportation, industrial manufacturing or power the electric grid.



	GREY HYDROGEN	BLUE HYDROGEN	GREEN HYDROGEN
Process	Reforming or gasification	Reforming or gasification with carbon capture	Electrolysis
Energy source	Fossil fuels	Fossil fuels	Renewable electricity
Estimated emissions from the production process ^a	Reforming: 9 – 11 ^b Gasification: 18 – 20	0.4-4.5 ^c	0

The energy in 1kg of hydrogen gas is about the same as the energy in 1 gallon of gasoline



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**BIPARTISAN INFRASTRUCTURE LAW
HYDROGEN PRODUCTION HUB MAP
WWW.ENERGY.GOV/OCED**

Pacific NW Hydrogen Hub

heavy-duty transportation, transit, agriculture, power generation



Heartland Hub

steel and glass production, power generation, refining, *heavy-duty transportation*, and sustainable aviation fuel

MachH2

power generation, refining, *heavy-duty transportation*, agriculture



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\$7B in DOE funding

THE PACIFIC NW HYDROGEN HUB AT A GLANCE
WWW.PNWH2.COM



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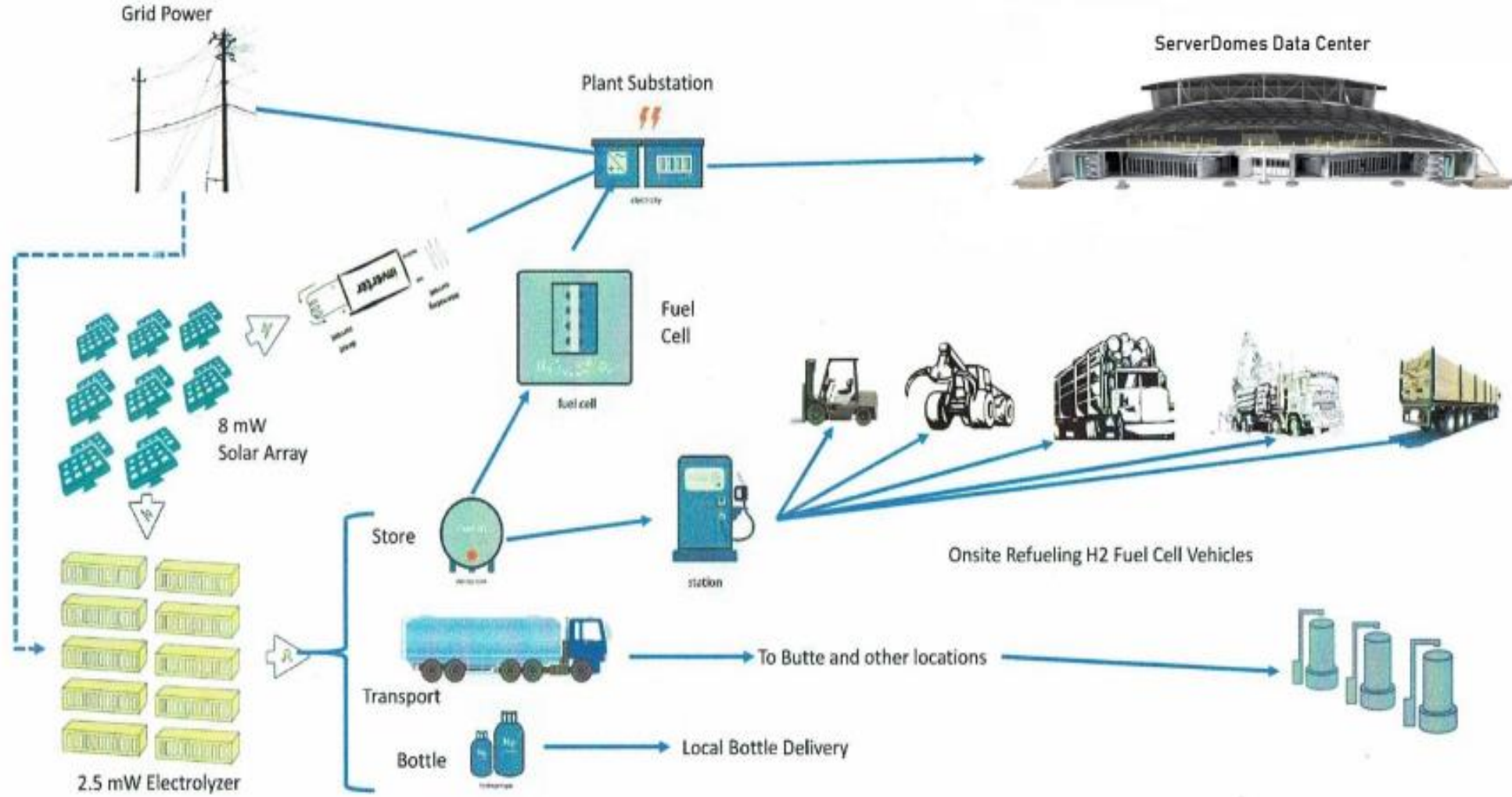
\$1B in DOE funding

ST. REGIS, MT LOCATION



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A CANVAS AS LARGE AS MONTANA'S BIG SKY



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AN OVERVIEW OF NODE 8 / SRSH2

TEAM MEMBERS

- **George Bailey**, CEO, St. Regis Solar H2
- **Kandy Jenkins**, CFO, St. Regis Solar H2
- **Arne Thompson**, COO, St. Regis Solar H2

PROJECT OVERVIEW

- 1MW hydrogen solar production and refueling facility in St Regis - 400kg/day
- Final Design/Permitting/Environmental to be completed in 2024
- Equipment Installation in 2025
- Begin Operations Q4 2025



OFFTAKE SUMMARY

- Co-development Partnership with Two Rivers Station to Initially Supply 400Kg of H2 per day to their H2 Station
- Scale Production and Distribution to Meet Demand
- Off Takers
 - Mining
 - Trucking
 - Charging Stations

COMMUNITY ENGAGEMENT

- Support the development of a Regional Community Benefits/Engagement Program Based on the Justice40 Principals that will Result in Systemic Change

TOTAL PROJECT SIZE

- \$16M BUDGET



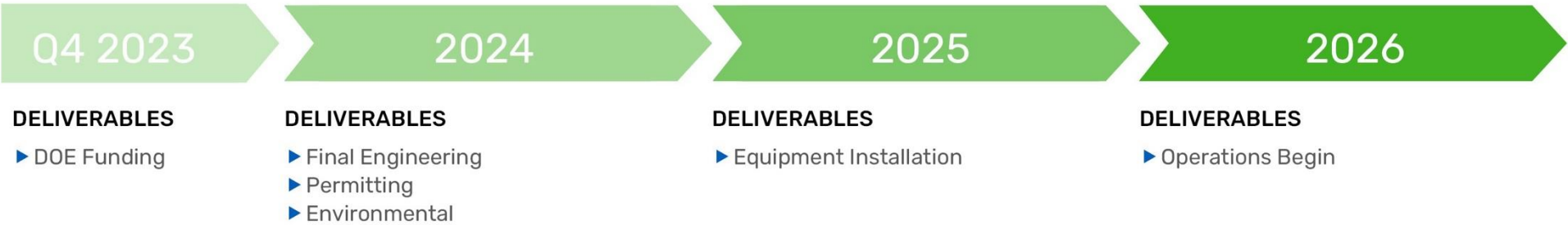
FINANCIAL & MARKET VIABILITY

- Green Hydrogen Production in PNWH2 Regional Hub Will Create the H2 Economy
 - ▶ The PNWH2 Regional Hub will help determine demand and support development of supply
- Inclusion of St. Regis Solar/H2 ensures Justice40 Communities have a seat at the table
 - ▶ ***Model can be duplicated in at least 10 other J40 communities in the region***
- Restore Community Viability through Job Creation



SRSH2 NODE WORKPLAN

Department of Energy Funding Q4 2023- Q4 2026



PLANNED CONTRIBUTIONS TO COMMUNITY BENEFITS PLAN

- St. Regis Solar/H2 has been developing a “Clean Energy Center” for 4 Years
- Project benefits from being Part of the Hub-whole Community Benefits/Engagement Process
- The Montana Community Benefits Plan will Support all J40 Communities Across the State
- Stakeholders have already been Engaged in the Community Benefits/Engagement Process
- Engaging Labor Groups and Universities to Support Rapid Training, Internships, Certification and Degree Programs will Ensure that We Create Quality Jobs that Pay a Prevailing Wage
- St. Regis has Established a Rapid Training Center with the support of Accelerate Montana



We are a Justice40 Community That Is Ready to Embrace The Future

Thank You!

Be sure to come see us in Missoula on September 25th

The Hydrogen Highway Decarbonization of the
Northern Transportation Routes



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