



## Project / Opportunity Profile

Project Plant Name: Entity:	<b>Grass Valley, California – Hydrogen Plant Yosemite Hydrogen #2 Grass Valley Biofuels LLC</b>
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### CONTACTS:

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### LOCATION:

Grass Valley, CA – approximately 40 miles NE of Sacramento, California in the Sierra Foothills at 2400 feet elevation and an approximate population in the area of 20,000

### OPPORTUNITY SUMMARY

Yosemite Clean Energy LLC will be project developer and through our consortium, will design, build and operate a dual-bed gasification plant using technology licensed from Aichernig Engineering TU Wien Gasifier for an approx. 25MWt plant using approx. 8,000kg wet @ 25% MC/hour and an estimated 52,000 bone dry tons per year

### PROJECT SIZE / ESTIMATED VALUE

25MWt

### TIMELINE / CURRENT STATUS:

FEED study Pre–engineering by August 2020  
Biomass supply and cost study – by June 2020  
Land due diligence, LOI, CUP, CEQA – By June 2020  
Project Feasibility – By September 30, 2020  
Financing decision – December 2020  
Full engineering and design Sept–April 2021  
Notice of decision to Construct April 2021  
Groundbreaking: May, 2021

### FEED STOCK:

- Forest logging residuals – the mix of fuel specifications shall be of (80%) forest residuals and up to (20%) agricultural almond, walnut and tree fruit residuals to supply hydrogen production.
- Feedstock primary suppliers: Sierra Pacific Industries, USFS, Local Wood Waste Collection, and Agricultural producers within 50 miles.
- Forest fuels treatments and other harvesting – USFS – via Master Stewardship Agreements
- Fire Safe – fuel treatments and biomass removal as part of community wildfire protection
- PG & E – Chipping and Grinding Operations from powerline tree removal program in region over the next 2–10 years – may continue and is adjacent to the proposed Plant and will be receiving per day for chipping

## OUTPUT TYPE / OFF TAKE

Hydrogen production – primary offtake  
 Renewable Natural Gas – offtake with PG&E biomethane program  
 Waste heat to produce power for mitigating plant load.  
 Separate – NG Co-gen is being considered to power the plant and provide power to the industrial-commercial land parcels adjacent to the proposed hydrogen plant

## PARTNERS / CUSTOMERS and RELATIONSHIP

Tribal parties are interested in becoming a feedstock supplier  
 PG & E – Feed stock supplier from chipping and grinding operations next to the project site  
 Local Firesafe program is promoting a Wood disposal program that could be collected at the site.  
 Waste Management – transfer station will provide biomass

## FUNDING SOURCES

Grants  
 \$125,000 USDA Woody Bug grant funding has been put toward Grass Valley as a portion of a larger received joint grant with the Camptonville Community Partnership biomass project. The funding for the Grass Valley plant has been partially expended to provide original TSS Consultants to develop a project scoping study, the Conditional Use Permit and CEQA requirements.

A Second USDA grant has been approved for Grass Valley and is an est. \$18,000 for legal  
 Costs to support fuel supply agreements, off-take and other legal costs born by the project.

## FINACIAL ANALYSIS

TBA