

Biogas RNG Project Delivery Best Practices

AD Biogas RNG Industry Discussion

August
2023



Intro to GreeneTec

- RNG Project Advisory Services
- Leading Edge Equipment Representation
- Education / Webinars
- Website with resources (ie Industry Directory)
 - www.greene-tec.com
- Biogas.tv



Next Webinar – Sept 7 on the ITC and Domestic Content



BIOGAS

FREE ONLINE WEBINAR

Driving More Domestic US Content In Biogas RNG Jobs

Learn from prominent US fabricators and manufacturing shops

Meet minimum US Manufactured Product requirements in the IRA

- Vessel and skid fabrication
- Containerization
- Creating pipe spool pieces and shop wiring
- Factory acceptance testing
- 3D CAD design and rendering
- Controls & System Integration

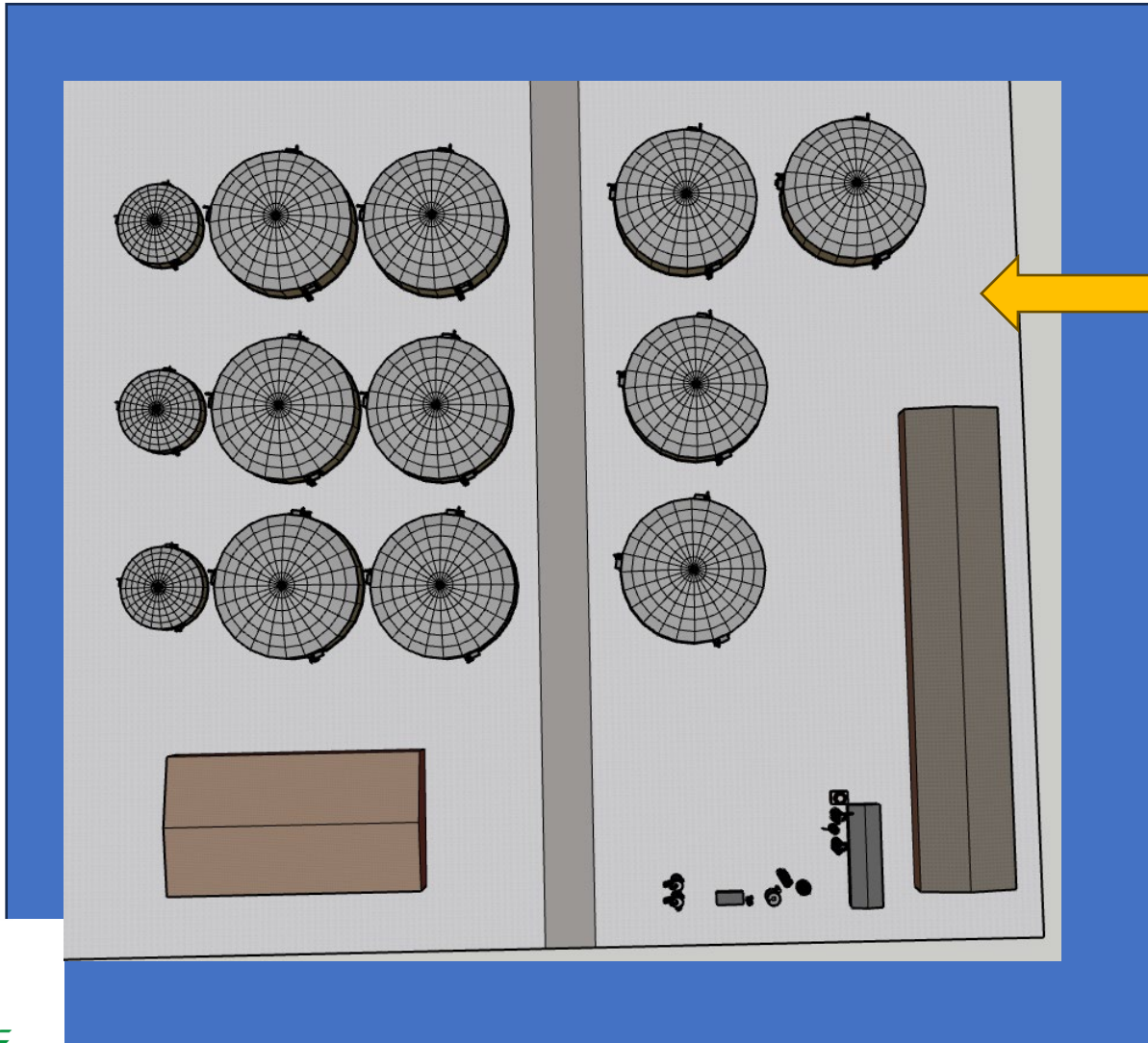

Paul Greene
HOST

September 7, 2023 | 2:00-3:00 pm Eastern

Technical content in the spirit of education



A goal of EPC Contracting.....



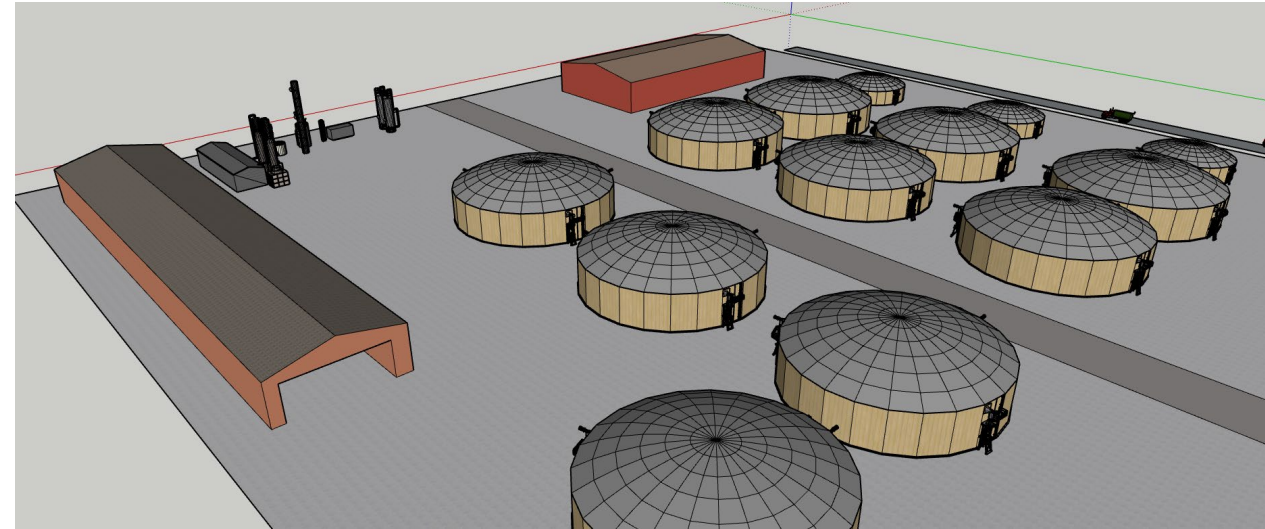
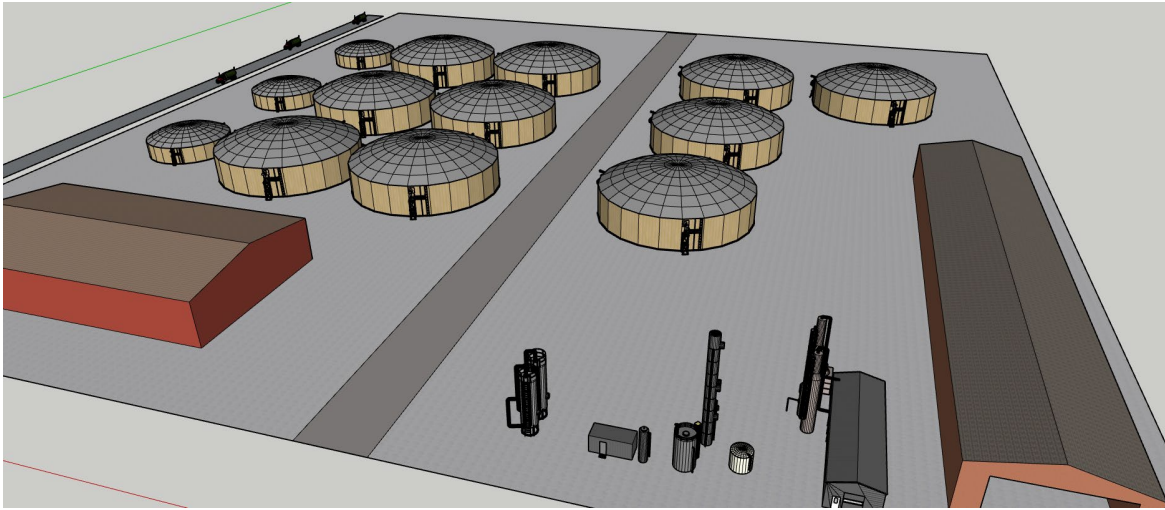
- Be able to work with your EPC so they are comfortable saying “I’ve got all of this”
 - Equipment
 - Piping
 - Electrical
 - Rigging
 - Structural
 - Process Performance
 - Schedule Risk
 - Commissioning
 - Within a given boundary

Getting the attention of an EPC Firm

- Be an educated buyer.
 - Understand what the system looks like that you want to buy
 - Also give the EPC the flexibility to modify the approach so you can
 - Secure a process guarantee from them
 - Avoid the EPC feel like you are “jamming” them with an approach that is either unproven or that they have not had a chance to provide proper buy-in
 - Be reasonable on schedule for proposals and deliverable.



New 3D Rendering Design



No Cost 3D Renderings based on standard shapes on drag & drop interface

Some goals for today

- Listen for:
 - How does the project arrive at a final construction price?
 - How does the buyer protect themselves to ensure the risk allocation and reward to the EPC is fair and feels like a real partnership?
- Think about a path forward.
 - We as an industry have no standards for what we desire for deliverable packages and what we call them
 - Other industries.....use FEL 1, 2, 3..... Other terminology
 - We have no standard:
 - Contracts
 - Specifications



Some thoughts on 10% ITC Bonus for Domestic Content

- Three Key Features to be made in the US
 - All Structural Steel
 - All Concrete
 - Manufactured Products to a minimum 40% threshold
- On getting to 40%
 - Most European pieces of equipment are lower cost than their US versions
- It might not be worth the fight

Is the Manufactured Content requirement worth the fight?

- The May guidance document from IRS is requiring extensive measures from suppliers:
 - Price breakouts to high levels that show component costs and further breakouts to direct part and labor cost.

Part III – Administrative, Procedural, and Miscellaneous

Domestic Content Bonus Credit Guidance under Sections 45, 45Y, 48, and 48E

Notice 2023-38

Read this
Study this

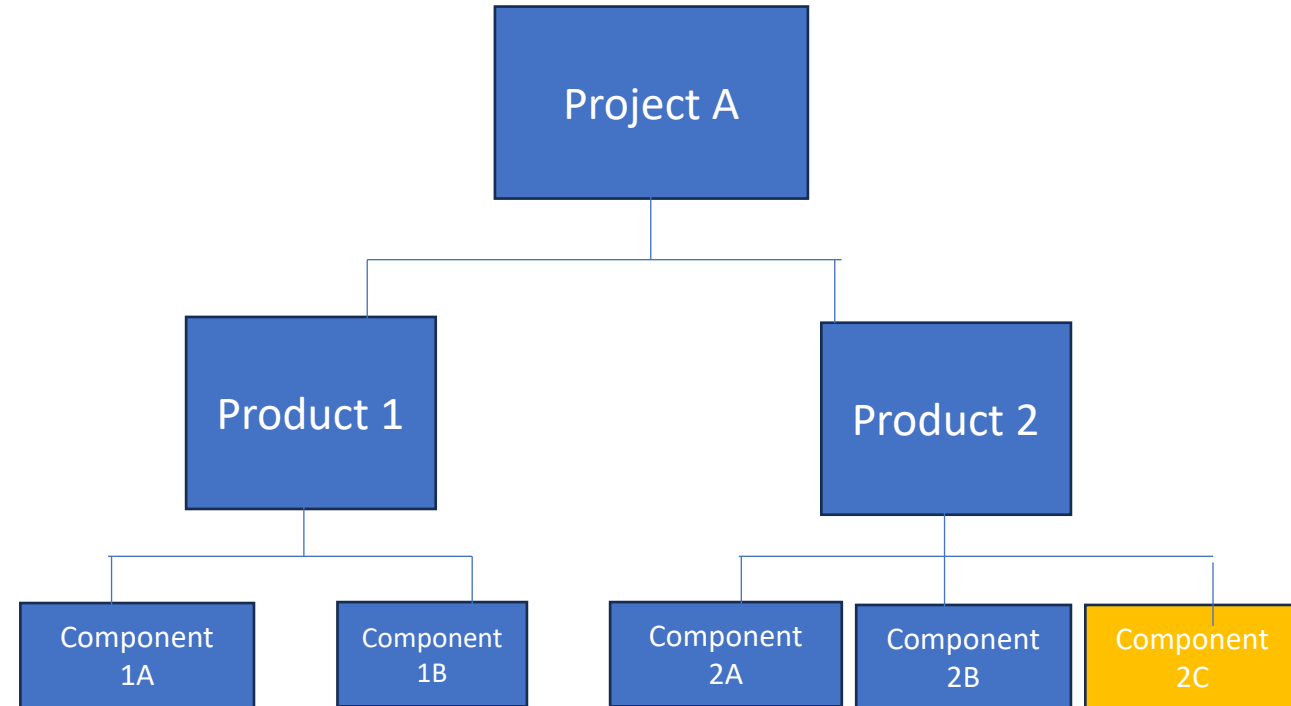


IRS Example

Table 1 – Direct Costs of Manufactured Products 1 and 2

Asset	Cost
Manufactured Product 1	\$100
Component 1A	30
Component 1B	45
Manufactured Product 2	\$200
Component 2A	30
Component 2B	50
Component 2C	100

Applicable Project A's Domestic Manufactured Products and Components Cost consists of the cost of Manufactured Product 1 (\$100), Component 2A (\$30), and Component 2B (\$50) for a total of \$180. Applicable Project A's Total Manufactured Products Cost consists of the cost of Manufactured Product 1 (\$100) and Manufactured Product 2 (\$200) for a total of \$300. Applicable Project A's Domestic Cost Percentage is 60% (\$180 divided by \$300). Applicable Project A satisfies the Adjusted Percentage Rule because its Domestic Cost Percentage of 60% exceeds the adjusted percentage. Thus, Manufactured Products 1 and 2 are both deemed to have been produced in the United States under the Adjusted Percentage Rule.



= US Manufactured
 = Foreign Manufactured

Is the Manufactured Content requirement worth the fight?

- Potential Nightmare scenario and supplier rebellion

purpose of this notice:

(c) Total Manufactured Products Cost. The Total Manufactured Products Cost for an Applicable Project is the sum of the costs of each Applicable Project Component that is a Manufactured Product. For purposes of determining the Total Manufactured Products Cost for an Applicable Project, the cost of an Applicable Project Component that is a Manufactured Product includes only direct costs as defined in § 1.263A-1(e)(2)(i) that are paid or incurred within the meaning of § 461 by the manufacturer of the Manufactured Product to produce the Manufactured Product. For purposes of this

IRS is requiring

- Breaking prices out by component
- Only looking at “Direct Costs” of labor and materials

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Oh No:

- Example - \$200,000 US Centrifuge
- Can't use the \$200,000 total price
- IRS is looking for the \$100,000 ish direct costs



If the Manufactured Product Requirement were only this easy

Project X - Domestic Content – Manufactured Products		
<u>Item</u>	<u>Domestic</u>	<u>Non- Domestic</u>
Digesters		12.5
Steel Tanks	8	
Boiler	0.7	
Gas Upgrader	6.5	
Final Compressor	1	
Flush Water Screens		0.6
Screw Presses		0.8
Flare	0.4	
Totals	16.6	13.9
Percent Domestic	54%	

Exceeds 40% Requirement



Thank you

Paul Greene

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