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CASE 1 - ROUND 1

GREENGROW





GreenGrow is in the waste management business and is setting up RNG (renewable natural gas) plants across the country to recycle agricultural waste and convert it into energy.

As of now, 6 RNG plants are being setup in Haryana and there are 11 more in the pipeline. The sustainability and economic viability of these plants depends to a large extent on their ability to secure the right feedstock. Given the typical vagaries in the agriculture sector in India, GreenGrow needs to have a robust sourcing plan in place.

GreenGrow's plants can only consume paddy straw. Paddy is sowed in the months of June-July and is harvested in the months of September-October. While harvesting, the seeds are cut from the plant and straw is dropped on the field.

This straw must be removed from the field to prepare for the next sowing within 15-20 days. Typically, farmers clear the field by burning the straw. Hence, collection must be done within this short timeframe.

Paddy straw collection can be done manually or through machines called balers. A single baler can collect straws from fields 20x faster than a single farmer doing manual collection for the same area.





However, very few farmers own balers, as they are expensive. Instead they rent it from other farmers or service providers. Farmers, however, are generally not aware of the demand for paddy straw from RNG plants or the harmful effects of burning it on the fields.

The amount of energy that can be generated from straw is known as the Gross Calorific Value (GCV). The GCV also depends on the quality of seeds, the inputs used, the quality of the field, and farming techniques. Other important quality parameters are moisture content, dust content and straw density. Since straw is produced only during 3 months in a year, the price of straw in the market also varies widely depending on when purchase happens. Off-season prices are typically double of in-season prices. Price paid includes transportation costs, and is paid only for the volume of the required quality of straw delivered at the plant / collection centre.

Given these challenges, GreenGrow wants to create the right procurement strategy to suit their yearly volume demands, high GCV requirement of straw and lowest cost / investment for procurement. Accordingly, it has invited a consulting firm to advise on the procurement strategy.



Key Deliverables - Round 1

Develop an issue tree/hypothesis and identify the right procurement strategy (i.e., the right source and the right model). Also identify key questions you would like to ask the client, that could be useful in further analysis.

(Here we are looking at the breadth of issues you bring up and how you plan to test these points. It should not be stuff just laid down theoretically, but testable practically)



Submission Guidelines

- ✓ Each team has to continue with the case they chose in Round 1 and
 2. Equal preference would be given to all cases for evaluation
- ✓ The case submission deadline would be updated on Avalon's website. No submissions will be accepted past the deadline
- ✓ Teams are required to prepare a PPT of <u>maximum 10 slides for</u>

 Round 1 and 25 slides for Round 2 (excluding annexure)
- ✓ The PPT guidelines for Round 3 would be shared during the mentorship sessions for the finalist teams
- ✓ The PPT files along with other supporting documentation can be uploaded in the form of a .zip or .rar format file. Files that exceed 25MB in size will be disregarded
- ✓ The cover page should mention the team name, college name and the case selected. The end page should mention the name, mobile and email ID of each team member. The slide limit includes the cover page and end slide
- ✓ Please name your submission file as <u>CaseNumber CollegeName TeamName</u> (e.g., Case 1_XLRI_Panthers)
- ✓ Participants are required to email their submissions to suntzu@consultavalon.com
- ✓ Please explicitly mention all the assumptions (if any) you make to solve the case. You can incorporate those as part of your submissions for each round.
- ✓ No additional slides beyond the set limit shall be accepted for evaluation.
- ✓ We encourage you to carry out your own research while working on this case. However, please ensure all your data points are obtained through authentic and reliable sources and should be mentioned in your submission.

