



COMMERCIAL READINESS SCORECARD

INPUTS - *fill in yellow shaded boxes*

Expectation	(pick one and insert corresponding number in box)	
<i>High Probability</i> - expect high level of confidence in capital cost, timeline and ultimate capacity of facility. Insert "1"		
<i>Balanced</i> - willing to accept some level of uncertainty in capital cost, capacity and schedule. Insert "2"		2
<i>Speed to Market</i> - strong drive to get into larger scale production as soon as possible, willingness to accept significant uncertainty. Insert "3"		(1, 2 or 3)
Number of Unit Operations	(insert number)	
Total number of unit operations from feedstock to final product		5
(3 - 15)		
Scale-up Factor	(insert number)	
Growth in size between current operating scale and proposed project		44
(1- 200)		
Status of Key Criteria	(insert decimal number)	
Average ratio of key process criteria when compared to commercial target		0.71
(0.0 - 1.0)		
Degree of Process Integration	(pick one)	
<i>Fully Integrated</i> - process is being operated from feedstock to final product in a continuous process, all on the same location. Insert "1"		
<i>Partially integrated</i> - process is conducted with pieces in multiple locations, attempting to mimic a fully integrated process. Insert "2"		2
(1, 2 or 3)		
<i>Independent</i> - unit operations are run individually and modeled based on mathematical representation of how they form an overall process. Insert "3"		
Length of Testing	(hours of continuous operation)	
Operational hours of testing at the previous (pilot or demonstration) scale that represents the commercial scale process		548
(10 - 1,000)		

Disclaimer - scorecard is intended as a high-level evaluation of the state of readiness of advanced biotechnology processes for commercialization and is highly dependent upon the quality of information input. Investment decisions should not be made on this level of analysis.



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Results

Target Score

75

Actual Score

76

Overall Comments

Process has scored higher than target expectation. Reasonable probability of meeting goals during commercialization

Willing to accept reasonable level of uncertainty in capital cost, project schedule, manufacturing cost and ultimate capacity. Will need to actively manage risk throughout the process.

Results by Individual Evaluation Criteria

Number of Unit Operations

(percent of individual target) 94%

Low end of the range of typical unit operations. Less risk integrating the process than typical advanced biotechnology processes.

Scale-up Factor

(percent of individual target) 83%

Medium technology scale-up risk, success dependent upon quality of integrated pilot data

Status of Key Criteria

(percent of individual target) 71%

Medium risk, especially in manufacturing cost and plant capacity areas. Consider additional optimization work.

Degree of Process Integration

(percent of individual target) 75%

Medium risk, consider methods to integrate operations into one site

Length of Testing

(percent of individual target) 55%

Limited hours, high risk of scale up and unlikely to meet key targets at commercial scale without additional investment or technical breakthrough

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