

20 March 2012

ACTINOGEN PLANS TO COMMERCIALIZE BIOETHANOL PRODUCTION

HIGHLIGHTS

- Actinogen has discovered actinomycetes that produce cellulase(s) as a by-product when breaking down newspaper, brown paper and glycerol.
- CSIRO has confirmed Actinogen's ability of producing cellulase(s) in volumes of up to at least 10 litres.
- Actinogen has begun testing their method on waste glycerol supplied by an Australian biodiesel company.
- Actinogen has engaged an independent expert Dr Karne De Boer to produce a report on commercialization of Actinogen's biofuel research program.
- Actinogen plans to develop cellulosic bio-ethanol by following the proposed development strategy highlighted by Dr De Boer in his report with the end goal of producing bio-ethanol commercially.

Actinogen Limited ("Actinogen", ASX:ACW), is pleased to announce the confirmed development of the bio-ethanol research program. The Directors of Actinogen have engaged an independent expert Dr Karne De Boer, to provide a report on the commercialization of Actinogen's bio-ethanol research program.

Dr De Boer is the managing director of Regenerate Industries Pty Ltd, which is a Perth based company that specialises in the development of biodiesel plants, bioenergy cogeneration plants and integrated systems based around Renewable Energy. Regenerate Industries most recent project is a \$500,000 biodeisel plant in Tasmania converting poppy seed oil into biodiesel. Dr De Boer is a renewable energy engineer who has completed a PhD at Murdoch University focused on biodiesel reactor technology and is also currently undertaking post-doctoral studies at Murdoch's Algae R+D centre on the conversion of algae into biofuels with a focus on energy consumption.

Dr De Boer has recommended the following development strategy to Actinogen:

Proposed Development Strategy

The possible large scale impact of this breakthrough and the promising results so far have encouraged the Actinogen board to further develop this project. Table 1.1 outlines a proposed development pathway that Actinogen could follow in the coming years.

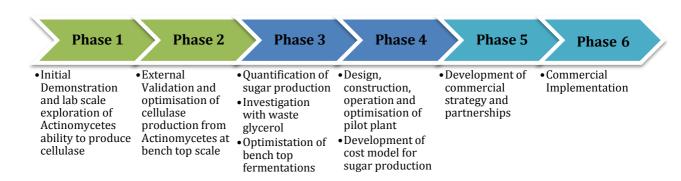


Table 1.1

Actinogen has already completed phases 1 and 2. The Directors intend to implement phases 3 and 4 as soon as possible.

Optimization of bench top fermentation and construction of test pilot plant

Actinogen plans to implement bench top fermentation to determine the best conditions for building a test pilot plant. Actinogen will aim to determine the effects of the contaminants in waste glycerol on cellulase production. Actinogen will also measure the sugars produced by the cellulase breakdown of cellulosic material. Measuring sugar production has been identified as one of the most realistic measures of enzyme activity as this is the end use of the enzyme and the metric that ethanol producers will find most valuable.

After this, Actiogen plans to construct a pilot plant that has the ability to use the enzymes created by Actinogen on biomass to produce sugars that can be used to ferment bio-ethanol. Actinogen will measure the sugars produced and determine whether their process can be used in commercial quantities. Dr De Boer has recommended that the pilot plant be constructed as shown in Figure 1 below.

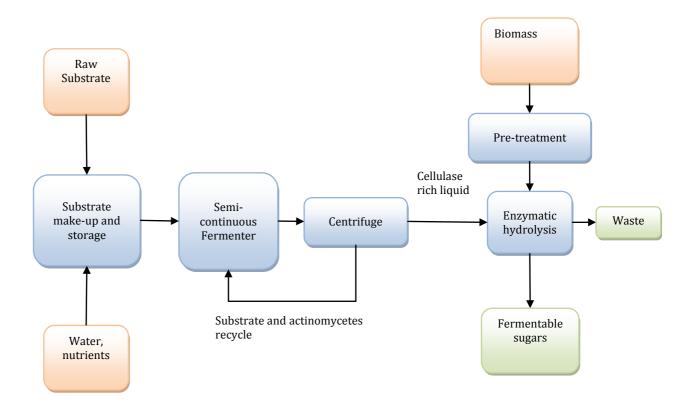


Figure 1: Proposed Pilot Plant

If phases 3 and 4 produce successful results, phases 5 and 6 will be implemented to begin to commercialize the Actinogen technology. Actinogen is currently considering two commercial pathways that could be pursued. The first pathway is to develop a "black box" that takes in substrate (such as waste glycerol or paper) and produces a cellulase rich liquid on site for other developed bio-ethanol producers. The second pathway is to construct Actinogen's own bio-ethanol producing facility.

Actinogen intends to immediately implement the commercialization strategy proposed by Dr De Boer. Actinogen's lab has already begun testing samples of waste glycerol.

The Directors are very encouraged by the results obtained by the Company to this date and by Dr De Boer's report, which describes Actinogen's research into second generation bio-ethanol as an "exciting breakthrough".

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