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# AC Pellet Technology Advancing in Water and Wastewater Treatment Sectors

- Positive results received from testing of new proprietary Activated Carbon (AC')
   Pellet technology in water and wastewater treatment sectors
- Three programs advancing:
  - AC Pellets being re-engineered to adsorb harmful pollutants produced within high humidity environments
  - Major nutrient removal tests in Florida underway, third-party verification being sought after initial positive results
  - Collaboration with Mote Marine Laboratory to develop mitigation technology for Florida Red Tide Algae. Freshwater eutrophication has been estimated to cost the U.S. economy US\$2.2 billion annually <sup>1</sup>
  - Project advancing with the support of a USD\$134,000 government grant, issued by Florida Red Tide Mitigation and Technology Development Initiative.
- The global water and wastewater treatment market was valued at US \$263 billion dollars in 2020, and is projected to reach US \$465 billion by 2028<sup>2</sup>
- September quarter sales continue to build, the company will provide an operational update to the market in the near future.

United States focused Cleantech company **Carbonxt Group Ltd (ASX:CG1) ("Carbonxt" or "the Company")** is pleased to report on three advanced initiatives with respect to the deployment of its proprietary Activated Carbon ("AC") Pellet technology, with expansion centred on the water and wastewater sectors.

AC Pellets for deployment in high humidity environments: Significant progress has been made on the testing of AC Pellets specifically designed for deployment within high humidity environments. These pellets have tremendous application in environments such as wastewater treatment plants. The results from recent commercial tests have been encouraging and strong customer leads have resulted. The Company has now engaged an independent laboratory for third party verification on product specifications, which has been very positive. Further field testing has been undertaken on one particular opportunity; again with positive results. Further commercial tests will occur over the coming months.

The new product presents a large market opportunity for Carbonxt and is likely to substantially strengthen the company's pipeline of opportunities in the wastewater treatment sector. Marketing initiatives are currently being undertaken to actively promote the product and achieve near-term sales.

**Nutrient removals from water run-off:** Another major test is currently underway in Florida focusing on the use of AC Pellets being used to assist in the removal of harmful nutrients from public waterways. This full-scale test will provide essential data to verify the commercial product and provide third party verification. Initial testing, with harmful pollutants including phosphate and nitrogen being successfully removed. Phosphate and nitrogen in waterways are typically due to the use of chemical farm fertilizers, garden fertilizers and manure.



Collaboration on Deployment of AC Pellets to destroy Red Tide Algae: In collaboration with the World renowned Mote Marine Laboratory, and aided by a USD100k government grant, Carbonxt continues to advance the development of an AC Pellet that can be used to destroy harmful Red Tide Algae in the Florida waterways. Recently developed pellet formulations containing natural algaecides have shown excellent promise in killing the algae cells which cause the destructive Red Tide events.

Further laboratory tests will be carried out on the most promising candidates to evaluate performance of killing algae and removing toxins released by the algae as it is killed. Next steps are being planned with the Mote Marine Laboratory in order to scale up field testing and commercialisation of the technology.

#### **Comment**

Managing Director Warren Murphy said: "Receiving such positive results from the most recent research and development initiatives is very encouraging. The water and wastewater treatment sectors in the United States are obviously huge markets and these three advanced programs demonstrate the ability of our AC Pellets to be adapted for deployment in other large industrial sectors. We are confident that we will be able to rapidly commercialise our AC Pellets for these large untapped markets with minimal additional R&D spend and strong US government support. The company will continue to pursue additional environmental technologies with the view of developing Carbonxt into a leading and diverse Clean-tech business.

"In addition, we confirm that demand for our AC Pellets and Powdered Activated Carbon continues to steadily build and we are meeting this demand through the increased work shifts at our manufacturing facilities."

This announcement has been authorised for release to ASX by the Board of Directors of Carbonxt Group Limited.

### **ENDS**

## **Enquiries**

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#### **About Carbonxt**

Carbonxt (ASX:CG1) is a cleantech company that develops, and markets specialised Activated Carbon products, focused on the capture of contaminants in industrial processes that emit substantial amounts of harmful pollutants. The Company produces and manufactures Powdered Activated Carbon and Activated Carbon pellets for use in industrial air purification, wastewater treatment and other liquid and gas phase markets.

- https://pubs.acs.org/doi/10.1021/es801217q
- 2. https://www.statista.com/statistics/1199744/market-size-water-and-wastewater-treatment-global/