



**This is a joint press release of Royal Cosun and Avantium**

## **COSUN AND AVANTIUM ANNOUNCE COLLABORATION**

*PRODUCTION OF BIOPLASTICS AND BIOFUELS FROM AGRICULTURAL WASTE STREAMS*

**Breda, Amsterdam, 21 January, 2009.** Today, Royal Cosun and Avantium announced the start of their collaboration. The companies join forces to develop a specific process for the production of a new generation of bioplastics and biofuels from selected organic waste streams. Avantium is developing these bioplastics and biofuels under the name 'Furanics'.

**Within the collaboration, Cosun will focus on the selection, isolation and purification of suitable components from agricultural waste streams. Avantium will continue to focus on the development of an efficient, chemically catalyzed production process. The duration of the first phase of the collaboration will be approximately two years. With positive results, the companies intend to scale-up the production technology and implement it on commercial scale.**

The collaboration between Cosun and Avantium combines the complementary knowledge and expertise from two important Dutch economic sectors to achieve new, sustainable products and processes based on biomass.

### **Collaboration between agro and chemistry**

"The further optimization of the value of our agricultural products is of great importance for our future", said Gert de Raaff, Director Corporate Development at Cosun. "Agricultural products and waste streams will increasingly be used as starting material for the production of chemicals and materials. For several years, Cosun has been active in developing and marketing these applications, focusing on high-grade products. An example is Carboxy Methyl Inulin, which is used as a sustainable additive in water treatment. The collaboration with Avantium for the development of Furanics perfectly matches the vision and developments at Cosun."

Tom van Aken, CEO at Avantium: "Our collaboration with Royal Cosun fits in perfectly with our strategy to produce Furanics from raw materials that do not compete with the food chain. With this approach, we clearly distinguish ourselves from existing bioplastics and biofuels production processes. By collaborating with Cosun, we gain access to organic waste streams and Cosun's proven expertise in processing agricultural feedstock."

### **Furanics**

For a number of years, Avantium has been developing "Furanics", a new generation of bioplastics and biofuels. Furanics can be produced from biomass such as sugars and other carbohydrates. Avantium's Furanics bioplastics can be produced cheaper than oil-based plastics and they have attractive properties with the potential to replace traditional plastics

in many existing applications. Avantium's Furanics biofuel program aims to develop a new generation of biofuels with both excellent properties (such as high energy density and mixability with conventional fuels) and competitive production costs.

Furanics are a sustainable alternative for materials and fuels that are currently produced from crude oil. By using Furanics, the dependence on crude oil decreases and CO<sub>2</sub> emissions are reduced.

## Note for the editors

### **About Cosun**

Royal Cosun is an international group that develops, produces and sells natural foodstuffs and ingredients. Cosun carries a broad and versatile range of products, from sugar, inulin, alcohol and potato specialities to compound ingredients for use in bakery products, dairy products, soft drinks and the foodservice sector. The group also processes organic residues into products for non-food applications.

In all these markets, the Cosun businesses Suiker Unie, Sensus, Nedalco, Aviko, SVZ and Unifine Food & Bake Ingredients work closely with their customers and suppliers.

Royal Cosun was established as a cooperative of Dutch sugar beet growers more than 100 years ago. The cooperative currently has approximately 11,000 member/shareholders. Cosun has grown into a group with an average workforce of 4,300 and a turnover of some EUR 1.7 billion.

### **For more information about Cosun**

Please contact Willy van Oorschot at +31 76 530 3243, or visit the website: [www.cosun.com](http://www.cosun.com)

### **About Avantium**

Avantium is a leading technology company specialized in the area of advanced high-throughput R&D. The company develops and commercializes Furanics, a next generation biofuels and bioplastics, and develops improved forms of existing drugs. Avantium has demonstrated the value and commercial potential of its unique technology and knowledge by collaborating with leading companies in the energy, chemical and pharmaceutical industry. Avantium's customer base for its R&D services and systems offering consists of more than 70 companies worldwide, including market leaders such as BP, Shell, Sasol, Pfizer and GSK. In 2008, the company generated revenues of approximately EUR 19 million. Avantium has around 140 employees; its offices and headquarters are based in Amsterdam, the Netherlands.

### **For more information about Avantium**

Please contact Mariëtte Hoogendoorn at +31 20 586 8010, or visit the website: [www.avantium.com](http://www.avantium.com)