

## News Release

### **ROYAL NEDALCO SIGNS AGREEMENT TO LICENSE TECHNOLOGY TO MASCOMA FOR LIGNOCELLULOSIC ETHANOL**

*American – Dutch technology partnership to explore collaborative research to accelerate commercialization of lignocellulosic ethanol*

BERGEN OP ZOOM / CAMBRIDGE, MA, 1 MARCH 2007 – Royal Nedalco, a European ethanol technology leader and producer, and Mascoma Corporation, the frontrunner in lignocellulosic biomass-to-ethanol development and production in the United States, have signed a license and joint development agreement to further their initiatives to commercialize ethanol production from lignocellulosic biomass. The objective of this technology partnership is to license Nedalco's yeast-based technology for use in Mascoma's recently announced demonstration plant and for use in future Mascoma commercial plants, and to explore collaborative research efforts to accelerate production of second generation bioethanol. The companies expect to exchange related know how and to engage in specific joint research programs to develop lignocellulosic ethanol from agricultural side streams, such as straw and wood waste. "We consider Nedalco's technology a key innovation in making fuel ethanol from cellulose a practical and sustainable reality for consumers," said Mascoma President and Director Dr. Colin South.

Royal Nedalco has a strong international technology and patent position in the production of ethanol from lignocellulosic ethanol. The company has developed a new fermentation process, using modified yeasts capable of converting all kinds of lignocellulosic biomass, including straw and wood waste, into ethanol. Nedalco recently unfolded its plans to build a second generation lignocellulosic ethanol plant in the Netherlands, which will be operational in the second half of 2008. **Mascoma Corporation** is leading the development of bio and process technology for cost-effective conversion of lignocellulosic biomass in the United States and is completing designs and partnerships to build and operate commercial cellulosic ethanol plants using both internally developed and licensed technology across multiple biomass feedstocks.

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“For Nedalco this partnership cuts both ways by providing an excellent opportunity to further improve our technology while making use of Mascoma’s skills and expertise in bringing innovations into production”, said Ger Bemer, Managing Director of Royal Nedalco. Today ethanol is made primarily from wheat and corn, resources with multiple uses with limits to its long term capacity. Ethanol made from lignocellulosic biomass (e.g. grass, wood, and various agricultural and forestry wastes) takes advantage of significantly lower raw material cost, more plentiful and varied feedstocks, and expands the potential for ethanol to blend with and displace gasoline with a cleaner and renewable liquid fuel. “The added value is that both our companies have a regional orientation on production, but a global orientation for research and development of new technology”, according to Ger Bemer. This means that Nedalco will continue to focus on supplying the 70 million cars in the North-Western European market, whereas Mascoma is initially focused on supplying the US market.

Dartmouth College Professor Lee R. Lynd, a Mascoma co-founder and a leading expert in cellulosic ethanol bioprocessing technology, added: “This partnership establishes a significant collaboration among leading lignocellulosic ethanol companies to develop processes related to Royal Nedalco's modified yeasts, and to commercialize cost-effective cellulosic ethanol production.”

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### **About Royal Nedalco B.V.**

Royal Nedalco ([www.nedalco.nl](http://www.nedalco.nl)) is a subsidiary of Royal Cosun. This company belongs to the oldest industries in the Netherlands. Nedalco’s high quality alcohol is used for

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several industries, like beverage, medical, cosmetic and chemical industry. Nedalco is one of the leading producers of natural alcohol in Europe. Nedalco owns two production sites in the Netherlands (Bergen op Zoom and Sas van Gent) and a third is under construction in Manchester. Nedalco also has a joint venture with Bruggeman Alcohol in Germany. In the field of research Royal Nedalco forms a joint venture with Delft University of Technology and BIRD Engineering to working together on research and development for lignocellulosic ethanol.

### **About Mascoma Corporation**

Mascoma Corporation is a cellulosic biomass-to-ethanol company with corporate offices in Cambridge MA and R&D labs in Hanover NH. Mascoma is leading in the development of unique biotechnology and deployment of cellulosic production. Initial deployment activities are focused on strategic partnerships for conversion of wood based cellulosic feedstocks into ethanol at relevant commercial scale. Mascoma is aggressively developing advanced cellulosic ethanol technologies in its Lebanon NH labs, as well as in Lee Lynd's labs at Dartmouth College's Thayer School of Engineering, and through other sponsored research and in-licensing of best in class technologies. Mascoma received founding investment from Khosla Ventures and Flagship Ventures and has since received Series B funding from a consortia of leading venture capital firms.