

Embargo 7 Nov 2007 12
noon

EUROPEAN BUSINESS AWARDS FOR THE ENVIRONMENT 2006 Results of the Cleantech Finland national competition

Winner of the Product Category

Neste Oil Oyj

NExBTL[®] Diesel fuel made from renewable raw materials

Made from renewable raw materials, NExBTL[®] diesel is the first commercial second-generation biodiesel.

Neste Oil has developed a diesel fuel utilising vegetable oils and animal fats on a broad scale. This product is the first commercial second-generation biodiesel. Its properties are excellent and compatible with existing diesel engines. Its GHG emissions during the entire production chain is 40–60% lower than with conventional biodiesel. The particulate and nitrogen oxide emissions are also lower, which helps improve air quality.

The product is the result of more than ten years' development work. It is estimated that Neste Oil has a technology advantage of several years over its competitors. The production plant already running at Neste Oil Porvoo refinery is the first of its scale in second-generation biodiesel production.

NExBTL[®] can be made from a variety of raw materials, and the company is constantly looking for new alternatives. Currently the product utilises palm and rapeseed oil and animal fats. Neste Oil requires that all its suppliers abide by the principles of sustainable development. Neste Oil has actively participated in helping to create the international certification system for palm oil production. The system is expected to be widely adopted in 2008.

The business idea of Neste Oil is to produce cleaner traffic fuels. Its competitive edge is based on long-term investment in the development and production of environmentally-friendlier fuels. Neste Oil has shown that on a global scale, a small oil company can be successful if it specialises in a clearly defined area.

Further information

Osmo Kammonen, Senior Vice President, Neste Oil Oyj

Osmo.kammonen@nesteoil.com

Tiina Tuominen, HSE Manager, Neste Oil Oyj

Tel. + 358 (0)10 45811, tiina.tuominen@nesteoil.com

www.nesteoil.com

Runner-up in the Product Category

UPM-Kymmene Corporation

UPM ProFi Deck

UPM ProFi Deck is a completely new type of innovation made mainly from recycled materials, combining the best qualities of wood fibre and plastic. It is an excellent example of how to combine material technology with recycling.

Embargo 7 Nov 2007 12
noon

UPM ProFi Deck decking board is the first commercial product developed from UPM's innovative wood-plastic composite. Its applications include patios, playgrounds, and jetties.

The basic material for UPM ProFi Deck is the surplus paper and plastic from UPM's self-adhesive label production. Recycled materials comprise approximately two-thirds of the raw materials used in production. Compared with other wood-plastic composites on the market, the use of recycled materials is unique.

The decking material has proved durable and easy to handle, and it can be worked just like wood. Easy to install, it requires no surface chemical treatments. The product can be disposed of through burning, recycling back into the production process, or with household and energy waste. Therefore, wood-plastic composite is genuinely environmentally-friendly.

Further information

Markku Koivisto, Director of Corporate Venturing, UPM ProFi tel. 040 861 2852

Aleksi Pekkanen, Sales and Marketing Manager, UPM ProFi, tel. 040 775 0075
www.upm-kymmene.fi
www.profi.fi

Third Prize in the Product Category Trans Veritas Oy Energy audits of transport chains

Extending energy audits to cover transport chains is a new application area with significant potential. Auditing transport chains can help reduce the costs incurred by companies, while simultaneously decreasing energy consumption and carbon monoxide emissions.

Energy audits for transport chains are a service product through which companies can reduce transport costs, energy consumption, and carbon monoxide emissions. The audits cover three stages: (1) the logistical planning and form of transport; (2) energy efficiency, transport equipment and technology; and (3) the personnel. As a result of the audit, companies are given recommendations on what needs attention and a calculation of costs, benefits, and the payback period.

The audit is a service product suitable for various industries, and it has wide-ranging application potential. The planning of logistical chains is something that has so far been paid too little attention. With increasing traffic volume and ensuing problems, the product is expected to meet with high international demand.

Further information

Ari Arposalo, Managing Director, Trans Veritas Oy
Tel. (09) 5259 1995, ari.arposalo@transveritas.fi
www.transveritas.fi

Embargo 7 Nov 2007 12
noon

Winner of the Process Category
Outotec Oyj
Ferrochrome production technology

Ferrochrome is an essential raw material in stainless steel production. Outotec's ferrochrome technology is innovative in that it utilises the heat energy of the gas the process itself produces. Thanks to the closed process, the energy consumption and the carbon monoxide emissions at the ferrochrome plant can be substantially reduced.

Originally developed at Outokumpu Oyj's Tornio plant and Outotec Oyj Pori research facility, the ferrochrome process is being continually assessed and improved. When the technology is sold to a new client, the process is tailored to meet each customer's specific needs.

The high cost of energy and metal on the international market as well as tighter environmental regulations have made this technology highly topical. Thanks to the process, carbon monoxide emissions at the Tornio plant have been reduced by an estimated six million tonnes and similarly, by some five tonnes at plants in South Africa. Thanks to the preheating kiln involved in the process, the electric power savings are substantial compared to conventional technologies.

Further information

Kari Knuutila, President, Outokumpu Technology, Research Center
Tel. 020 529 2009, kari.knuutila@outotec.com
www.outotec.com

Runner-up in the Process Category
AkkuSer Oy
Battery recycling, a response to the accumulator/battery directive

In a new type of dry process, used batteries and accumulators are treated without water or chemicals, eliminating waste water problems and minimising the amount of solid waste. The process provides an inexpensive and eco-efficient answer to the new EU directive concerning the recycling of batteries and accumulators.

In the treatment process for dry-cell batteries and accumulators, the valuable metals are recovered for further use, and other components, such as plastic and cardboard, are utilised in energy production. The process chain comprises the reception of accumulators, intermediate storing, sorting based on the metal content, and the actual treatment. The sorted batteries are crushed and ground, the ensuing dust and gases treated, and the metal recovered. The entire process is automated, and in this innovative dry process, no water or chemicals are used. As a result, there is no waste water and the amount of solid waste remains minimal. Moreover, the energy consumption is relatively low compared to smelting technologies. The recycling efficiency of the process is good.

Development of the treatment chain has required a pioneering role in battery sorting, recognition and tracing as well as in process safety technologies. A

Embargo 7 Nov 2007 12
noon

full-scale utilisation of the process requires that the infrastructure for the collection of used accumulators and batteries be improved in Finland.

The EU directive on batteries and accumulators will require recycling of these materials. A law based on the directive will enter into force in Finland in 2008, so this type of process will be in great demand. Furthermore, the availability of efficient and affordable recycling will ensure that used accumulators and batteries do not end up in landfills or third-world countries.

Further information

Jarmo Pudas, Managing Director, AkkuSer Oy
Tel. 050 312 0591, jarmo.pudas@akkuser.fi
www.akkuser.fi

Winner of the International Co-operation Category
Clean Globe International Ltd
New, efficient systems for oil spill response

A ground-breaking new solution for oil spill response has been developed for the joint action of the public and private sectors, and has created new opportunities for international co-operation. Clean Globe International has created a new business model for more effective oil spill response that complements existing response capacity.

The Clean Globe International Ltd oil spill response solution is based on response capacity being built into oil tankers. The company signs contracts for building oil spill response capacity with ship owners; usually oil tankers are ready to be fitted with oil spill response equipment in the eventuality of an accident. In this situation, the tankers empty their load into a stockpile while being fitted with oil recovery equipment.

The Baltic area, where the system was first introduced, has two stockpile centres and the vessels will be able to reach an accident site within 15 hours. Oil response readiness, the management of response actions, and the response team are available, regardless of the ownership of the sea territory. Clean Globe International made a contract with the European Maritime Safety Agency (EMSA) for the Baltic Sea in 2005 and another covering the Atlantic coastal area in 2006. The company has also offered EMSA a similar solution involving the Mediterranean, the Black Sea, and the Atlantic Ocean.

Further information

Pekka Eskelinen, Vice President, Clean Globe International Oy,
Tel. 020 765 0160, pekka.eskelinen@cleanglobe.eu
Lasse Parvinen, President, CEO, Clean Globe International Oy,
Tel. +358 20 765 0160, lasse.parvinen@cleanglobe.eu
www.cleanglobe.eu