

## Philips Research Press Release

February 27, 2006

### Philips develops a woodstove that saves lives and preserves energy resources

EINDHOVEN, THE NETHERLANDS - Philips Research today announced the end of successful trials of a woodstove for cooking in communities currently relying on less efficient means. The stove cuts the smoke and toxic emissions which are claimed to cause 1.6 million deaths a year. It also burns more efficiently to reduce the load on the existing energy supply chain, without involving dependence on non-renewable energy sources. The stove could benefit up to 300 million families in the world's poorest regions.

When properly used the woodstove typically reduces fuel consumption up to 80% compared with traditional, three stone fires. Apart from faster and more convenient cooking, this energy efficiency means the stove can save the cost of the time needed to gather fuel, and should also slow deforestation.

Efficient burning and high combustion temperatures also reduce the amount of indoor air pollution. The Philips woodstove reduces pollution due to smoke up to 90%, and organic volatile emissions up to 99% of the level of traditional cooking fires. "The World Health Organisation has identified indoor air pollution as a major risk to the health of women and children in the world's poorest countries," explains Rick Harwig, Chief Executive Officer of Philips Research. "It was this that first prompted us to investigate sophisticated, sustainable technology that was affordable and practicable for a great many of the world's less developed countries."

The secret to many benefits of this stove is an electronically controlled fan forcing air through the stove, leading to higher temperatures and a better fuel to air ratio. This results in cleaner burning and more efficient use of fuel. A thermoelectric generator using the heat from the burning wood generates electricity for the fan. Apart from ensuring autonomy from electricity supplies, the generator can also power external equipment like radios or lighting. Philips Research also optimized the construction of the stove for low thermal mass and good insulation. This ensures that the stove takes less energy to heat up, decreasing the time to get to cooking temperature, and makes sure the stove loses less of its heat to the surroundings.

During 2005, field tests have been running in different areas in



The woodstove reduces indoor air pollution and fuel consumption substantially compared with traditional fires.



The woodstove offers a convenient, safe and efficient way of cooking and could benefit up to 300 million families in the world's poorest regions.

India and the immediate acceptance level of the woodstove by the people in the trial lead to the decision to set up a commercial pilot in India later this year.

High-resolution pictures are available from:  
+ [www.research.philips.com/newscenter/pictures/060227-woodstove-pict.html](http://www.research.philips.com/newscenter/pictures/060227-woodstove-pict.html)

For further information please contact:

Ellen de Vries  
Communications Department Philips Research  
Tel  +31 40 2742321  
Email: [ellen.de.vries@philips.com](mailto:ellen.de.vries@philips.com)

### **About Royal Philips Electronics**

Royal Philips Electronics of the Netherlands (NYSE: PHG, AEX: PHI) is a global leader in healthcare, lifestyle and technology, delivering products, services and solutions through the brand promise of "sense and simplicity". Headquartered in the Netherlands, Philips employs approximately 121,700 employees in more than 60 countries worldwide. With sales of EUR 27 billion in 2006, the company is a market leader in medical diagnostic imaging and patient monitoring systems, energy efficient lighting solutions, personal care and home appliances, as well as consumer electronics. News from Philips is located at [www.philips.com/newscenter](http://www.philips.com/newscenter).

---

[Philips](#) | [Privacy policy](#) | [Terms of use](#)

©2004-2007 Koninklijke Philips N.V. All rights reserved.