ACOUSTICS2008/206 Generating electricity from burning wood using Thermo-acoustics for use in developing countries

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SCORE is a wood burning stove that will cook food, generate electricity and cooling for use in developing countries by means of thermoacoustics. The consortium of Nottingham (Lead), Manchester, Queen Mary, Imperial and City universities with the charity Practical Action, believe that the very demanding cost targets can be achieved by using thermo-acoustic technology due to the no-moving-part design. Standing wave and travelling wave designs are being evaluated with support from Los Alamos Laboratories in the US. The presentation will concentrate on the stove requirements and needs of the developing world and how this affects the thermo-acoustic and mechanical design. Results from mathematical modelling and measurements from an early demonstrator will be presented. More information can be found at Http://www.score.uk.com. The £2M Score research project is funded by EPSRC, a UK government agency.