

MOND

Accompanying Measure on Critical Technology Selection and Conference for Renewable Energy Recovery from Biomass Generated within the European Leather Sector

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**BIO-ENERGY
ENLARGED PERSPECTIVES**

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MOND Overview

A 2 year techno-economic study
leading to a Conference on:

**Selection and Implementation of
Renewable Energy Systems
Appropriate to the
EU Leather Sector**



Project Partnership

- BLC (UK, co-ordinator)
- AIICA (Spain)
- ROVESTA (Denmark)
- ELKEDE (Greece)

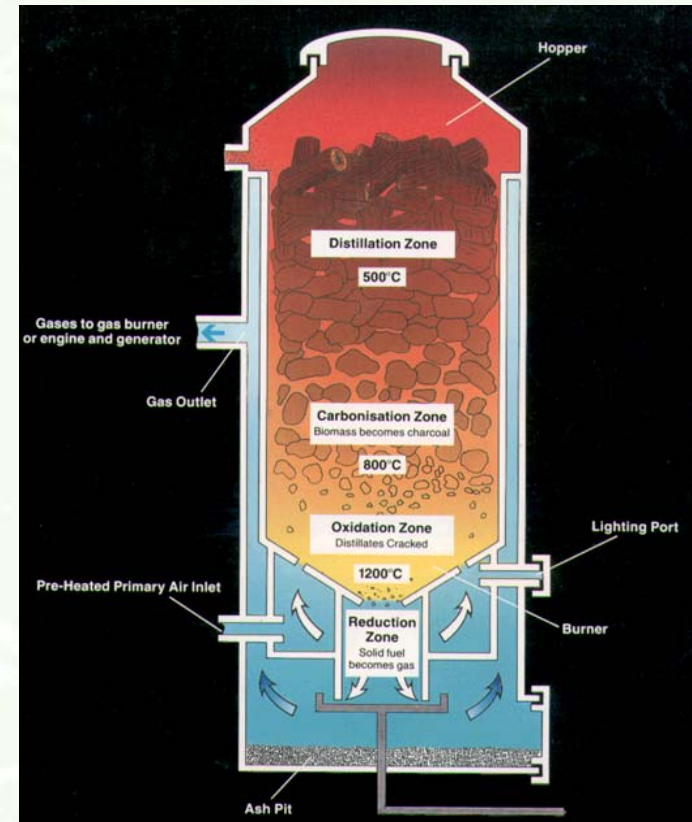
All Leading European Leather and Related
Technology Research Organisations

Current RES Situation for EU Leather Sector

- 2 million tonnes of leather waste are disposed annually
- This contains the equivalent of 38×10^{10} MJ of wasted energy
- Barriers to implementation exist, both technically and non technically:
 - lack of freely available knowledge by the target sector
 - little appreciation of the waste streams concerned
 - public perception
 - legislation/regulators

Leather Situation continued...

- Technology available developed for wood or coal applications
- BLC builds pilot scale gasifier for leather waste with support from UK government....then the problems begin!!



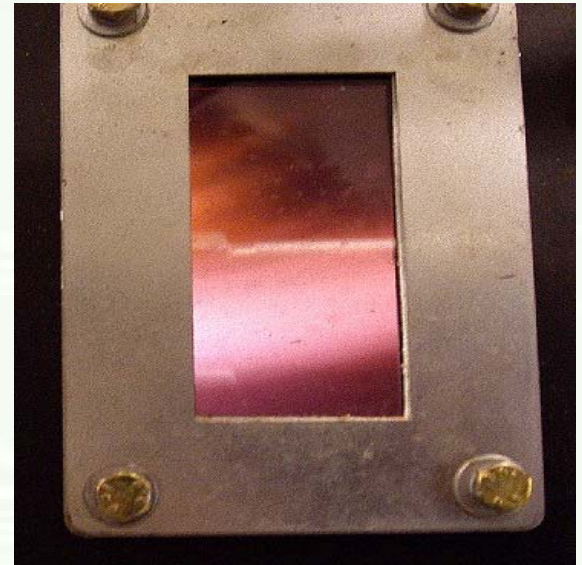
Gasification Problems & Actions



- Briquette density too high
- Fuel : throat ratio ?
- Bridging observed (blocking)
- Gas quality variable
- Gasifier component removed from container and replaced by another unit
- Fuel density reduced: 1+ to 0.5 g/cm^2
- Geometry of unit changed.....

Continuing Work (12 months)

- Complete the refit with new design
- Complete gas emission testing
- Industrial demonstration at two sites in UK planned
- Compliance with EPA/ IPPC considered
- Feed outcomes into MOND project....



MOND Project Structure

- Carry out Techno-economic identification of technologies for energy recovery from biomass
- Identify needs & technical/non technical barriers
- Compare technologies and apply and review Quantifiable Criterion MATRIX
- Evaluate efficiency of use and potential reduction in energy (in accordance with EC BREF documents)
- Conduct international Conference / Workshop
- Produce an interactive Web site for dissemination to European leather industry

Compilation of Database

The partners have been:

- Reviewing and acquiring information regarding technology suppliers for the purposes of compiling a database of RES technology providers
- Preparing a review of the demand for technology, based upon waste disposal quantities across the EU

Overcoming Technical & Non-Technical Barriers

The barriers identified include:

- Public perception - key issue and main barrier
- Technical and cost concerns
- Legislative position and cost of enforcement - less of an issue

The MATRIX (!!)

Compare technologies and apply and review
Quantifiable Criterion MATRIX including:

- Economic standards (E1500/ Ktoe)
- Safety standards (employee quality of life and health and safety improvement)
- Environmental standards (emission standards according to EU Incineration Directive)
- Energy efficiency standards (>45% efficient recovery) giving rise to a techno-economic evaluation of technology.

Gasification Conference

- 29 September - 1 October 2004
- Northampton, United Kingdom
- Price includes 2 nights accommodation, meals and Conference Dinner
- 500 + VAT
- Contact rita@blcleathertech.com

SEE YOU NEXT YEAR!