

## **Chemical technologies and products from renewable sources: recommended use in industrial/agricultural lubricants and chemical auxiliaries**

*F. Bucelli* – Houghton Italia Spa, Genoa, Italy

Italy is the fourth largest consumer of lubricants in Europe (exception made for Russia) after Germany, France and U.K.

In our country during these last years (2000-2001-2002-2003) the total consumption of industrial lubricants is estimated around 270.000 tons/y, the 95% of this amount comes from “non renewable sources”.

Machining lubricants (as hydraulic, turbine, compressor, machinery and gear oils) and metalworking oils, rust preventives, quenching oils and so on represent a wide range of applications that often are very difficult to keep under control by Health & Safety and Environmental National & Local Authorities.

The use of chemical auxiliaries and lubricants coming from renewable sources represent therefore an opportunity that should be taken into consideration.

Nowadays a company that wish to maintain its presence on the market and manufacture in the meantime products and chemical technologies with excellent safety level for the end-users, should consider to replace own products and formulae containing a wide range of compounds coming from non renewable sources with other ones coming from renewable sources.

The use of vegetable oils and their derivates represent often a condition which reward the presence of the company on the market minimizing in the meantime its environmental working impact .

With this paper we wish to point out the different opportunities offered by natural chemical technologies (green chemistry) and the valuation of the relevant quantities involved on the market.