

## Lead Metal Production LCA

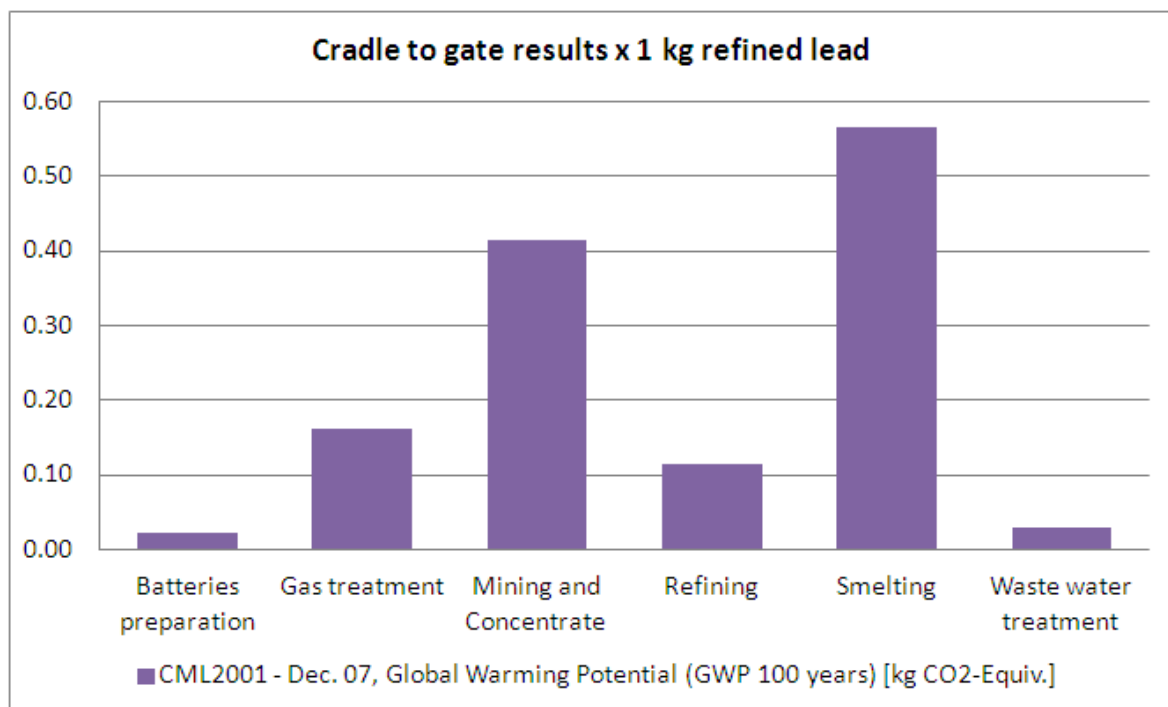
ILA has completed a Life Cycle Assessment (LCA) assessing the environmental impact associated with primary (metal generated from ore) and secondary (metal generated from scrap through recycling) production of lead metal within 27 EU countries (excluding Croatia).

The main findings of the study are as follows:

**High recycling rate** - Lead has one of the highest recycling rates of all materials in common use today, and can be recycled over and over again, indefinitely, without any loss to its inherent properties.

**Low energy demands** - Due to its low melting point lead also has one of the lowest energy demands of any metal.

**Biggest impact** – Mining and smelting have the biggest impact – the graph below demonstrates the results for global warming potential. The main contributors in mining and concentration are the fuel combustion and power production. Direct emissions from smelting and indirect greenhouse gases from power generation are the main contributors for smelting.



This work has been conducted by PE International, and the report and Life Cycle Inventory (LCI) data are available on request.

**What is a LCA?**

LCA is a tool that is increasingly being used to examine the environmental impact of a product through its entire life cycle. For metals, a typical 'cradle to grave' LCA study covers the mining and extraction of raw materials, their fabrication, use, and recycling/disposal, and includes energy and transportation considerations and all the other product supplies required.

**June 2014**