

# “Green Lead” a new approach to product stewardship

Presented  
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# Broadening Our Horizons

- ✿ Australian Minerals Industry *Code for Environmental Management*
- ✿ WWF report
- ✿ Cannington invitation to NQCC to conduct environmental assessment
- ✿ Report titled "Broadening Our Horizons"

## “Broadening our horizons” outcomes

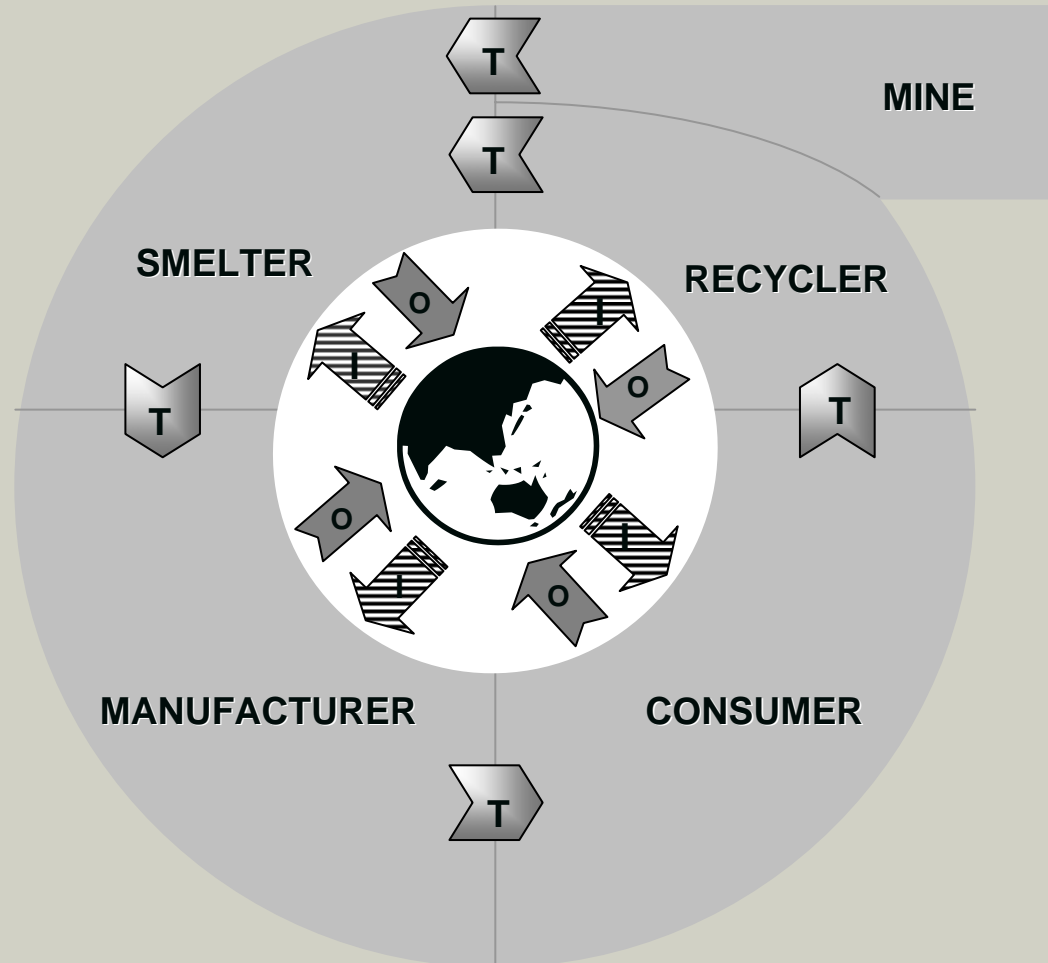
The key issues, identified by NQCC , that need to be addressed by Cannington include:

- community input to risk analyses,
- a separate indigenous social impact assessment
- peer review system of community reporting,
- specific research of the operating environments , and
- **conduct detailed life-cycle analyses and develop stewardship protocols for products and waste.**

## Green Lead vision (2003)

**Green Lead™ is the vision of mining, processing, transporting, treating, manufacturing, storing, using and recycling lead – with zero harm from lead exposure to people and the environment.**

# Green Lead sigma cycle



## The original plan

Establish a pilot involving:

- Australian Mine
- Transporter
- European Smelter
- American battery manufacturers
- International Consumers
- Asian lead recycling company

Focus of the pilot study is on batteries - over 75% of lead use

See [www.greenlead.com](http://www.greenlead.com)

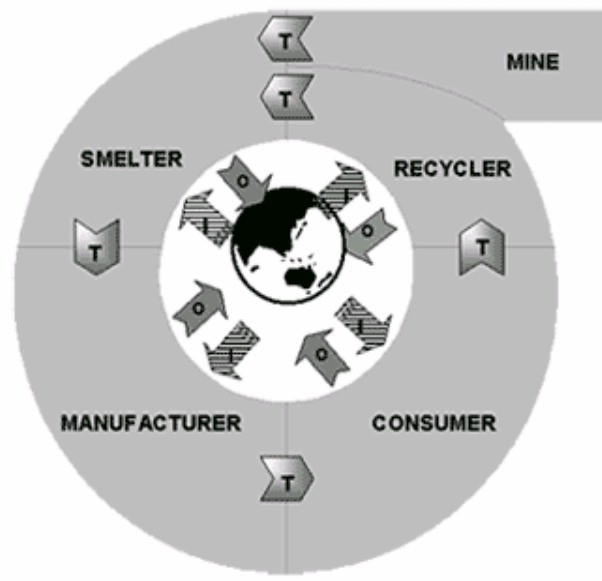
# Green Lead™



Green Lead™ is the use of best practice to all aspects of mining, transport, manufacture, use and reuse of Lead in order to minimise people and planet exposure to Lead.

The concept is simple, but complex in its application. It is proposed to take a 'whole of lifecycle' approach to lead and its impacts on people and the environment and to analyse all of them.

The process will commence with a [Lifecycle Analysis Framework](#), which will then be used to develop a series of [Product Stewardship Protocols](#). These protocols will then be used to develop [Accreditation](#) for all aspects of the Lead lifecycle



# Green Lead™

Home > Lifecycle Analysis Framework

Search:  GO!

- Chapter 2 - Proposed General Methodology
- Chapter 3 - Goal and Scope Definition
- Chapter 4 - Inventory
- Chapter 5 - Impact Assessment
- Chapter 6 - Conclusion
- Chapter 7 - Glossary
- Chapter 8 - References
- Chapter 9 - Appendices

## Lifecycle Analysis Framework

### Introduction

The purpose of this document is to discuss the issues associated with undertaking a Life Cycle Analysis as part of the proposed Mother Earth to Rebirth (MER) Product Stewardship Protocol under Green Lead. It also discusses issues regarding a product-system wide LCA, and makes recommendations regarding the standardisation of LCA within the MER framework. The discussion is largely based on experience from the recent first-pass of an LCA conducted at BHP Billiton's Cannington Mine and also borrows heavily from Wenzel et al. (1997), Weidema (1997), and Barnhouse (1998).

*It is hoped that this paper will provide a starting point for the discussion and development of a Green Lead LCA Standardised Methodology. Comments and input would be greatly appreciated (refer to the [contacts](#) page for details).*

[The PDF version of this paper \(4Mb\)](#)

# Steps to success

- Step 1 - Impact Identification
- Step 2 - Develop Green Lead Standards/Criteria
- Step 3 - Green Lead Process Certification
- Step 4 - Product Stewardship and Sustainable Development

# What's next ?

- Finalise all sector involvement
- Agree on protocols
- Agree on certification program (do not reinvent the wheel !!)
- Commence certification
- And then we will achieve .....
- A GREENLEAD WORLD
- In which the practices will all be best practice
- .....and the image will then look after its self

# ENVIRONMENTAL PRODUCT DECLARATIONS (EPD)

In summary, EPD is:

*A declaration of contents about products and services and what type of environmental problems they cause in a life cycle perspective.*

- EPD utilises ISO TR 14025 Type III Environmental Declarations.
- The EPD system is an attempt to apply ISO TR 14025 in practice.
- The system is based on Life Cycle Assessments, LCA, according to ISO 14040-14043.

# APPLICATION OF EPD SYSTEM & GREEN LEAD™

The EPD system is applicable for all products and services within clearly defined product groups and service types to ensure objectivity, comparability and credibility in communicating their environmental performance.

**Green Lead applies to individual lead products and services**

# EXAMPLES OF COMPARISONS FOR GREEN LEAD™

- Green Lead Batteries *versus* Non Green Lead Batteries
- Green Lead Ingots *versus* Non Green Lead Ingots
- Green Lead Concentrates *versus* Non Green Lead Concentrates

# WHAT DOES EPD MEAN TO GREEN LEAD™?

The EPD system is developed to meet various information needs within the supply chain and for end products (both in the private and public sector) as well as for general purposes in information activities and marketing.

**This will allow the consumer to validate the claim of Green Lead:**

**“Zero harm from lead exposure to people and the environment”**

# FEATURES OF BOTH EPD SYSTEM & GREEN LEAD™ REQUIREMENTS

- Life Cycle Analysis (ISO 14040-14043)
- Environmental Labels and Declarations (ISO 14020)
- Utilise product-specific requirements (PSR)
- Valid for 3 years
- Independent verification

# ADDITIONAL REQUIREMENTS FOR GREEN LEAD™

- Lead Leakage Survey
- EMS (ISO 14001: 1996)
- OHSAS 18001 (or other equivalent)
- Remedial site management plans

## Lead industry sector can contribute by:

- openly supporting and endorsing the green lead project;
- suggesting improved assessment methodologies to 'measure' green lead practices;
- participating in the development of the green lead project ;
- being creative in the promotion of green lead
- contributing to the pilot assessment phase of green lead
- helping to design systems that will facilitate the identification and recovery of green batteries.

# A green lead world .....

The ongoing success of the Green Lead project is dependent on the support of all sectors in the life cycle of lead to improve the practices within the lead life cycle

Thank you – any questions ?

