



24.03.2022

Working with Sustainability

Presentation of PAC



ABOUT US

ABOUT THE COBALT INSTITUTE?



Global trade association
representing cobalt industry and
value chain.



Promotes the sustainable and
responsible production and use
of cobalt.



Knowledge centre for regulators,
governments, industry, NGOs the
media and the public.



Membership driven organisation
acting in the collective interest in a
efficient and cost effective manner.

MEMBERS



GLENCORE



Jervois

sherritt



SUMITOMO
METAL MINING

TRAXYS

umicore



ALBEMARLE

borchers



COLOROBBLIA
ESPAÑA

CoreMax



EGG
KIMYA

eramet



itaca
grupo esmalglass-itaca

HALDOR TOPSØE

JM Johnson Matthey
Inspiring science, enhancing life



JX JX Nippon Mining & Metals

LCM
less common metals



VENATOR



CobaltBlue



Electra
Battery Materials



WHAT WE DO



Global Chemicals Management: The CI is a leader in the human health and environmental science of cobalt in the workplace and the environment - through the CI, members have invested over €30m to ensure regulatory compliance and market access across the globe.



Market Development: Through research, public engagement and publications, the CI promotes the use of cobalt in its current applications, providing details on its unique properties and critical role in these technologies. We also investigate new and emerging uses for cobalt.



Responsible Sourcing: The CI and its' members are playing a leading role in addressing the issues around the sourcing of cobalt and launched the Cobalt Industry Responsible Assessment Framework (CIRAF) to help members meet current challenges in raw material provenance. Additionally, the CI plays a leading role in the development of key responsible sourcing standards.



Sustainability: The CI develops crucial data that helps make cobalt a raw material of choice for downstream users and informs the decisions of regulators and policy-makers. We developed the first cobalt industry life-cycle assessment (LCA) and are currently updating it to include key battery materials.

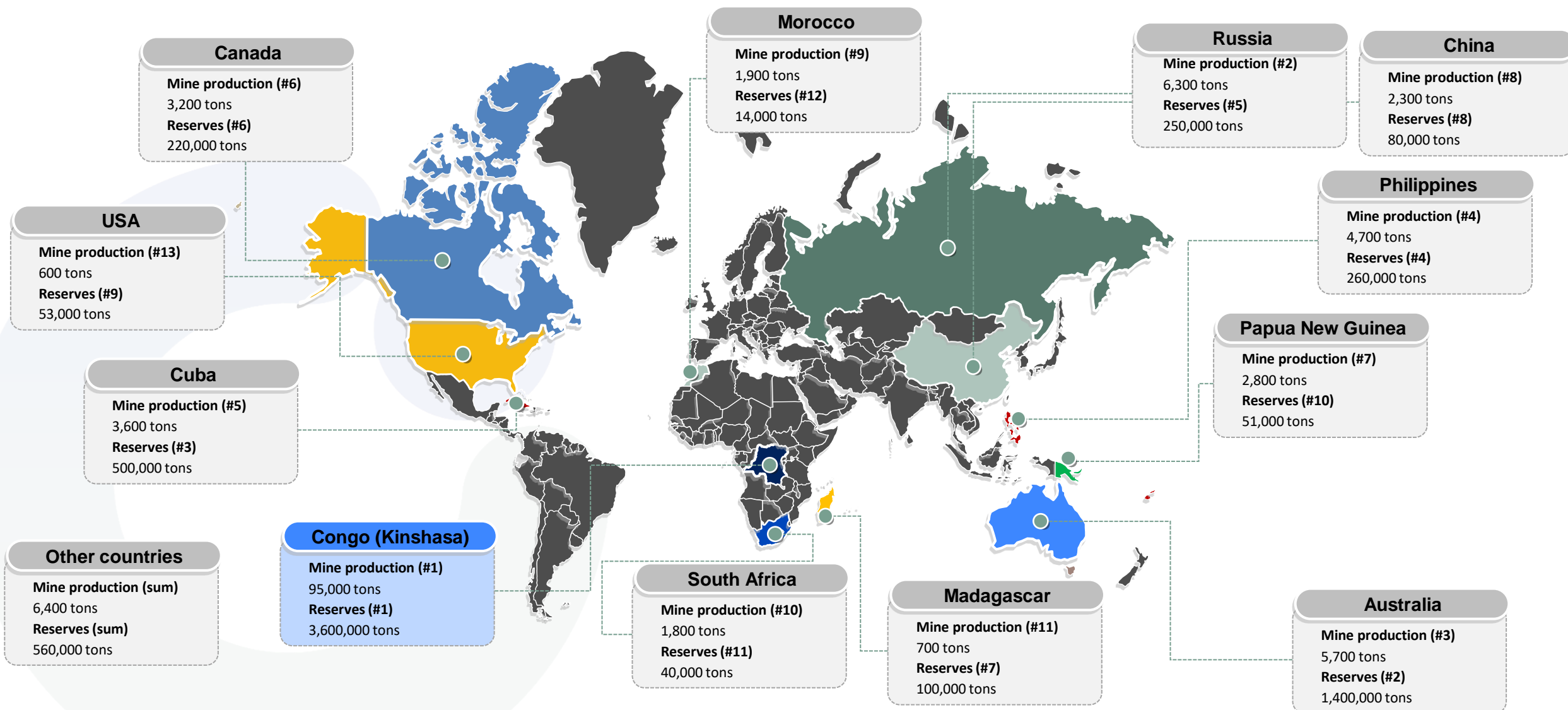


Government Affairs & Communications: Recognised as the authoritative voice of the cobalt industry by many governments around the world, the CI ensures its members have a place at the table when big decisions are made. Through our communications we promote cobalt and position the CI as the centre of knowledge on cobalt.



ABOUT COBALT

COBALT PRODUCTION AND RESERVES (2020)



SPOTLIGHT ON THE DRC



- DRC accounts for **60-70%** of world cobalt supply (approx. 100K tons).
- Mineral extraction accounts for **90% of the country's exports** and constitutes a core element of the Congolese economy.
- Cobalt production concentrated in an area known as the “**Copperbelt**”. Haut-Katanga and Lualaba provinces are not considered to be prone to endemic conflict.
- Large-scale mining (LSM)/industrial mining represents **70-80%** of cobalt production.
- Over 100,000 artisanal miners extract **10-20%** of cobalt production.

ARTISANAL AND SMALL-SCALE MINING (ASM)



Images Credit: David Sturmes (Fair Cobalt Alliance)

AN OVERVIEW OF COBALT USES

HUMAN HEALTH

Cobalt is essential for, and forms part of, vitamin B12

RECHARGEABLE BATTERIES

Cobalt-based cathode technology is vital for sustainable technologies including electric mobility and renewable energy storage for load balancing.

MAGNETS

Cobalt can be magnetised. When alloyed with aluminium and nickel it makes particularly powerful magnets.

MEDICINE

Cobalt-chrome alloys are used in orthopaedic and dental implant due to their high biocompatibility, and high corrosion and wear resistance.

Co

ALLOYS

Superalloys and cobalt are used in jet turbines where high temperature strength is important.

ELECTRONIC COMPONENTS

Cobalt is used in many areas of electronics technology, such as integrated circuits and semi-conductors.

CATALYSTS

Cobalt has major uses as a catalyst in the petrochemical and plastic industries.

PLATING

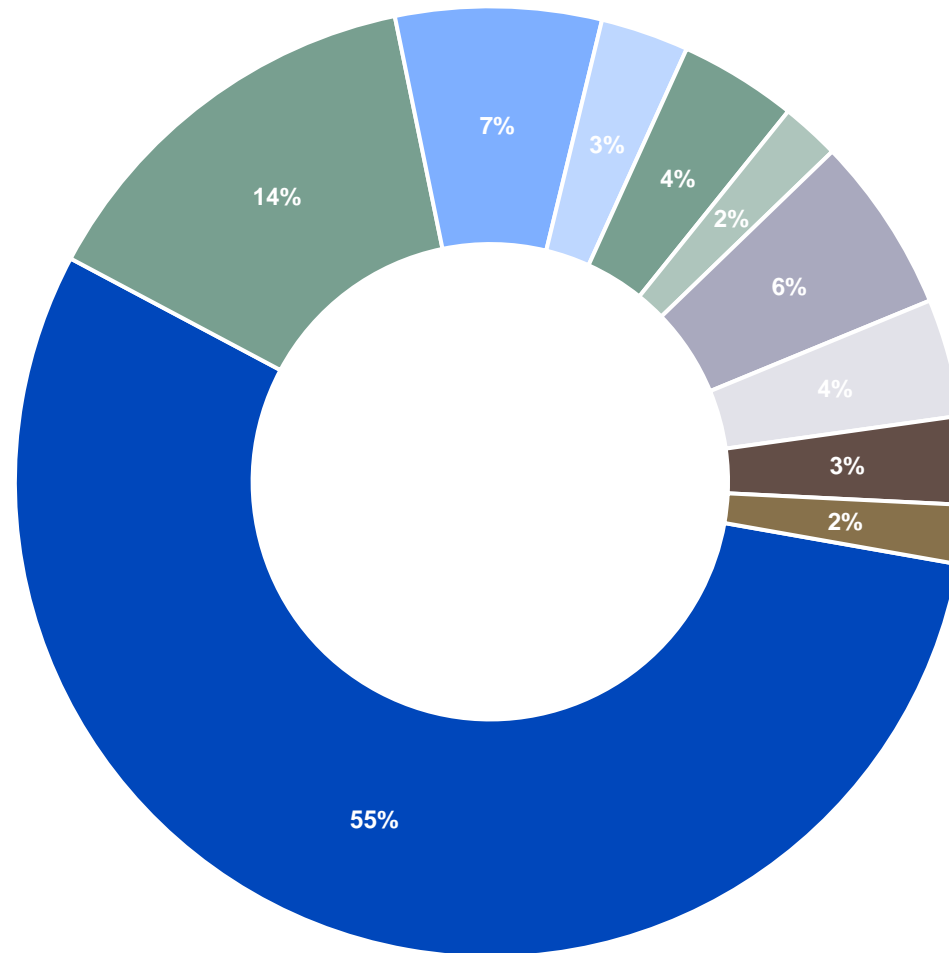
Cobalt is used in electroplating because of its hardness, appearance and resistance to oxidation.

INKS AND PIGMENTS

Cobalt has been used for centuries to produce brilliant blue colours in pottery, enamel and glass.

AN OVERVIEW OF COBALT USES

- Batteries
- Superalloys
- Hard metal
- Hard facing
- Magnets
- HS Steel
- Catalysts
- Pigments
- Organics
- Other



COBALT IN THE GREEN ECONOMY

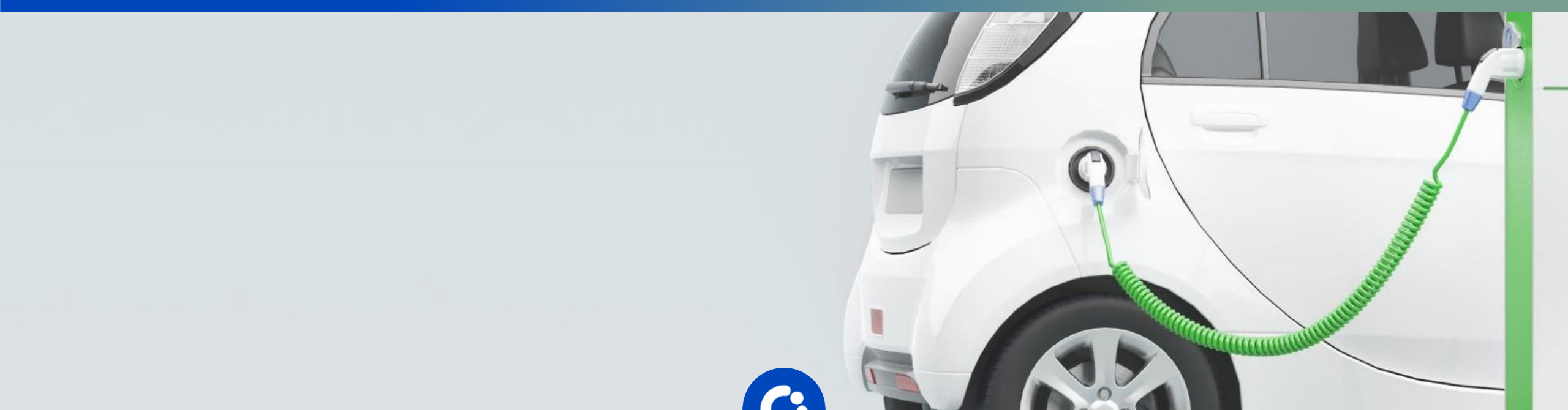


Cobalt is **crucial to the future low-carbon economy**: it ensures safe and durable batteries for electric mobility, provides energy storage of intermittent renewable energy.

Cobalt is **key component in a lithium-ion battery**. It makes the battery safe, stable, efficient, and long-lasting.

Cobalt is part of the solution to the **circular economy**: its battery materials can be recycled and used over and over again.

It is the presence of cobalt in the battery that makes **recycling economically attractive**.



EU POLICY AGENDA

EU ESG & POLICY AGENDA IMPACTING COBALT

- Chemicals Management Legislation and Regulation:
 - Chemicals Strategy for Sustainability and REACH Review; and
 - Cobalt specific regulation under REACH and CLP.
- Battery Regulation.
- Corporate Due Diligence.
- Raw Materials and Trade Policy.
- Horizontal Climate Packages (Green Deal, Fit for 55).

PUBLIC AFFAIRS ENGAGEMENT – SOME OBSERVATIONS

- Acknowledge the challenges and be transparent.
- Engage before the issue is there.
- Highlight the work industry has done/is doing to address challenges outside of legislation or regulation.
- Ensure development of data and studies to provide the information policy-makers and wider society require.
- Be clear as to contribution to both the ESG and sustainability agendas.
- Like the challenges and opportunities, do not seek to silo as independent issues.
- Always be political when discussing the technical.

AN EXAMPLE: RESTRICTION V OEL

- Proposal for a Restriction under REACH:
 - Not all Cobalt compounds;
 - Exposure levels very low;
 - Health benefits v costs not proportionate; and
 - Risk of double regulation.
- CI argued that an OEL under the CMD would be the appropriate RMO:
 - Covers all cobalt compounds;
 - OEL process will result in a number which is feasible and proportionate;
 - OELs are familiar to industry and enforcement authorities;
 - No double regulation.



18 Jeffries Passage, Guildford, GU1 4AP UK
Tel: +44 1483 578877
www.cobaltinstitute.org