

## Fact Sheet: 'Responsible Aluminium' and the role of ASI

From a lifecycle perspective, 'responsible aluminium' focuses on the sustainability and human rights impacts of producing aluminium, as well as energy savings gained through use and reuse. Aluminium's many applications include:

- Transport: Lower GHG emissions through lighter vehicles and through its recyclability
- Infrastructure: Bringing energy efficiency for cities and buildings in an energy constrained world
- Packaging: Preserving food and medicines through its unique barrier properties.

### ASI's independent third party certification

- The Aluminium Stewardship Initiative (ASI) is developing a global independent third party certification program to ensure sustainability and human rights principles are increasingly embedded in aluminium production, use and recycling.
- ASI's Performance Standard covers critical issues for the entire aluminium value chain including biodiversity management in mining, indigenous peoples' rights, greenhouse gas emissions, waste management and material stewardship.
- A Chain of Custody standard is also in development, to link responsible production with responsible sourcing and support increased emphasis on sustainability in procurement practices.

### Greenhouse gas emissions

- ASI aims to contribute to the global effort for climate change action through the development of its Certification program for the aluminium value chain. This is particularly important in light of the COP 21 agreement to keep global average temperatures below 2°C above pre-industrial levels and for countries to pursue efforts to limit the temperature increase to 1.5°C.
- Approximately 80% of all GHG emissions in the aluminium industry worldwide relate to the energy-intensive smelting process.

**ASI's role:** ASI's Performance Standard requirements represent a shift towards a lowered emissions profile for the sector that is significant and long-term. The ASI Performance Standard includes two smelter-specific criteria:

- Smelters starting production after 2020 must achieve a level of direct and indirect (Scope 1 and 2) GHG emissions below 8 tonnes CO<sub>2</sub>-eq per metric tonne of aluminium produced.
- Existing aluminium smelters that were in production before 2020 must achieve the 8 tonnes CO<sub>2</sub>-eq per metric tonne level by 2030. To put this in perspective, the current global average for aluminium ingot production is estimated to be [12 CO<sub>2</sub>-eq per metric tonne](#).

ASI is exploring what a 2°C compliant GHG emissions trajectory would look like for the aluminium sector and will consider the implications of the new COP 21 global agreement. A GHG Working Group will be established in 2016 under the ASI Standards Committee, to enable input and engagement with climate change experts, members and stakeholders. Once the 2°C trajectory is better understood, ASI will incorporate the findings into the next revision of the Performance Standard.

## Recycling

- Aluminium is 100% recyclable and experiences no loss of properties or quality during the recycling process.
- Recycling aluminium also uses only 5% of the energy used to create new aluminium and emits only 5% of the greenhouse gases. This is why approximately 75% of the aluminium ever produced is still in use today. The majority of aluminium is used in products with very long use phases, for example transportation products that have a typical lifetime of 20 years or buildings with lifetimes of approximately 50 years.
- Recycling of post-consumer scrap and waste requires a number of conditions, including the availability of systems to collect and sort used materials, and the adequate design of products that enable classification and recycling, among others.

**ASI's role:** ASI's standards place requirements on downstream companies that design and produce consumer and commercial goods to consider future recyclability and support society's efforts to increase recycling.

## Indigenous peoples' rights

- Mining and mining-related activities (exploration, development, resource extraction, processing, transportation and waste disposal) often take place on, or near, indigenous lands.
- Major industrial developments can have significant adverse impacts on indigenous groups and/or vulnerable groups and individuals, affecting their rights to self-determination, infringing on their lands, territories and resources, and threatening their ability to maintain their culture, including their cultural heritage and recognition of their distinct identities.

**ASI's role:** ASI is convening an Indigenous Peoples Advisory Forum as part of its formal governance structure. This group will be comprised of representatives from indigenous peoples' organisations and indigenous peoples' rights experts. The Indigenous Peoples Advisory Forum will liaise with both the ASI Board and Standards Committee on matters relating to standards setting, the ASI Complaints Mechanism, and the broader involvement of indigenous peoples in ASI's programs.

## Waste management

- Between two and four tonnes of bauxite are required to produce one tonne of alumina. Once the alumina is extracted from the bauxite, the remaining bauxite residue is stored in landfills. Disposal of the bauxite residue is a challenging aspect of alumina production.
- Aluminium smelters also generate significant quantities of solid waste. One of the main sources of waste production during the smelting process is 'spent pot lining' (SPL) from the relining of pots, which takes place every five-to-eight years. Leading companies minimise the generation of SPL by extending life times of the pots, and ensure proper handling of SPL waste through treatment or use by other industries, such as the cement industry.

**ASI's role:** ASI's standards set requirements for good practice for both types of wastes. Through effective planning and management the negative environmental impact of waste can be minimised, and the true cost of dealing with waste can be better understood.

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