Rest of the World

Our presence in Europe and the FSU (the former Soviet Union) includes our headquarters in Baar, as well as a large zinc asset in Kazakhstan, a nickel refinery in Norway, zinc/lead assets in Spain, Germany, Italy and the UK, and many agricultural and logistics assets. This region also includes a significant nickel operation in New Caledonia, in the southwest Pacific Ocean. The total workforce comprises over 45,000 employees and contractors.

In 2015:

- **29%**
  - of our procurement in New Caledonia was with local suppliers

- **78%**
  - of our employees in New Caledonia were local

- **90**
  - local entrepreneurs supported in New Caledonia

- **$1.5 million**
  - invested in local power distribution networks.
  - 16,000 people benefited from health and education programmes in New Caledonia

- **$1.3 million**
  - invested in power generation and distribution in Kazakhstan, as well as roads

- **$211,000**
  - spent supporting 850 local entrepreneurs in Kazakhstan

- **58%**
  - of our procurement in Kazakhstan was with local suppliers; all of our employees were local
Our people: safety

Maintaining safety leadership is a priority across our operations.

**SafeAgri**

Our FSU assets maintained a strong focus on their safety culture in 2015, which will continue. We began to roll out the SafeAgri programme, based on the Group SafeWork initiative; work began in March with safety leadership sessions in Russia and Ukraine. All FSU asset leaders, country managers and senior HSEC management were present.

To deal with the large number of assets in the FSU, we identified a team of 15 additional local SafeAgri trainers. Each trainer was responsible for training supervisors and employees and initiating the SafeAgri rollout for a specific a group of FSU assets.

We carried out an issue-based risk assessment, which determined many action plans for improvements, which we implemented accordingly. Agriculture’s HSEC team increased the number of announced and unannounced site visits at FSU assets during 2015 (over 10 visits). Each visit focused on safety interventions and coaching site managers in leadership and the SafeAgri programme. To track the implementation of SafeAgri, monthly progress reports were discussed.

Our people: health

We seek to understand and address causes of occupational illnesses amongst our workforce.

**A focus on occupational diseases at Kazzinc**

During 2015, Kazzinc, our zinc asset in Kazakhstan, has undertaken a number of measures to address the workplace-related health risks facing their people. Kazzinc focused in particular on strengthening its systems for assessing and monitoring our people’s blood lead levels. It also worked on steps to prevent levels from rising, and to reduce levels if they are too high.

We worked with a local public healthcare centre to establish baselines and conduct periodic tests. Monitors track lead at our assets and our people work to a task rota that ensures minimal exposure. Individuals with higher lead levels are transferred to other duties that do not involve contact with lead, to reduce exposure.

Kazzinc has also undertaken a comprehensive review of work conditions, and introduced a number of personal protective equipment changes and upgrades to minimise the risk of musculoskeletal or respiratory diseases.

Going forward, one of Kazzinc’s top priorities is to lower its occupational disease rates, as the asset focuses on identifying and eliminating causes.

Environment

We make use of new technologies to minimise our impact on the environment.

**Agricultural improvements: no-till farming**

Our Russian farming assets started to develop no-till farming methods recently; about 5% of our land is cultivated this way, and we intend to increase this figure. Seeds are deposited directly into untilled soil by opening a narrow slot trench or hole.

This offers minimal soil disturbance, and allows soil to be permanently protected by vegetation, significantly reducing soil erosion and conserving water in the soil. After several years this method can lead to higher crop yields. We also believe it reduces climate change risks.

Although it will increase the chemical usage per hectare for plant protection (herbicides and N₂O emissions), it will decrease GHG emissions from the soil, and reduce the use of fossil fuel and synthetic nitrogen fertiliser. We expect operational costs per hectare to reduce, due to lower fuel consumption and fixed costs per hectare.
Efficient energy management

Nikkelverk in Norway was founded in 1910, and various owners have upgraded and expanded the facility over the years. Today, it is one of the most efficient nickel refineries in the world; over the last two years, it has successfully implemented several energy management programmes. From great to small, these include initiatives based on pressurised air, steam, ventilation, reusing waste heat, and process improvements.

We have implemented a systematic approach to energy efficiency improvements in our quality system. Norske Veritas provided auditing for the first ISO 50001 (the international energy management standard) revision in December 2015, with accreditation to take place during the first quarter of 2016. Early improvements have included eliminating the leakage of pressurised air and reducing steam losses via better installation, eliminating leakages and removing any steam pipes that are no longer in use. We have also stopped using paid-for electricity to heat our buildings, instead using waste heat from our operations. Three significant energy initiatives implemented in 2015 will provide energy savings of over 30GWh annually. These projects have been made possible through $6 million in funding from ENOVA (the Norwegian government energy fund).

- We have installed new nickel electrowinning tanks with improved electrical contacts and energy-efficient anodes, reducing overall energy consumption and lowering operational costs. We expect this to provide energy savings of 5GWh per year.
- In our cobalt electrowinning assets, we have started using waste heat from our sulphuric acid plant to replace electrically-generated steam. This is used both internally, to heat our facilities, and externally, for heating within the local district. We will be selling the equivalent of between 20 and 40GWh every year to the district, and saving 10GWh internally.
- We are working to replace any remaining older anodes at our nickel electrowinning assets with new, energy-efficient box-anodes, as a four-year programme running from 2014 to 2017. Once the programme is completed, we expect it to provide energy savings of 17GWh per year and improve the stability of our electrowinning process.

Working with the community on redundancies

Koniambo Nickel has contributed significantly to development of industrial development capabilities in New Caledonia’s Northern Province since it began operations there. Unfortunately, recent commodity price drops have combined with technical challenges, leading us to the difficult decision to retrench 250 employees and 750 contractors in 2015.

Throughout the decision-making period, Koniambo has maintained timely and transparent dialogue with local contractors, business partners, tribal leaders and the provincial government. It has also provided support for its workforce, host community and local small businesses.

Before the recent economic downturn, Koniambo ran a training initiative, in partnership with the provincial government, that trained 866 current and prospective employees. 51 completed pre-employment training in mine operations, seven undertook an 18-month superintendent training programme, and 44 completed a 12-month management development programme.

Koniambo also provided community schools with $175,000 to improve sanitation and learning environments. Koniambo worked closely with tribal leaders and sub-contractors to mitigate the impact of downsizing. We held town hall meetings with sub-contractors, while its procurement team supported sub-contractors in diversifying their client bases, and helped them join business assistance programmes managed by the provincial government. Koniambo also co-funded welding and scaffolding certification training with the provincial government, as well as HSE training and accreditation for first-line supervisors working for 16 local contractor companies. Nine employees achieved a health and safety certificate in 2015.