





Sustainability and People

It is our goal to transform our Swedish graphite deposits into green anodes and advanced materials for the lithium-ion battery and consumer products market. However, supplying a product that has a role in a green future is not enough; we need to do so sustainably.

We are committed to operating and acting sustainably. That means using our resources efficiently, embracing clean power and being socially responsible.


In 2021, we developed a sustainability approach and work program covering five focus areas. These were identified through a review of internal factors including our risk profile and operational portfolio; and external factors such as our regulatory environment, customer, supplier and partner interests, local community and other stakeholder interests, the views of ratings agencies, and the standards set by external sustainability initiatives.

	Our Aspirations	Alignment with the UN Sustainable Development Goals
Responsible Value Chain	We are embedding sustainability across our value chain, from using responsible suppliers to partnering with leading manufacturers of lithium-ion batteries.	7,8,12,13
Governance	We are reliable, work with transparency, and can be trusted to deliver on our commitments and plans. We are committed to behaving ethically and upholding high governance standards.	8
Environmental Stewardship	We focus on minimising and mitigating our impact on water, land, air quality and biodiversity. We are resourceful and resource efficient in delivering green products.	7,12,13,15
Social Responsibility	We respect the cultures, customs and values of the societies in which we operate. We aim to work collaboratively with our stakeholders to deliver positive outcomes.	7,8,13
Our People	We seek employees with an entrepreneurial spirit that are looking to have a positive impact. In return, we provide a safe, inclusive, supportive and diverse workplace.	8

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The UN Sustainable Development Goals (SDGs) were created to achieve a better future for all. In so doing, the 17 SDGs recognise that tackling climate change, preserving our oceans and forests whilst ending poverty and other deprivations must work in conjunction with economic growth.

In developing our sustainability framework, we mapped our activities and impacts across our value chain against the SDGs, focusing on the SDGs and targets where Talga has the potential to make a positive or negative contribution. We have shortlisted five SDGs that we will focus on as a business. Over the next year Talga will work to develop internal targets aligned with these SDGs.



Our mission is to enable the world's most sustainable batteries and consumer products through innovative graphitic materials.

Responsible value chain

Unlike traditional battery anode manufacturers, our production processes extend across the complete value chain from mining to product and are designed to achieve optimal economies of scale and sustainability. This vertical integration enables better costs, quality, and environmental control, allowing Talga to make best use of its natural graphite resources for production of greener battery anode and advanced materials.

Product Stewardship

Our mission is to enable the world's most sustainable batteries and consumer products through innovative graphitic materials. We believe that part of our product life cycle responsibility includes traceability from mine to manufacturer, through to disposal.

We will continuously investigate the techniques and technologies required to achieve and accelerate best practice disposal in the industry, including segregation, treatment, recycling, and ultimate end of life in a safe repository. We will also work in conjunction with national waste management regulators to develop these capabilities.

In 2021 we completed a Life Cycle Assessment (LCA) on our flagship anode product Talnode®-C, investigating the environmental impacts related to the product. The LCA included the evaluation of energy and resource consumption as well as emissions from cradle to gate stages, including raw material processing and anode manufacturing.

The LCA showed global warming potential of the production of 1 kilogram of Talnode®-C is 1.477 kilogram CO₂ equivalent. Talnode®-C's strong environmental credentials are driven by Talga's unique high-yield graphite ore, innovative anode process and use of renewable energy. Compared to synthetic graphite anode produced in China, this is a reduction of 96% in greenhouse gas emissions, which is equivalent to a reduction of ~2.9Mt of CO₂ per million EVs produced¹.

This makes Talnode®-C the greenest graphite anode in the world.

CO₂ emissions to make 1 Tonne battery anode



33.6 Tonnes
Typical synthetic graphite



1.5 Tonnes
Talnode®-C in North Sweden

The LCA also identified areas for improvements. The largest estimated contribution to the environmental impact of the Talnode®-C life cycle is from the purification process and anode plant, specifically chemicals produced by third parties. There is therefore an opportunity to further improve the project's environmental credentials through the establishment of specific requirements on environmental performance within the supply chain. We will continue to update the LCA model with actual production data as the pilot project and commercial facilities are scaled up, together with improved supply chain specifications. The result will be an optimised supply chain for Talnode®-C production with environmental innovation in focus.

Climate Change

We acknowledge the changing global climate and accept the Intergovernmental Panel on Climate Change assessment of climate science, and support the intent of the Paris Agreement to limit global warming to well below 2 degrees above pre-industrial levels.



As a business, we recognise that we have a role to play alongside government in the global shift towards a green economy and net zero emissions. Sweden has made a commitment to be fossil fuel free by 2045 at the latest, and graphite will be a critically important mineral in this transition. Development of Nunasvaara South, trial mining at Niska South, the qualification plant in Luleå and broader graphite exploration programs will be a springboard to a commercial battery anode operation that can provide an environmentally responsible, economically valuable and socially beneficial new industry in northern Sweden.

As Talga progresses the design of its facilities and the establishment of its operations, opportunities are progressively being identified and evaluated for recovering energy and heat, minimising wastes and emissions, and reducing greenhouse gas emissions even further.

Governance

We are committed to a high standard of corporate governance. As a company listed on the Australia Securities Exchange (ASX), we have established a corporate governance framework including corporate governance policies, procedures, and charters with reference to the fourth edition of the ASX Corporate Governance Council's Principles and Recommendations ("ASX Principles").

In 2021, we released our Social Performance Policy and Environmental Policy which articulate our commitment to positively contribute to the development of the communities in which we operate and to minimise the adverse impact on the environment. Full copies of these policies are available on www.talgagroup.com.

To support these policies, we are developing an Environmental and Social Management System which includes topic-specific standards that set the standard of performance across our business. Going forward, we intend to implement these requirements through management plans at each of our current projects. The Environmental and Social Management System is being designed in accordance with ISO 14001, with accreditation being a goal as we move into production.

Environmental stewardship

At this stage of development, we are focused on avoiding and minimising environmental impacts through considered project design. Planning and design is progressing for all active projects, and several field investigations have been carried out over the past year. In parallel, environmental permit applications continue to be developed and submitted applications progressed with assessing authorities and courts.

A trial mining campaign at our Niska South graphite deposit commenced in September 2021. The trial mine will be used to validate our ability to produce high quality, consistent quantities of lithium-ion battery anode material at an expanded scale. This will enable us to gather information about the environmental, geological, and economic properties of the deposit, and further test rehabilitation techniques that can be implemented in our initial operation at Nunasvaara South and across all our future projects.

Construction of a Talga battery anode qualification processing plant, located at Swerim in Luleå, commenced in April 2021. The plant will produce larger scale electric vehicle anode samples for automotive and battery customers at an advanced stage of testing. Once in operation the plant will also be utilised to collect environmental data and test elements of Talga's environmental management system to inform future development plans.

We have commenced consultation for environmental permitting of battery anode processing facilities within Luleå Industrial Park, both at an expanded pilot plant scale and at a commercial scale. The facilities will process graphite from Vittangi into battery anode material for use in the fast-growing European lithium-ion battery industry. The aim is that our responsible mining and innovative processing methodologies can bring great benefits to the area by conducting mining operations with a small ecological footprint and reduce fossil fuel emissions. Environmental impact assessments and environmental permit applications continue to be developed for these two operations.

Social responsibility

We are committed to positively contribute to the development of our communities and to minimise the adverse impact on their livelihoods.

Good relations with landowners, Sami reindeer herding cooperatives and local stakeholders are a priority in our work. We aim to positively contribute to the social and economic development of our host communities, develop and promote respectful and productive relationships with stakeholders, and capitalise on commercial opportunities to benefit people as a result of our business activities. We are working in a diverse range of environments and social settings and recognise the importance of integrating environmental and social management into how we do business.

We are developing a formal Environmental and Social Management System to document the process for managing environmental and social risks. This includes the implementation of the Social Performance Policy and Social Performance Standards which will provide the structure for our commitment to protect labour, human rights, and communities.

Talga has established and been working to a stakeholder engagement plan that continues to be implemented and updated as activities develop.

Our people

Currently, Talga has 38 employees located in five different countries with operations in northern Sweden, R&D and sales in the UK, processing and distribution in Germany, battery anode development in Japan and corporate headquarters in Perth, Australia.

Talga is in the development phase of its initial operations and expects to double the number of employees in the next year. As our world changes at an ever-faster pace, relevant skills are not constant. Continuous development and learning, together with entrepreneurial mindsets, is key to our success and applied both by developing our current team and recruiting new employees.

Safety

Our goal at Talga is zero injuries. We strive to enable a safe and productive workplace that protects and cares for human life and wellbeing. We at Talga are responsible for providing the tools and processes so our employees can complete their roles in a safe and healthy manner. We want all our people to return home safely to their families at the end of the working day.

Continuous development and learning, together with entrepreneurial mindsets, is key to our success





COVID-19

We have proactively implemented a range of new policies and procedures to manage the effect of COVID-19 on our operations, while focusing on the well-being of our people, partners, and customers. These measures have been aligned with directives from both state and federal governments and health departments across the five countries of our operations.

The COVID-19 pandemic will not only have short-term effects, but also long-term consequences that Talga, just like other companies, must take into account in its actions in society. Empathy and humanity serve as cornerstones for how we work and work-life balance continues to be a priority. As we move forward, we will continue to operate in line with our articulated values of having impact, being reliable, favouring ingenuity, and working with transparency.

Diversity and inclusion

We are committed to diversity and recognise the benefits which arise from a diverse mix of skills and talent amongst our employees to enhance performance and achieve our goals. We provide equal opportunities in employment and employment conditions including hiring, training and career advancement. We promote a harassment free workplace, and all reports of impropriety are treated seriously and in a confidential and sympathetic manner.

We treat our people, including our stakeholders and those impacted by our operations, fairly and respectfully regardless of gender identity or expression, ethnicity, religion or other beliefs, functional variation, sexual orientation, and age. We encourage people to be themselves and feel empowered to be true to their culture and have a voice.