

Ingå/Inkoo Community – Top FAQs

When a new industrial project is being considered in a small community, residents understandably have questions. Here are questions and corresponding answers that address these concerns. These will be updated as the project progresses.

1. That is the environmental impact of this project?

The Finnish Ministry of Environment, and its officials have an obligation to the citizens of Inkoo, Uusimaa, and Finland as a whole, to ensure environmental laws and policies are followed. Therefore, a comprehensive environmental impact assessment (EIA) is performed by the project to identify potential impacts on air, water, and soil quality.

Project managers are guided by the concept called, best available technology or best available techniques (BAT) approved by legislators or regulators for meeting output standards for a particular process, such as pollution abatement. BAT is a moving target on practices, since developing societal values and advancing techniques may change.

However, Blastr project managers are applying best available technologies along with a “spare no reasonable expense” doctrine. This process is performed in stage gates and becomes a process of elimination as engineering activities and equipment decisions are methodically refined over the planned 30-month project development period. An important milestone was reached in July 2024 when the primary technology providers were selected marking a significant step forward toward developing more granular final data points.

2. If there is no steel plant in *Ingå/Inkoo* today, how can 670,000 tonnes of CO₂ annually be considered a reduction in CO₂?

Inkoo is a community that shares an atmosphere with the entire world, as well as the seas that flow over our planet. Where does one’s backyard end and another begin if CO₂ and other greenhouse gases have no boundaries or concerns for one backyard over another?

The majority of flat rolled steel mills in Europe emit 2,000kg (or more) of CO₂ for every one tonne of steel. That is 2 tonnes of CO₂ for every 1 tonne of steel. Blastr with its entrepreneurial spirit, indirectly exerts competitive pressure on those mills to reform their production methods or potentially close their heavy emitting furnaces. But generally, transforming existing mills is a challenging and time-consuming process. Blastr will emit 90% less CO₂, and this lowers the CO₂ in our atmosphere and therefore helps to meet the 1.5-degree Celsius goals.

This project also creates demand for renewable energy, further aiding the country’s goal to transition to lower emission energy and reduce energy related GHG.

3. Why does it have to be in *Ingå/Inkoo*, *why can’t you build this somewhere else, not in our backyard?*

Electric arc furnace plants or “mini-mills” are much smaller in scale than the blast furnaces and basic oxygen-furnace process in traditional steelmaking, but larger (fossil-free) electricity requirements and efficient logistics are critical to their lower emission success.

Per an article in Financial Times about the green steel transition: *“The winners will be newcomers to the steel industry that are not saddled with legacy infrastructure. Those based in regions with access to cheap green energy, such as Scandinavia, Australia and the Middle East. Many believe the production of steel will inevitably move to these regions.”* Source: [Climate tech explained: low-emission steel plants \(ft.com\)](#)

While Finland may not be officially part of Scandinavia, Finland as a Nordic country has one of the world’s most ambitious carbon neutrality targets and is in a strong position to achieve them given its already low reliance on fossil fuels. Source: [Finland’s nuclear and renewable power strengths provide a solid foundation for reaching its ambitious climate targets, IEA review says - News - IEA](#)

Finnish TSO Fingrid and the 400kV substation at Inkoo provide one of the strongest electricity offtake locations in the Nordic power system. Locating on a deep-sea port reduces extra transportation and handling, as well the ice-free deep-sea harbor at Ingå/Inkoo, combine to further reduce CO₂ in its logistics.

4. Why is the Ingå/Inkoo port chosen over the Port-of-Hanko Koverhar location?

The Koverhar location, while exceptional in some respects, lacks the most important component, sufficient existing electricity.

5. This project was started in Norway, why did Norway not want it?

This is a flat-out wrong assertion that the Norwegians did not want a new steel mill and unfortunate that fearmongering is inserted into this topic.

Yes, the project was the vision of a Norwegian based green industrial venture capital fund. However, due to bottlenecks in the Norwegian electricity grid and its transmission system in Southern Norway near ice-free ports, Blastr was unable to secure enough existing grid capacity in Norway.

When Blastr’s project team was presented with the idea of moving the project from Norway to Finland, it was an easy decision. Locating on a former coal-fired plant site with additional available land already being used for industrial purposes in an ice-free existing deep-sea port and with an existing substation and national grid connections, Ingå/Inkoo was a unique opportunity.

In fact, SSAB and H2GS are building their new greenfield steel plants in Northern Sweden because excess fossil-free energy generation is in the North (SE1) and the existing grid has not been built out to move this excess power to the South, SE4 region, a similar problem as Norway. However, congestion in the region’s rail infrastructure as well as the Lulea port, that is also iced over much of the year, creates substantial challenges, that Ingå/Inkoo solves while ensuring Blastr and the Finnish economy significant competitive advantages over the long-term.

Furthermore, Norway is not in the European Union. And in fact, Blastr's new leadership has hired E&Y (Ernst & Young) to understand what is required to move the parent company from Norway to the EU, with Finland as one of those options.

6. Thermal load on the sea of 1050 MW or 9.2 TWH annually, is this really an accurate number today?

No, initial modeling and options for cooling excess heat considered using all seawater, but further engineering studies had the project in cooperation with authorities and consultants eliminate the full seawater cooling option. New scenarios are being considered, and Blastr project managers are applying best available technologies along with a "spare no reasonable expense" doctrine. New guidance and numbers will be coming out in the following months.

7. How will this project affect local air quality?

Emissions at all stages of the project and company development will be closely monitored and regulated to comply with national and local air quality standards.

Blastr project managers are applying best available technologies along with a "spare no reasonable expense" doctrine. Although this is a dynamic project numbers will consciously develop, however, since the selection of our main technology providers we are able to be more accurate on emission figures. We wish to correct some old and rumored numbers.

Incorrect/Outdated non-company numbers:

Particulates:	300 tonnes/annually
SO ₂ :	600 tonnes/annually
Lead:	1,100 tonnes/annually
Cadmium	100 kg/annually
Mercury:	200 kg/annually

Corrected/Updated company data driven numbers:

Particulates:	122 tonnes/annually
SO ₂ :	392 tonnes/annually
Lead:	150 kg/annually
Cadmium:	50 kg annually
Mercury:	20 kg annually

8. How bad will odors be from the plant?

Odors are not an issue in the iron and steel making process this project will employ. Strong odors in older steel mills come from coke-based processes and are related to the release of Sulphur as hydrogen sulfide which has a distinct smell of rotten egg.

Blastr has a hydrogen-based iron and steel process and as such, no coke oven plants, or gas power plants is part of the project. Other less pungent odors that might be emitted from steel melt shop during surface treatment of the steel products, will be mitigated with the idea of spare no reasonable expense by way of proper gas cleaning systems.

9. Inkoo is a wonderful sea community, water pollution needs to be addressed. What plans will be in place to mitigate any negative affect on the waterways?

State-of-the-art water treatment facilities to ensure that any discharged water meets environmental safety standards will be put in place. The project is exploring outsourcing this responsibility to global experts in the field of water treatment. And applying best available technologies along with a “spare no reasonable expense” doctrine is the project’s intentions.

10. PFAS in the environment basically does not break down at all, can exist for more than 1000 years. How will this be mitigated?

There will be none. There is no use of PFAS or Per- and polyfluoroalkyl substances in the project or operations. Any numbers shared were part of BAT modeling in the initial stage one studies, but no PFAS will be used.

11. How will this project impact local wildlife and natural habitats?

No less than six studies are being performed this summer to perform biodiversity assessments along with additional modeling of impacts in both water and land. The project will take steps to protect local wildlife and habitats, including creating conservation areas if necessary.

12. How will increased traffic impact the local community and safety of its residents?

Blastr will work with national and local officials on plans to manage any increased traffic, including potential upgrades to infrastructure. The full traffic report is public and can be downloaded <https://www.inkoo.fi/asuminen-ja-ymparisto/kaavoitus-ja-maankaytto/ajankohtainen-kaavoitus/asemakaavat/joddbole-v/>

In the report that is made by Finnish Consulting Group you can for example see the spread of the traffic and development both under construction and operation phase. As and example the spread of direction of traffic indicating that approximately 60% of the traffic is expected to move eastward on road 51, approximately 20% westward, and about 20% northward on regional road 186, what is a good general spread.

13. What are the expected economic benefits for the community?

Creating good paying jobs will help keep residents in the community, boost local businesses, and increase tax revenues, contributing to overall economic growth in the community. But it will be up to community planners and administration to determine best desired impact on the community.

According to a regional economic impact assessment conducted by planning and consultancy company Ramboll Finland Oy (Ramboll), the steel plant will have a significant economic impact on Finland at national, regional, and local levels. As an example, the property tax revenue of around EUR 6-9 million per year for Inkoo.

Report source: <https://blastr.no/Newsroom/Post/?permalink=ramboll-report-blastr-green-steels-steel-plant-would-generate-nearly-300-million-euros-in-tax-income-for-finland-annually>

14. Has noise modeling considered other companies and industrial activities, albeit those outside the control of Blastr?

Actually, yes noise modeling studies did consider LNG terminal and other activities in the industrial port area. The full noise modeling report is public and can be downloaded <https://www.inkoo.fi/asuminen-ja-ymparisto/kaavoitus-ja-maankaytto/ajankohtainen-kaavoitus/asemakaavat/joddbole-v/>

Blastr modelling shows implemented noise reduction measures, including sound barriers. Noise levels will be monitored continuously, and efforts will be made to keep them within acceptable limits.

15. Will Inkoo residents be prioritized for job opportunities?

Yes, the project will implement local hiring policies and provide training programs to ensure that community members can benefit from job opportunities.

16. How will the project affect property values in the area?

Several factors can affect property values, including perceived environmental impacts, new community offerings, such as a community center and economic benefits. Efforts will be made to mitigate any negative effects on property values.

17. When is construction anticipated to begin?

The project timeline is evolving, but the goal is to have final investment decision and construction started so the plants first low emission coil can be delivered before the end of the decade. The project will keep the community informed as plans progress, including key milestones such as start and completion dates for construction phases.

18. What safety measures will be in place to protect the community?

Comprehensive safety plans, including emergency response procedures, will be developed, and communicated to ensure the community's safety.

19. How will the company ensure that the community is engaged throughout the project?

Regular community meetings, information sessions, and updates will be provided to keep the community informed and involved throughout the project and after operations begin. A community liaison office will be established for community concerns and questions.

20. Will the project contribute to community development initiatives and job training and support?

The project is discussing community benefit agreements, supporting local development initiatives such as schools, healthcare facilities, and recreational areas as operations begin.

Blastr will offer a variety of job positions, including electrical, mechanical, engineering, manufacturing, operations, logistics, administration, and environmental roles. Blastr is committed to hiring local and regional residents and will implement local hiring policies. Comprehensive training programs in collaboration with regional education facilities will be provided, including apprenticeships, on-the-job training, and certifications. Additionally, ongoing professional development opportunities and support for further education will help employees advance in their careers.

21. There is a large tower in the plant renderings, how will the project address the community's concern about visual impact and aesthetics of the plant?

Fortunately, the site Blastr is building on is and has been used for industrial purposes. However, Blastr understands the view from the sea needs to be considered. The company will assemble a team with both community and company members to consider landscaping and reasonable design measures to help ensure that the project blends with the surrounding environment and minimizes visual impact.

For the project visual impact mitigation, more specifics on the design measures and landscaping efforts to reduce the visual impact of the plant are developed. Since our main technology providers now are chosen, we are developing more details layout that will show a modern steel plant and how it can fit in the landscape.

22. What is the typical life expectancy of a new steel mill and when it reaches its end of life, who is responsible for its reclamation?

Steel mills are not easily moved or shuttered like warehouses or retail stores. They are built with operating plans reaching 50 to 100 years. The youngest fully integrated steel mill in Europe is nearly 60 years old. Outokumpu, while not a competitor of Blastr, it makes stainless steel, was established in 1914. SSAB's first steel plant, still in operation today in Oxelösund, was also built in 1914. The SSAB Raahe steel mill was built in 1964 and is why SSAB planned to re-build this traditional blast furnace plant now, until their first revamp project was prioritized in Sweden first.

At the end of its life expectancy, the owner of the plant, Blastr, has the reclamation obligation. No community or tax payers money will be spent for dismantling the plant.

23. What is the probability this project will get fully funded?

The capital markets are difficult. Interest rates, energy crisis, war in Ukraine, all are headwinds for this and other industrial projects in Europe. Additionally, the US and other countries are aggressively attracting projects and businesses away. Consider SSAB moving to Sweden to make its first low emission plant a reality.

Furthermore, in the US for instance, new greenfield start-up steel mills are built at a rate of 1 every 5-7 years. The American steel industry already transformed itself from heavy emitting Bf-BOF production to 80% EAF production. This is why the US is one of the most efficient and low emission steel industries in the world. This has created security and economic stability for the United States industrial sector over the last 20 to 30 years.

Undoubtedly, headwinds exist but Inkoo is viewed as a competitive advantage by the capital markets and momentum is building.

24. A new steel mill and billions of euros investment is difficult to imagine for most people and is therefore scary. How do we know this is possible?

Nothing is a guarantee in life. But with passion, commitment, thick skin, and support from those committed to one planet – one atmosphere - one people, Blastr will succeed.

Our peer company H2 Green Steel is proving the nay-sayers wrong already. An executive of a Swedish based entrepreneurial newcomer, similar to Blastr, gave an interview in media publication, here is some excerpts:

We [H2 Green Steel, a new entrepreneurial Swedish start-up company] have pre-sold 1.0 million tonnes [annually] of steel into various European industries, in 5 to 7-year term take-or-pay contracts.

Those contracts we [H2 Green Steel or H2GS] are getting a 20-30% premium compared to brown steel prices, - a blast furnace-based steel. The abatement of carbon compared to that route is where the premium comes.

We [H2GS] will have a capacity by 2025-26 of 2.5 million annual tonnes, and the 1.0 million tonnes pre-sold is 40% of that annual capacity – guaranteed to be bought every year for the first 5 to 7 years. We [H2GS] do not believe we should sell more now because we think that premium will only increase with time. Source: <https://www.argusmedia.com/en/news-and-insights/latest-market-news/2494034-q-a-h2gs-sees-green-steel-premium-potential>

SSAB and John Deere Forestry Oy agree on deliveries of fossil-free steel

APRIL 10, 2024. Source: <https://www.ssab.com/en/news/2024/04/ssab-and-john-deere-forestry-oy-agree-on-deliveries-of-fossilfree-steel>

German luxury carmaker BMW announced it would join hands with one of China's biggest steel companies, HBIS Group, on Thursday. The two sides signed a memorandum of understanding that BMW's Shenyang production base in Liaoning province will use HBIS's green automotive steel from 2026. Source: <https://govt.chinadaily.com.cn/s/202209/26/WS63314017498ea274927a43ec/bmw-propels-sustainability-with-ground-breaking-green-steel.html>

Another [former] executive at H2 Green Steel said this about Scania making an investment in green steel: *“Scania has been one of our biggest supporters from day one. Not only in helping frame the opportunity for green steel but also as an early seed capital investor. Their support and partnership in crafting the value proposition has contributed massively to our go-to-market strategies. Scania is truly a pioneer in sustainability and was first in their sector to set Science-Based Targets in line with the Paris Agreement. Now all our forward leaning off-take customers are doing the same.”*, says Mark Bula, Commercial Head of Boden Steel at H2 Green Steel. Source: [Scania places first green steel order in further step towards decarbonized supply chain — H2 Green Steel](#)

Be part of developing our FAQ:

Residents will continue to have the opportunity to provide feedback through community meetings, email contacts, surveys or by phone. Blastr will host regular information sessions and provide updates. We aim to have a community liaison office to handle concerns and ensure timely responses. Regular reports will be issued to show how community feedback is being incorporated into project decisions and improvements.