

ARCTIC CIRCULAR ECONOMY SUMMIT

2024 KIRKENES



Exploring the Arctic's Green Transition:

Insights from the Arctic Circular Economy Summit

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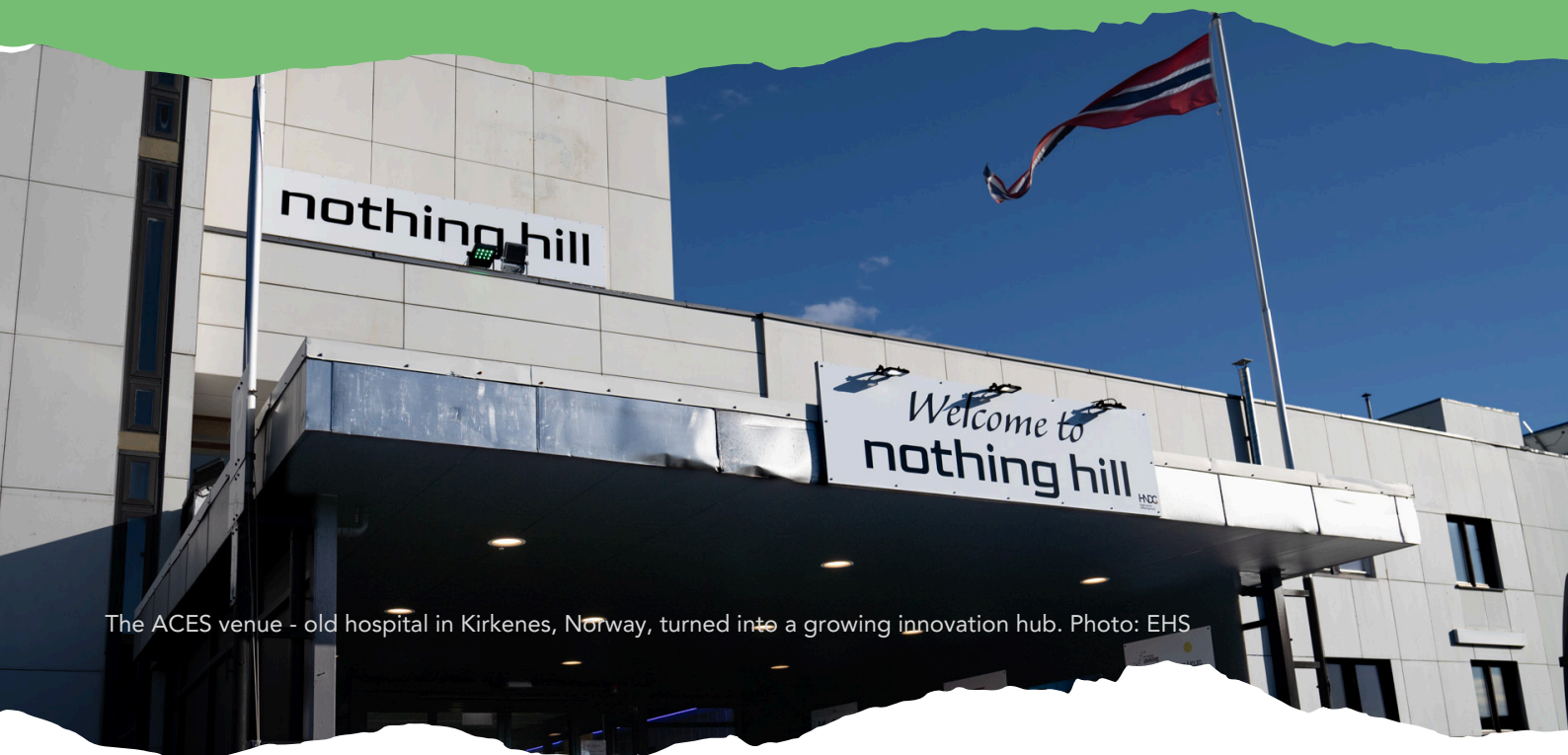


The Norwegian
Barents Secretariat



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The ACES venue - old hospital in Kirkenes, Norway, turned into a growing innovation hub. Photo: EHS

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Insights from the Arctic Circular Economy Summit

From September 18th to 20th, Kirkenes played host to the ICE Arctic Circular Economy Summit 2024, gathering a vibrant mix of entrepreneurs, policymakers, and researchers to discuss a crucial topic for the North: the circular economy. The concept, which focuses on minimizing waste by reusing, recycling, extending the life of products, and local production which reduces transport. All in all, the event gave hope for a sustainable future.

The challenge becomes even more apparent in the Arctic, where harsh conditions, geographic isolation, and limited resources make everything more challenging. Implementing these principles requires innovative and tailored approaches. Over three days, the summit buzzed with conversations about how the region could not only catch up but also lead in the global shift towards sustainability.



GENGREEN meeting with tasting of Noe i Gjære non-alcoholic drink. Photo: EHS

Setting the stage with local initiatives

The summit opened with a breakfast meeting hosted by local and regional organizations, including Kirkenes Næringsforening, Arctic Energy Partners, Orinor, Kupa, and ICE. The strong local support from Kirkenes Næringsforening, Orinor, and ICE - a project of Sør-Varanger Utvikling which was instrumental in bringing this event to life. These organizations not only play a crucial role in the region's ongoing initiatives but also contributed to the planning and execution of the summit, setting the stage for an intense three days of sharing ideas and experiences.

The initial breakfast session introduced key Arctic projects like Om:Nord and LINNGE, which are working to create circular economic models by focusing on sustainable energy, better resource management, and optimizing supply chains. The emphasis on collaboration across sectors was clear from the start - in the Arctic, solving sustainability challenges often means coming together to tackle logistical roadblocks that larger, less remote regions simply don't face.

The first day continued with workshops: the first one being about social media and branding for female entrepreneurs-participants of GENGREEN project. GENGREEN supports green entrepreneurship among women in Southern and Central Osterbotten, Lapland, Norbotten, Troms and Finnmark. Key focus areas for the project are green business management, digital skills, innovation, organic methods and cross-border collaboration. GENGREEN embraces an interdisciplinary approach in order to build a strong female network for knowledge exchange and collaboration.

Later the same day Nordic Innovation held a workshop on the Nordic Circular Economy Playbook, bringing together young entrepreneurs from across the Arctic region. The session offered participants insights into circular business models and introduced the Playbook as a practical resource for creating sustainable innovation.

Young innovators and practical solutions

The second day was all about young energy and practical tools, it was packed with thought-provoking presentations and discussions. Opening remarks by Ondrej Spala set an optimistic tone. Vesna Lavtizar's session, "Key Points to Remember About Circular Economy", underlined that while the principles are widely understood, applying them in the Arctic requires innovative thinking due to the region's specific challenges. Her call for customized solutions resonated with the room – here, where resources are scarce, every initiative must be efficient and impactful.

The LINNGE project with Kristiane Mauno Krystad also drew attention discussing how circular economy principles can revamp local supply chains and energy systems. The project's approach to overcoming logistical and waste management challenges in the Arctic could set a blueprint for other remote regions facing similar issues.

In the meantime, Vext indoor farming systems - the "grow cabinets" - sparked intrigue among the summit participants. The smart grow cabinets are designed for cultivating herbs, vegetables, and other small plants indoors, providing efficient lighting and automated care via "fogponics". This small addition shows how innovative technology can bring nature closer and brighten up even the most challenging Arctic spaces.

Faroe Voyage was among the companies making waves at the summit. Represented by Árni Winther Jákupsson and Bjarni Brimnes, the company showed its unique approach to tourism in the Faroe Islands. They are not just offering travel experiences, but deeply immersive journeys that emphasize cultural respect and environmental sustainability. With a mission to uncover hidden gems and create adventures, Faroe Voyage represents a move towards tourism that is not only economically beneficial but also environmentally and culturally respectful.

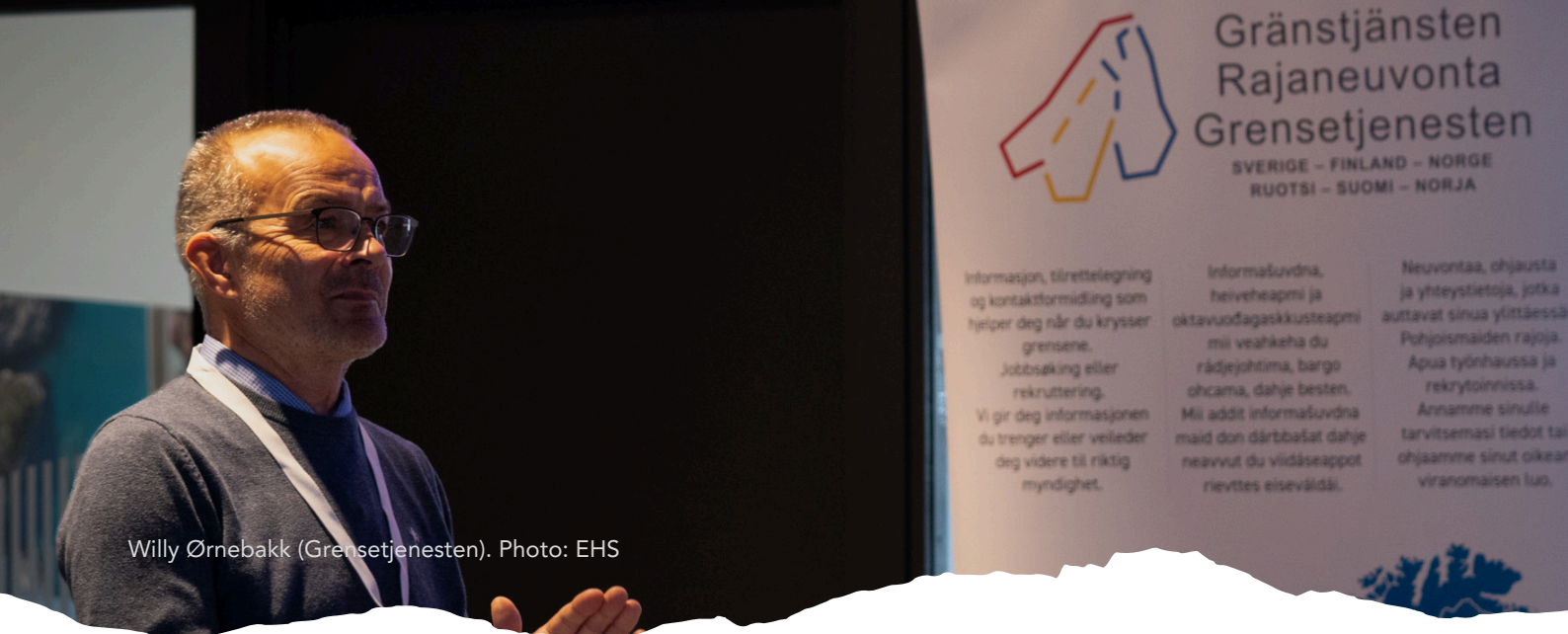


Panel debate on perspectives of young entrepreneurs. Photo: EHS

During lunch, a lively discussion continued about sustainable tourism in small communities, featuring insights from Elisa Maljamäki - a lecturer at Lapland University of Applied Sciences from Rovaniemi. The conversation revolved around balancing economic development with the need to preserve local culture and protect residents' privacy. An idea took shape: a "Cultural Code of Conduct" for tourists. The proposed code would guide visitors in exploring the region respectfully, adding cultural depth to their experience while safeguarding the community's way of life. The aim is to enhance tourism's positive impact without compromising the financial benefits for the area.



Student-chefs from a local high school. Photo: EHS



Willy Ørnebakk (Grensetjenesten). Photo: EHS

The power of cross-border collaboration and technological integration

The importance of cross-border collaboration was a recurring theme, particularly highlighted by the involvement of Grensetjenesten Sverige-Finland-Norge. This organization focuses on helping workers who move between Sweden, Finland, and Norway settle in more easily. They assist with practical tasks like getting taxes sorted, setting up local bank accounts, making the transition smoother for those starting fresh in a new country. Kirkenes, located in the far northeastern part of Norway, serves as a vital link between these countries due to its proximity to the borders of both Finland and Russia, and Sweden in the northwest. This geographical position makes Kirkenes a strategic hub for discussions and initiatives aimed at enhancing regional collaboration and addressing shared challenges in the Arctic. Grensetjenesten representative Willy Ørnebakk talked about the organization's efforts to enhance mobility across borders and remove barriers that hinder sustainable growth. Such initiatives are crucial in the Arctic where geographic isolation can be a challenge and borders can be barriers, and they demonstrate how a united approach can lead to a better environment - literally and figuratively.

Local actors also had something to contribute to the cross-border issue: NIBIO Svanhovd, represented by Cornelya Klutsch, highlighted the importance of environmental research in the Barents region. Located in Pasvikdalen, NIBIO Svanhovd's research station plays a critical role in monitoring biodiversity and promoting sustainable land-use practices. Their work underlines the Arctic's significance as a unique ecosystem where scientific research is essential for balancing development with conservation. Svanhovd actively collaborates with local and international partners - including Russia - to address ecological challenges in the Arctic region.

Bringing perspective from, it would seem, an entirely “foreign” region was Antonio Guerreiro – a tech ecosystem builder from Algarve, Portugal. While Norwegian coastal ecosystem suffers greatly from the abundance of sea urchins (as we learned later that day), the beautiful Algarve beaches in Portugal – postcard-worthy one day – are now fighting the battle against the seaweed. And as Kirkenes slowly but surely builds its way up to becoming a northern eastmost innovation hub, so does Algarve on the other end of Europe.

Companies like Vikonnekt with its CEO Safa Jemai showcased how technological innovation could further support circularity. Their custom AI and blockchain solutions help businesses become more efficient, enabling startups and established companies to scale in a way that aligns with sustainable practices. This was echoed in Arturs Garais's presentation from airBaltic, where he showed how blockchain and NFTs could be used to incentivize sustainable behavior, even in industries as traditional as aviation.

Throughout the second day of the summit, Finnish tech solution Kimberlite was available for everybody to experience. By adding an AI soul to a camera, Jason Brower from Oulu was taking second-hand stores to a new level – digitalization of the assortment. Saving the precious time and money for storeowners, Kimberlite machine is able to do a 360° photograph, write an AI description and post numerous objects straight to the website, making it also easy for the potential customers to familiarize themselves with the store assortment.



Antonio Guerreiro (Algarve Evolution). Photo: EHS

An inclusive approach to sustainability

In the midst of all the tech talk and innovative ideas, Eliza Reid, former First Lady of Iceland, brought a much-needed reminder that sustainability is not just about gadgets and growth. "Every single person has a voice, everyone is a role model, and we all have an obligation to grasp all the opportunities that come our way," she said, calling for a people-centered approach. Her emphasis on inclusivity and the social dimension of the green transition resonated across the sessions, adding a human touch to the technical discussions.



Fireside chat Maja Kruuse & Eliza Reid. Photo: EHS

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Every single person has a voice, everyone is a role model, and we all have an obligation to grasp all the opportunities that come our way.

Eliza Reid



Justine Vanhalst (Hringvarmi, Iceland). Photo: EHS

Technology at the forefront

The highlight of the day was the 46elks Snowhotel Party & Pitching, a lively conclusion to the main part of the summit. During the pitching competition moderated by Björn Skyttberg and Niina Ebeling, the audience got the chance to dive deeper into some of the companies making a real impact.

Take Surova, for instance. Represented by Valentina Klaas, the company is transforming agriculture in Iceland with Controlled Environment Agriculture (CEA), using hydroponics and robotics to produce fresh vegetables all year round with minimal environmental impact. This kind of innovation is a game changer for the North, where traditional farming is tough.

Hringvarmi - a pioneering circular AgTech startup from Iceland and its co-founder Justine Vanhalst showcased a solution of using excess heat from data centers by directing it into specially designed biomes that support controlled environment food production. Hringvarmi addresses multiple interconnected challenges through a single circular economy solution while fostering a community for food producers.

Marine Spark X, represented by Gustav Vestlie, is tackling a severe environmental issue along Norway's coast, where sea urchins are causing kelp forests to disappear. By transforming sea urchins from a destructive force into a valuable resource for local aquaculture feed, the startup shows how a problem can be turned into an opportunity for sustainable growth. Their solution aligns with Norway's regulatory push to increase the proportion of local ingredients in aquaculture feed, marking a step toward a more sustainable circular economy.

In the parking space sharing sector, Kirkenes-born Rent & Park stood out, presenting solutions for optimizing parking space use in Arctic towns - vital in remote areas where every bit of infrastructure counts. Nittaya J. Amundsen - the CEO - represented the company at the pitching competition and won a special prize - a ticket to Slush in Helsinki, a big win for the company and a great opportunity to showcase Arctic innovations on a larger stage.



46elks Snowhotel Party & Pitching. Photo: OS



Panel debate on funding opportunities. Photo: EHS

Concluding thoughts

"The job of young people is to make old people think twice," - said Magnus Mæland, the mayor of Sør-Varanger in his closure speech, - "And we have to motivate young people to come back here and drive the change. Nowadays, the circular economy is not just an opportunity, it is a new way of life. If you want to have the future, you have to open your mind to collaboration and cross-border cooperation. And we all have to take a step into the unknown and accept the challenge".

The Arctic Circular Economy Summit 2024 wasn't just a meeting of minds—it was a call to action. Through discussions on everything from sustainable agriculture and tourism to AI-driven solutions and cross-border cooperation, it became clear that the Arctic's challenges also present opportunities for leadership in the global green transition. The region's specific conditions require tailored solutions, but as the summit showed, there is no shortage of innovation, energy, and collaboration ready to meet those needs. With companies and projects from across the Nordic countries driving forward, it's evident that the Arctic can indeed become a beacon for sustainable development.



Until the next time! - from a tour at Snowhotel Kirkenes. Photo: EHS

Thanks to

all of you who have attended, contributed and otherwise supported this first ICE Arctic Circular Economy Summit. It represented a great milestone for Sør-Varanger and was a fantastic showcase of cross-border collaboration, not limited to the nearest partner land border. It is important to continue actions toward implementation of circular transition in remote regions - without greenwashing activism, but with strong practical use-cases and modern technology. See you in 2025!

Ondrej Spala, Event Director

This event was organised by the ICE Arctic Youth Community.

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