



Report Dutch Arctic Circle meeting

Sustainable entrepreneurship in a changing Arctic

March 25th of 2022 – online meeting



March, 25th of 2022, an online meeting of the Dutch Arctic Circle took place, entitled Sustainable entrepreneurship in a changing Arctic. Participants of the meeting were:

Mads Qvist Frederiksen (Arctic Economic Council), Reagan Aylmer (Arctic Council), Jan van Tatenhove (Van Hall Larenstein), Verena Ohms (Nederland Maritiem Land), Maarten Verdaasdonk (Stichting de Noordzee), Renno Hokwerda (NWO), Özlem Terzi (Vrije Universiteit Amsterdam), Erik Molenaar (Universiteit Utrecht), Xander de Vries (Ministry of Foreign Affairs), Linde van Bets (Wing), Eelco Leemans (Leeways Marine), Niels Geelhoed (Wing), Gert Polet (WWF), Frieda van Essen (Writer), Jorunn Skodje (Ministry of Foreign Affairs), Bernadete Goncalves Castro (IHC)

Opening and welcome

Eelco Leemans, moderator, welcomes the guests on behalf of the DAC consortium and invites Xander de Vries, who replaces Hannah Wijmenga at the Ministry of Foreign Affairs, and Reagan Aylmer from the secretariat of the Arctic Council. Eelco explains the programme of today's meeting. Normally the polar symposium would take place around this time, but due to COVID-19 it has been postponed for a second time to May, 19th.

Perspective of the Arctic Economic Council on sustainable Arctic entrepreneurship

Presentation by Mads Qvist Frederiksen (Executive Director, Arctic Economic Council)

Mads Qvist Frederiksen is involved in the Arctic region since 2005. He is based in Tromsø, where the headquarter of the Arctic Economic Council (AEC) is located. The AEC looks at the world from the top. AEC has a variety of members, ranging from indigenous groups, business organisations, to start-ups and SMEs up to large companies. The presentation is attached to this report. Some key points:

- AEC believes it is possible to cut emissions and grow GDP at the same time. Examples are electrifying airplanes and solar panels, which seem promising also for low temperatures.
- 85% of the world population lives in the northern hemisphere and the Arctic connects it all. Shipping is booming. Nevertheless the Northern Sea route does not provide as much potential as people thought. As response to this increase in shipping, the Arctic Corporate Shipping Pledge was developed which pledges for no shipping in the Arctic. The AEC asked companies why they signed this pledge, but they did not want to explain it. In the AEC perspective no Arctic shipping implies more flying to the Arctic, which is not a sustainable solution.
- Another issue is that banks do not want to invest in certain projects in the Arctic, which makes the AEC wonder how companies based in the Arctic do get financial support. In response the AEC developed the Arctic investment protocol which shows how to invest in the Arctic in a responsible manner.
- A remarkable example in the presentation concerns the village of Berlevåg, in the county of Finnmark in Norway. The surplus energy generated with ammonia production will be used for heating shrimp farms and agriculture farms.
- Examples of thinking big are the use of skin of cod and use enzymes from fish for medical purposes.
- Another example is Sara Cultural Centre, one of the world's tallest timber buildings, which is located in Skellefteå, just below the arctic circle in the north of Sweden. The wood used for the construction of the buildings originate from the neighboring forests, maximally 140 km away from the village.

Questions from the audience:

- Russian companies are part of the AE. How does the current Russia-Ukraine war effect work in the AEC?
 - The AEC is created by the Arctic Council. We run independently, but the chairmanship matches with the one of the Arctic Council. Novatec and the chairman are not on the sanction list. While the Arctic Council did not agree on one statement, two statements were send out, one from the Arctic 7 & and one from the eighth country. The AEC condemned the war with one shared statement. The AEC is in dialogue with Russia, but paused the work of the board. The AEC's work consists of a lot more Arctic issues than Russia. This work continues, probably the business partners will change, following EU regulations. Kirkeness for example trades closely with Moermansk. It is highly likely that 700 people will lose their jobs. The border is closed, Finland stopped the train to Russia. What are the consequences for northern Arctic people and cities. Think of indigenous people, such as the Sami, which cross borders for reindeer herding.
- How do you deal with conflict between organisations in the AEC?
 - We run by decisions through our board, this does not give any issues so far.

Perspective of the World Wildlife Fund on sustainable Arctic entrepreneurship Presentation by Gert Polet, (head of Forests & Wildlife Unit of WWF-NL and supports WWF's Arctic programme

Gert starts his presentation by expressing his concerns that we do not have much time left with respect to climate change and adds that WWF is quite busy with the current situation of the Russia-Ukraine war. The presentation is attached to this report. Some highlights of the presentation:

- 30% of the Arctic should be protected by 2030 through no go zones. Although we are on the right track, the picture is not always positive. Think of moratoria on oil and gas which are sometimes being revoked, currently we have a fisheries moratorium in the Arctic.
- The focus should be first on the no go areas, later on the go areas.
- Climate and conservation are key aspects which are missing according to Gert in the strategy of the AEC
- In relation to indigenous people it is important to note that any community is not homogeneous. This is the same in any Arctic community. There will always be people short sighted on short-term economic development and private interest and other people focused on long-term conservation of their (cultural) values.

Questions

- Mads agrees that conservation and climate are important. He adds that in China for example there is a lot to win for Arctic development.
 - Gert invited Mads to collaboration. Mads adds that Arctic development starts with compensations somewhere else, say Amsterdam for example

Business perspective on sustainable Arctic entrepreneurship Presentation by Bernardete Castro, (head research & development, Royal IHC

Bernadete Castro starts her presentation with explaining that IHC has no activity in the Arctic. IHC is a maritime company which builds ships, ao for Arctic waters. The presentation is attached to the report. The key elements were:

- Efficiency is key. You need a customer that wants to invest in advanced technologies and wants to take a high technological and economical risk.
- There are two routes for alternative fuel: biobased or electrical fuels. Additionally carbon capture storage might be interesting, now it is mainly applied at cruise vessels. We use a tool to calculate the viability of the vessel over the long-term or life of the vessel: LNG is the most economically viable, when LNG used to be cheap. Other fuels are quite expensive and therefore not yet competitive.
- You pay for fuel and emitting emissions: hydrogen and LNG in combination with carbon capture storage becomes the most economically interesting, from a technical perspective. But we need a policy that supports this technological development as well, so that both go hand in hand.
- Coatings for biofouling are being developed with interesting technologies. Sometimes anti fouling does not want to attach to the ship.
- Developments are looking at vessels which are more energy efficient and which does not need anti fouling, which is a win win situation.
- The Russia-Ukraine war could be positive for the energy transition: people realize we do not want to be dependent on one or two countries for energy

Questions

- What did your client trigger to invest in the LNG ship with advanced technologies?
 - Regulations in the Netherlands and Belgium ensure you get an extra score in the tender procedure if you use alternative fuel for dredging. IHC was already investing in LNG, it is a challenge to invest in LNG, bio-ethanol, hydrogen. We are busy with preparing for the future, we do not talk a lot, instead we do a lot.
- The presentation was mainly about the new ships, what about existing ships?
 - It is worse to retrofit if you have vessel of ten years old. Older than ten years, blend is better, blend with bio-LNG or bio-diesel. There exist diesel vessels which are methanol ready, all the investments are already done. This is interesting, but still expensive. Fuels are less dense, tanks are very heavy, you need to prolong your vessel to make it float.
- For Biomethane and bio LNG you hear sometimes that the amount of biomass needed to produce it is not sufficient.
 - Biofuels is a stepstone into electrical fuels, this discussion is not yet finished
- When prices go up, the renewable energy becomes more attractive. When prices go down, the interest in renewables went down as well. How can be keep the interest up?
 - CO₂ valuation is very important, when the price is sufficiently high, this is a trigger to invest in renewables. In the European Union policy making takes too long or goes backward. Bernardete is optimistic about this. People are quite aware of the urgency, more and more people realize this and start to demand it from government. Look at the Urgenda case, the case against Shell and opposition for Tata Steel. Bernardete sees a trend

Closure

Eelco and Linde invite the participants to the polar symposium which will take place May, 19th in Museum Museon (The Hague) and which is co-organized by NWO, DAC and APECS NL.

If you are not subscribed to the DAC newsletter, you can do this through the DAC website: dac-netwerk.nl

Eelco thanks the participants and presenters for their contribution.