



EKF Danish Export Credit Agency Green Accelerator Facility Annual Report 2021

Content

1. Summary	3
2. Background	3
3. Overview of Green Accelerator Facility purpose and function	3
4. Financial status – disbursements end of year 2021	6
5. Calls for proposals and evaluation meetings held 2021	6
6. Status on project implementation, reporting received	8
7. Data management (including GDPR agreement)	8
8. Facility outcomes and impacts	8
9. Lessons learned 2021	8
10. Interviews with selected grantees	9
11. Examples of project case stories	11
12. List of approved projects, Application round 1-3	12



1. Summary

In 2021 the first export projects were approved under the Green Accelerator Facility operated by the Danish Export Credit Agency (EKF). This report is a summary of the activities related to the grant facility and the administration of funds supported by NIRAS A/S. During the last 3 calls, 15 projects have been approved amounting to a total value of DKK 13,960,729.55. Following their approval the projects have entered the implementation phase which is scheduled to last approximately 12 months. It is therefore too early in order to report on results from the approved projects. Nevertheless, this first annual report on the Green Accelerator Facility discusses the preliminary experience that has been gained in the application and approval process.

2. Background

In order to support the Danish export-oriented business community and mitigate the risks hampering the green transition, the Danish Government allocated funds to support mature green solutions by Single or Company Alliances, with the ambition to pave the way for an economic recovery post Covid-19 which can contribute to sustainable investments in the green transition.

EKF Green Accelerator is an initiative as a part of a political agreement rebooting Danish exports based on recommendations from Danish businesses, which was launched in October 2020. The purpose of the facility is to increase Danish green exports. More specifically, it will support the preparatory work for green projects with export potential, which are yet to find the right structure and format.

The EKF Green Accelerator will contribute to the financing of i) preparatory business activities and ii) secondments and short-term visits of Danish advisers and experts, including the posting of EKF financing advisers to selected Danish representations abroad to support the maturation of projects with potential for Danish exports. This annual report only describes the activities of the EKF Green Accelerator's financial support related to preparatory business activities expected to lead to Danish export orders within the green transition theme.

3. Overview of Green Accelerator Facility purpose and function

The objective of this component of the EKF Green Accelerator is to help Danish companies take the first steps into new markets by providing financial support to mature Danish export solutions, which have a ready foreign market. Danish companies have the opportunity to make a significant contribution to reigniting growth in the Danish export market by stimulating sustainable growth and employment opportunities abroad and in Denmark.

The objective of the EKF Green Accelerator is specifically directed towards helping Danish companies within green transition sectors to take the last but challenging steps into new markets by providing financial support to services necessary to ready or finalise the export solutions directed to a foreign market.

Single companies or Company Alliances¹ of export mature companies present their business case for the export order(s) and describe which specific activities are needed to complete an order. Lastly, they argue why such activities will result in the export order(s) materializing and produce growth.

The financial support per project was set between DKK 300,000 and DKK 5,000,000. Company alliances that apply for the financing of their projects can do so without all companies in the alliance applying for financial support. EKF Green Accelerator will reimburse 80% of expenses to Company Alliances incurred upon completion of report and will not pay advance payment. The requirement of forming company alliances was later adjusted from the 3rd application round and

¹ The Green Accelerator Facility was revised from Round 3 to include support to a single applicant company albeit with a higher self-contribution of 30 percent instead of 20 percent as applicable to company alliances.

onwards, encouraging a single company to apply with necessary documentation provided confirming its SME title. However, EKF Green Accelerator will reimburse a slightly lower ratio of 70 % for single applicants.

Figure 1 below outlines the intervention logic applicable for the competitive selection of projects to receive funding under the Green Accelerator. In brief, the Green Accelerator will finance the necessary expenses to finalize an export order in a project, justifying its green aspect following the EU's Green taxonomy. The intervention logic is operationalized in the definitions of eligibility and various assessment criteria are used to estimate which applications are most likely to realize exports, and aligned with the objective of the Green Accelerator.

Figure 1. Intervention logic

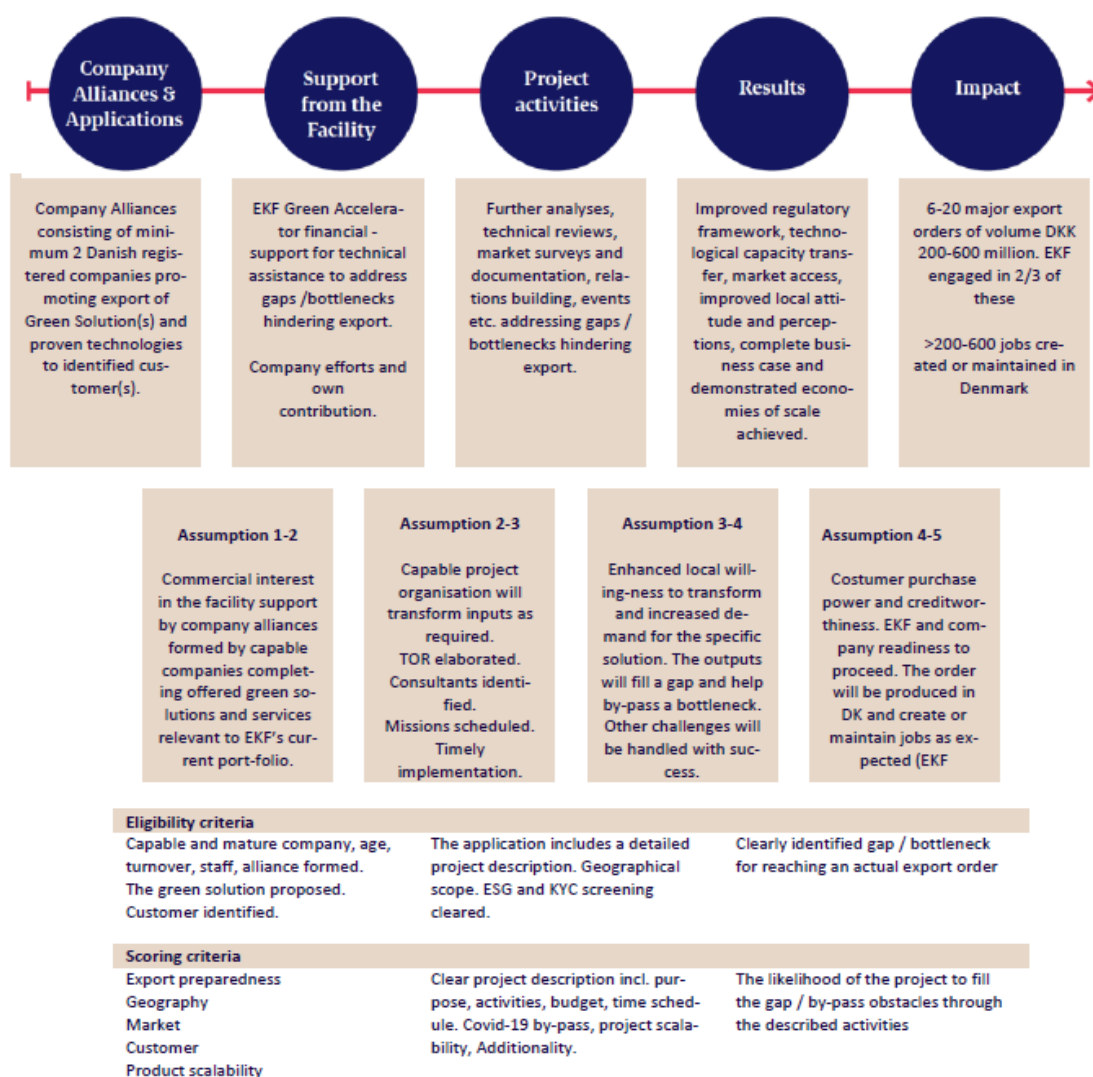


Figure 1: Intervention Logic

In order to facilitate a smooth operation of the Green Accelerator, EKF sought advice from NIRAS International Consulting ("Niras") on the design and operation of the facility. Furthermore, a digital application form was designed (on the "SmartME" platform developed by Finnish company Adalia) in October 2020 in preparation for the first round of applications due 5 February 2021. Niras was also employed as "Facility manager" to assist in the evaluation of projects.



Figure 2. Application process



Figure 2: EKF Green Accelerator's Administrative Flow Charts



4. Financial status – disbursements end of year 2021

As all projects granted were uncompleted by the end of 2021 and thus not ready for reimbursement from the Green Accelerator, no disbursements took place in 2021.

5. Calls for proposals and evaluation meetings held 2021

Following the design and set-up of the application guide and operations manual in the autumn of 2020, the first call was published in December 2020 with a deadline of February 5th, 2021. To facilitate as many applications as possible, it was decided to have three application rounds per year.

Three calls were implemented during the year 2021:

	Opening for Submission of Applications	Estimated Notification of Award
Application Round 1	15/12 2020 to 05/02 2021	February 2021
Application Round 2	01/04 2021 to 01/05 2021	May 2021
Application Round 3	01/07 2021 to 01/08 2021	August 2021

To assess the applications in a fair and transparent way, the Facility manager was tasked to prepare an evaluation of the applicants according to established criteria. In addition, a Green Accelerator Grant Committee was established with the objective of taking final decisions on the awarding of grants. The Grant Committee for the Green Accelerator has had the following composition:

- Jørn Fredsgaard Sørensen, Head of Country, Bank & Sector Risk, EKF - Chairman
- Kristin Parellø-Plesner, Head of Sustainability, EKF
- Thomas Howard, Chief Commercial Officer, EKF
- Jørgen Bollesen, Regional Business Development Manager, EKF
- Rasmus Abildgaard Kristensen, Head of Green Diplomacy, Danish Ministry of Foreign Affairs, Observer (2nd, 3rd meeting)
- Dorte Bech Vizard, Chief Consultant, Danish Ministry of Foreign Affairs, Observer (1st meeting)

Secretariat for the Grant Committee: Mette Thybo / Andreas Brogaard Buhl / Hanae Benjnouh, NIRAS A/S

Three Grant Committee meetings having been held in 2021:

- Meeting for Round 1: March 11th, 2021
- Meeting for Round 2: June 10th, 2021
- Meeting for Round 3: November 11th, 2021

Overview of the applications received and processed during the three calls for applications. Below is a summary of the review process and the results obtained:

Application Round 1

	Number of Applications proceeded
Applications submitted before February 5 th , 2021	8
Applications passing eligibility check and pre-screening (NIRAS)	8
Applications passing the clearance in principle / screenings (EKF & UM)	8
Applications scoring more than our threshold of 60 points (NIRAS)	8



Comments to application round 1

The quality of applications for the first round was mixed. Some were excellent, others good and a few rather weak, but nevertheless all eight passed the eligibility gate criteria. The clearance in principle and the minimum assessment requirement of at least 60 points. From a total of eight applications, one unconditional commitment and five conditional commitments were given. Two applications were rejected.

Application Round 2

	Number of Applications proceeded
Applications submitted before May 7 th , 2021	3
Applications passing eligibility check and pre-screening (NIRAS)	3
Applications passing the clearance in principle / screenings (EKF & UM)	3*
Applications scoring more than our threshold of 60 points (NIRAS)	3

Comments to application round 2

Due to a second wave of Covid-19 the number of applications were very low, only 3 applications were received. The three applications all passed the eligibility gate criteria, the clearance in principle and the minimum assessment requirement of at least 60 points, even though one did not fulfil the strategic relevance screening criteria. Out of the three applications assessed the Grant Committee approved one, gave one conditional commitment and rejected one application.

Application Round 3

	Number of Applications proceeded
Applications submitted before October 1 st , 2021	12
Applications passing eligibility check and pre-screening (NIRAS)	11
Applications passing the clearance in principle / screenings (EKF & UM)	11
Applications scoring more than our threshold of 60 points (NIRAS)	10

Comments to application round 3

Applications in round 3 had both company alliances and single company applicants. A total of eleven applications passed the eligibility gate criteria, the clearance in principle and the minimum assessment requirement of at least 60 points. Five of a total of six approved applications were given a conditional approval, which made follow-ups necessary after the initial approval was given. Fortunately, most were signed at the end of the year. The remaining five applications were not approved, but several of these are expected to come back with an improved application in 2022.

Summary of Decisions of the Grant Committee:

	Round 1	Round 2	Round 3	Total
Approved	1	1	1	3
Conditional commitment	5	1	5	11
Rejected	2	1	5	8



6. Status on project implementation, reporting received

At the outset in January 2021, it was believed that the Covid-19 crisis was coming to an end over the spring and that Danish companies soon would be seeking new orders in the export markets. Unfortunately, the second and third wave of Covid-19 hit globally, and therefore many activities had to be postponed. Only reporting from the first round of granted application was due in the calendar year 2021, and several companies have asked for deadline extensions as their activities did not take-off as planned. The few reports received demonstrate a general delay in campaigns and field visits, which eventually also will influence the likelihood of completing activities within the 12 months deadline mentioned in the application guide and manual.

7. Data management (including GDPR agreement)

During 2021, the first year of operation of the Green Accelerator; the cooperation between EKF, NIRAS and Adalia has been such that EKF was fronting the Facility and owning all data. NIRAS and Adalia have been managing the data received from applicants with a more prominent role for Adalia as the data software system owner and service provider to the SmartME software. In this set-up, NIRAS has provided data analysis and assessments of applications using the built-in step-by-step facilities of the SmartME software.

8. Facility outcomes and impacts

It is still too early to expect results from the projects approved in the course of 2021. As part of the grant administration process NIRAS has developed an outcome and impact template, which intends to capture outputs, outcomes and impacts from the projects supported at project completion. Most notably in the form of export orders, trainings delivered, encounters with clients etc. But if possible, also in terms of other impacts associated with the projects such as jobs created or maintained.

9. Lessons learned 2021

Based on the three calls for applications in 2021 the following lessons learned emerge:

Calls for applications

- The calls for applications three times a year enables a concentrated and linear process leading to grant committee approval.
- There is no need to increase the call frequency, but there might be a need for EKF to increase the publicity and communication in order to reach a higher number of potential applicants.
- The use of application rounds (rather than the possibility of continuous applications) allows for evaluation and adjustments of the workings of the facility and a better overview of the funds approved and available.

Selection criteria

- The selection criteria were adjusted after the second call to include individual firms at a lower reimbursement rate of 70% instead of 80% reimbursement available to company alliances.
- Other selection criteria were slightly softened after the first call.

Application process

- Since some companies are initiating the application process without completing their application there might be scope for some active follow-up from EKF towards applications not completed one week before deadline.
- The questions and answer document should include all questions answered and not only recent Q&A.
- From the applicants' point of view the duration of the application review seems a long time to wait for the result / process outcome and efforts should be made to shorten the time.



Eligibility check and initial screening

- The eligibility criteria are quite robust, justifiable and easy to communicate.
- The eligibility criteria should be presented relatively early in the application, so that applying companies will have to consider if they fulfil them or not without having to go through all the questions.

Clearance in principle

- The clearance in principle could be cut shorter if other processes could be carried out in parallel.
- From the outside, it appears that the internal procedures at EKF work well.

Assessment

- The procedure of having two reviewers from the facility manager going through the assessment and comparing notes afterwards functions well.
- There are only minor differences in assessment points given, and these are always discussed between the two evaluators.

Decision process and approvals

- The evaluation reports in form of PowerPoint presentation have been received well by the grant committee and subsequent discussions have built on these.
- Conditional approvals should preferably be avoided as they take longer time and involve another round of follow-up communication between EKF and the applicant regarding conditions imposed by the Grant Committee. However, in most cases, the required extra information has been provided shortly after the conditional approval.
- A list of already approved projects should be presented on EKF's homepage as inspiration of others

Monitoring

- Not much experience has been gathered as implementation of most projects has been delayed. It is anticipated that substantial work will be required in 2022 and 2023 regarding monitoring of ongoing activities.

10. Interviews with selected grantees

Three grantees were interviewed about their Green Accelerator experience in 2021. The three companies were: Solar A/S (Sitehub), Linka Energy A/S, and Suez A/S. A semi-structured questionnaire was used as basis of a discussion around the following main questions:

1. *How was the application procedure with EKF?*
2. *How was the user experience with the SmartME application platform?*
3. *What is the status of the project now and how is the collaboration among the alliance partners going?*
4. *What is the current progress towards export sales to the target country / countries?*
5. *Do you have any recommendations to EKF and other applicants with regards to the Green Accelerator Facility?*

Sustainable construction site logistics

C2-0010 Solar A/S (Sitehub)- Interview with Mr. Ulrik Branner, CEO Sitehub on February 10th, 2022

Solar A/S and Sitehub Aps have developed a joint project together with NT Consulting Aps regarding more effective and efficient construction site management and logistics. The project provides a digital solution which will enable better coordination, less waste material and less transport. The company alliance has been assisted by the Danish Trade Council to develop the application. The project received a conditional approval which meant that they had to regroup before final approval making Sitehub a service provider (consultant) to the alliance instead of a partner.

The opinion about the application process was generally positive, questions were clear and grouped into meaningful categories. The requirements were understandable, and the upload of documentation was easy. Since the application



was approved the Corona Covid-19 pandemic made it necessary to shift emphasis between the two target countries, so that more activities in the USA were conducted virtually and more activities in Norway were carried out as physical meetings. The local partners have been very helpful in all aspects.

A recommendation from this project is that many other companies could benefit from the Green Accelerator Facility and that EKF could do more in terms of promoting the facility towards the SME segment. Furthermore, the Alliance has been grateful for the support received from The Confederation of Danish Industry (DI).

Introduction to Japan of Biomass Boilers for Rice Husk as Fuel

C3-0027 Linka Energy A/S – Interview with Mr. Thomas Gaardbo, CEO Linka A/S on February 11th, 2022

Japan is importing fossil fuels such as gas and oil for heating purposes - including district heating in smaller areas or building blocks and process heat for industrial purposes. The project aims at providing a new boiler technology that will enable the use of biomass-based waste products derived from production of rice for district heating purposes and use the ashes as fertilizer and soil improvement.

The application procedures were clear and user-friendly. The questions asked about the company were well founded in the context of export preparedness, and the application portal made it easy to upload documentation. The timing and communication regarding the application was also reasonable with a conditional approval after 6 weeks and final approval after further 3 weeks after conditional approval was all within a reasonable time frame.

The project had some challenges with regards to getting in touch with the right local partners, but the assistance given from the Danish Embassy in Tokyo was very valuable, especially in the extended period of restricted entry in the country. With a good local partner Linka foresees that export orders will be materializing by mid-2022.

Linka Energy would like EKF to be even more active in reaching out to Danish SMEs as they believe the Green Accelerator Facility is a straightforward mechanism which could benefit many more companies. The challenge is that they are simply not aware of the facility and the favourable conditions for support.

Sustainable Water Supply to villages and townships, Bangladesh

C1-0024 Suez A/S – Interview with Mr. Per Krøyer Kristensen, CEO on February 14th, 2022

Suez is proposing a solar driven compact and automated drinking water treatment unit that provides safe WHO standard quality water to local villages and townships. The containerized solution is an answer to the multiple sites in Bangladesh suffering from lack of safe drinking water free from pathogens and toxic substances.

Overall, the application process worked well for Suez. The digital platform is user-friendly and the template can be saved and closed and re-opened whenever applicants are ready to put more into it. Some budget tables could be improved by having supporting texts on the side.

An important aspect of the project was to establish a pilot project locally and therefore the necessary equipment is now in Bangladesh and will be on-site almost according to plan despite the extended Corona Covid-19 pandemic. Several events are thereafter planned for May-June 2022 when everything is in operation at the demonstration pilot site.

Suez is generally satisfied with the EKF homepage, the digital application platform and the templates. With a high success rate and its no-nonsense and non-bureaucratic procedures; Suez will recommend other companies to make use of the Green Accelerator and proposes at the same time that a list of already approved projects will be featured for inspirational purpose on EKF's homepage.



11. Examples of project case stories

Test and promotion of robotic adaptive moulds for composite and concrete in North America

One-off moulds are used to form materials into construction panels and elements in the building industry and are commonly made of polystyrene and resin polymers. Danish companies Adapa A/S and Holtec Automatic – Nord A/S created an adaptive mould, a reconfigurable machine, which can be reused using robotic hardware and intelligent software. Adaptive moulds can replace thousands of one-off moulds and reduce annual CO₂ emissions by 430 tons, making them cost-efficient and sustainable.

Manufacture of the one-off moulds is manual labour intensive, and is considered to be long term health damaging, as manufacturing staff is in contact with dust and emissions from hazardous materials when shaping the one-off moulds. Adapa's adaptive moulds are reconfigurable machines and thus reusable due to robotic hardware and intelligent software. One adaptive mould can replace thousands of one-off moulds and be disassembled for recycling at the end of lifetime. The adaptive moulds do not create any hazardous dust or emissions.

Compared to one-off polystyrene moulds, one adaptive mould is expected to eliminate the use of 69 truckloads of polystyrene and reduce CO₂ emission by 430 ton, each year (www.adapa.dk/sustainability) and a huge decrease the use of polymer resins (www.adapa.dk/adapa-enables-saving-weight-in-the-marine-industry).

Breakthrough export of channel-UV systems for wastewater disinfection in China and India

Dangerous microorganisms found in wastewater are commonly treated with chlorine but come with side effects of harmful by-products and high maintenance costs due to the requirements in the de-chlorination stage. Ultraaqua A/S and Brønderslev Stål A/S collaborated to create a more sustainable and cost-efficient wastewater disinfectant to be exported to Indian and Chinese markets. *UV systems are a well-established technology for water disinfection. However, while addressing the concerns raised by chlorination and ozonation and other less used disinfection methods, the current UV systems have significant drawbacks that prevents it to be adopted as the “gold-standard” for sustainable and cost-effective wastewater disinfection. Namely: i) channel-UV systems require high energy inputs for their operation representing a high operational cost and environmental impact; ii) channel-UV systems require substantial space and infrastructure and thus are not suitable to every location, posing severe and costly limitations for scale-up and retrofitting operations.*

Together with an exclusive stainless steel welding partner Brønderslev Stål, Ultraaqua have developed an innovative channel-UV reactor design with integrated flow-guide plates and UV-light reflectors that increase energy efficiency and capacity, with up to 30% better performance than the best competitors in the market, thereby eliminating the drawbacks of traditional channel UV-reactor systems. A wide selection of ULTRAAQUA open channel UV systems excel in energy and disinfection efficiency, overall cost optimization, advanced scalability and customization, ease of operation, and maintenance. The companies' innovative channel-UV design increases energy efficiency and capacity whilst protecting vital water resources.



12. List of approved projects, Application round 1-3

Round 1 (from Evaluation report, March 2021)

Application Name	Single Application or Company Alliance	Applicants	Total Project Budget	Reimbursable Expenditures*
Test and promotion of a water-free de-scaling machine for fish	Company Alliance	Kroma A/S & AquaPri A/S	990,500.00 kr.	792,400.00 kr.
Sustainable Water Supply to villages and townships, Bangladesh	Company Alliance	Suez water A/S & Vand og Teknik AS	2,543,000.00 kr.	2,034,400.00 kr.
Energy optimization within the German wastewater treatment sector	Company Alliance	AL-2 Teknik A/S & Landia A/S	878,850.00 kr.	703,080.00 kr.
Decarbonizing the heating sector in Germany by expanding district energy networks and integrating green technologies	Company Alliance	Linka Energy A/S & EMD International A/S & Aalborg CSP A/S	1,593,150.00 kr.	1,274,520.00 kr.
Decarbonizing the production of food and beverages in Germany through introduction of Danish energy efficient solutions.	Company Alliance	Au2mate A/S & Atcho-Engineering A/S	1,296,375.00 kr.	1,037,100.00 kr.
Industrial Water and Wastewater Treatment for Ghanaian Food and Beverage Industries	Company Alliance	BioKube & Norlex Chemicals A/S	1,200,200.00 kr.	960,160.00 kr.

Round 2 (from evaluation report, June 2021)

Application Name	Single Application or Company Alliance	Applicants	Total Project Budget	Reimbursable Expenditures*
Test and promotion of robotic adaptive moulds for composite and concrete in North America	Company Alliance	Adapa A/S & Holtec Automatic – Nord A/S	1,157,000.00 kr.	925,600.00 kr.
Bæredygtig Byggepladslogistik	Company Alliance	SOLAR A/S & NT Consulting	1,954,355.24 kr.	1,563,484.19 kr.



Round 3 (from evaluation report, November 2021)

Application Name	Single Application or Company Alliance	Applicants	Total Project Budget	Reimbursable Expenditures*
Breakthrough export of Channel-UV systems for wastewater disinfection in China and India	Company Alliance	Ultraaqua A/S & Brønderslev Stål A/S	1,677,000.00 kr.	1,341,600.00 kr.
Biological Pest Control Solutions in Poland	Single Applicant	EWB Bioproduction ApS	489,114.00 kr.	342,379.00 kr.
Green coating solutions for Swedish and Norwegian markets.	Single Applicant	ELPLATEK A/S	1,314,000.00 kr.	919,800.00 kr.
Energy and water optimizing solutions for the U.S. food & beverage industry. Novenco, GEA, Eryk, Alpha-E, Bürkert.	Company Alliance	ALPHA-E ApS & Eryk A/S & GEA PROCESS ENGINEERING A/S	1,250,680.00 kr.	1,000,544.00 kr.
Promotion of Danish Green-tech solution for the building sector in North America	Single Applicant	WindowMaster International A/S	770,000.00 kr.	539,000.00 kr.
Implementation of public bike share systems in Finland	Single Applicant	DonkeyRepublic Admin ApS	743,647.66 kr.	520,553.36 kr.
Introduction to Japan of Biomass Boilers for Rice Husk as Fuel	Single Applicant	LINKA ENERGY A/S	778,728.00 kr.	545,109.00 kr.