

A broadly constituted taskforce behind the action plan

Internationally competing companies have together with knowledge institutions and mayors settled several recommendations to develop East Jutland as international food hub. This is the basis for the strategic action plan of Business Region Aarhus for food and bioresources.

TASKFORCEMEMBERS:



Arla Foods Science Director Peter Sinding Andersen



Arla Foods Senior R&D Manager Simon Metz Mariendal Pedersen



Cold Hand Winery Founder and Executive Director Jens Skovgaard



Danish Crown Senior Learning Manager Lis Korsberg



Lallemand Director Michael Vinge



DuPont Nutrition & Biosciences Group Manager Hans Chr Bejder



Marel Former Executive Director Henrik Ladefoged



Danish Center for Food and Agriculture, **Aarhus University** Director

Niels Halberg



Department of Food Science, **Aarhus University** Head of Department Michelle Williams

TASKFORCEMEDMBERS: - CONTINUED



Food & Bio Cluster Denmark CEO Lars Visbech Sørensen



Agro Food ParkDirector
Anne-Marie Hansen



Danish Technological InstituteDirector
Anne Louise Dannesboe Nielsen



SEGESExecutive Director, Digital Ivar Ravn



Municipality of OdderMayor
Uffe Jensen (formand)



Municipality of Randers Mayor Torben Hansen



Municipality of SilkeborgMayor
Steen Vindum



Strategic Action Plan for Food and Bioresources

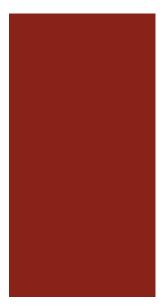
Viewed internationally, East Jutland has a unique concentration of leading agricultural and food-related companies, producers and knowledge institutions which create a strong foundation for positioning East Jutland as an internationally known and recognised food hub.

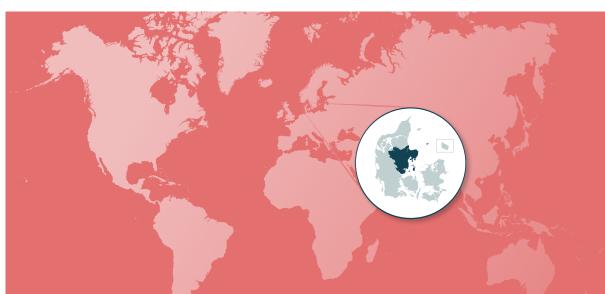
Business Region Aarhus wants to contribute to realising this potential with some development tracks and initiatives, which are fleshed out below with matching resources.

The established development tracks and initiatives are based on the recommendations from a broadly constituted task force including top representatives from companies, knowledge institutions and politicians in the 2nd half of 2019. The task force has been transformed into the East Jutland Food Partnership which will meet once each year in the strategy period 2020–2022 to follow up on the strategy and utilize current opportunities to launch new initiatives.

The basis for the realisation of the strategy's development tracks and initiatives is elaborated in the following.

The initiatives build upon the good results the previous strategic action plan up until now has achieved since 2016. For example, Food Nation Visitor Centre opens in Agro Food Park in August 2020; this is a result of the previous strategic action plan. The Visitor Centre will give international delegations a professional introduction to the position of strength held by Danish food related companies and knowledge institutions. This strategic action plan is thus part of a long-range strategic plan for further developing the Danish food cluster with its heart in East Jutland into a globally known and recognised food hub.





Basis for realisation of four development tracks and associated initiatives

The task force has prioritised a number of recommendations for initiatives within four development tracks which could contribute to further sustainable growth and job creation in the food sector:

- 1) East Jutland food expertise in international context
- **2)** Increased sustainable growth through structured cooperation
- 3) Development of sustainable solutions
- 4) Well-qualified workforce

In all, 3 million DKK is earmarked for realisation of the food strategy.

When the East Jutland Food Partnership meets during the strategy period 2020-2022, it will contribute to ensuring that the initiatives can be adapted to the needs of business as a supplement to the forthcoming national cluster organisation. The partnership will contribute to qualify the realisation of the strategy's specific efforts.

The task force recommends openness to activating initiatives which go beyond the efforts they have recommended to the political steering group of Business Region Aarhus. This is because the organisation and the task portfolio of the coming national food cluster have not been clarified. In addition, the food hub in East Jutland could encounter ongoing challenges and opportunities which it may be appropriate to act upon to meet the objective of Business Region Aarhus to develop East Jutland into an internationally recognised food hub.





East Jutland is the heart of the Danish food cluster

Food production is a sector which constitutes an essential commercial position of strength across East Jutland. It is a position of strength that is broadly based along the whole value chain from soil to table.

There are budding companies often having new sustainable solutions, large market-leading food companies and strong knowledge institutions in East Jutland. In addition, many companies supply equipment to the food industry. A significant portion of the food-related businesses have become a part of global food-related corporates.

The Danish food cluster is one of Europe's largest and most innovative¹, and there is great potential for increased growth. Food-related businesses make up 25% of the total exports of Danish goods. Food-related businesses in East Jutland are responsible for 33% of Danish food exports. A steadily growing population and, not least, an explosively growing middle class worldwide result in growing demand for Danish competencies relating to food ingredients, food security and healthy food products, among other things. Food businesses in Denmark are, for example, responsible for 14% of the world's production of food ingredients, and, among these, East Jutland businesses are responsible for more than 4% of the world's total production of food ingredients.

Increasing consumer awareness of the value of sustainable production of healthy food products strengthens demand further. For instance, Denmark has a very well-developed organic production with the highest organic market share in the world. East Jutland is the centre for organic expertise in Denmark.

Sources: "Innovation in the food industry: An international benchmark study", LEI Wageningen UR Report 36, 2013 and "Innovation in the Irish Agrifood Sector", Renwick et al, 2014.



All over East Jutland, there are a high concentration of local farm shops and primary producers of foodstuffs. In recent years, several successful producers of high-quality food ingredients for Michelin restaurants have appeared.

The food-related companies in East Jutland are international leaders in several sectors. This is especially true regarding food analysis and consulting, processing equipment, digital solutions, processing of milk products, meat, sustainable protein sources and ingredients. The companies have access to local raw produce from East Jutland agriculture, which has some of the country's best farmland.

East Jutland is the heart of the Danish food cluster, which, overall, is the world's third largest food cluster (measured by number of employees). The knowledge and innovation strength are especially centred around Agro Food Park with a 55,000 m2 innovation environment and with 1,250 knowledge employees. Here, Arla Foods has established its global innovation centre, and, in November 2019, Aarhus University consolidated its food research into an approx. 10,000 m2 research environment, with leading research facilities.

In Foulum, near Viborg, Aarhus University and Agro Business Park form a leading international research and development environment, particularly in the areas of farming and bioresources. On 590 hectares and in 120,000 m2 of buildings, there are numerous laboratories and the world's largest experimental biogas plant. There are 250 researchers and 150 Ph.D. students, half of which come from abroad.

In addition to that, there are several other commercial specialisations in the food and bioresource area in East Jutland. This is true for ingredients, bioeconomy and circular









economy, packaging, processing equipment, IT and automation, agricultural innovation, and development of food products.

In November 2019, Business Region Aarhus entered into a partnership agreement with Regio Foodvalley in Holland. The agreement is aimed at developing close collaboration between the knowledge institutions, companies, and public authorities in the two business regions on development of a sustainable food system. The two internationally leading universities in food and agricultural research, Wageningen University & Research and Aarhus University, are central players in the development of a successful collaboration.

Specific initiatives in the collaboration include, among other things, cooperation on joint international positioning of the two leading food hubs in Europe. In addition, there will be work on creating an overview of, and easy access to, the leading international innovation environments in the business regions for researchers, students, and companies. For example, Regio Foodvalley has a centre of expertise in poultry and soon a centre of expertise in sustainable protein sources, and Business Region Aarhus has centres of expertise in cattle, pigs and seaweed.

Business Region Aarhus is a large, connected labour force area, and this is particularly evident within food. This provides a good starting point for East Jutland to develop one of the world's strongest ecosystems in the food sector.









Development tracks and initiatives

Business Region Aarhus will strengthen the food sector with the following strategic development tracks and associated initiatives:

East Jutland food expertise in an international context

There is a need to show that East Jutland has one of Europe's largest concentrations of food related businesses and knowledge institutions through a common identity. This will contribute to continued investment and sufficient recruiting to the food sector in Business Region Aarhus. In addition, we will bring East Jutland expertise into play globally to promote sustainable solutions and job creation. The following initiatives are set in motion:

1/ International visibility

To increase recognition of the East Jutland food hub, which has one of Europe's largest concentrations of food and agricultural expertise, there is a need to form a common identity and a matching brand. The brand will be developed with a view towards the international profiling activities of the new national cluster organisation Food & Bio Cluster Denmark.

2/ Solutions for global food challenges

Several initiatives contribute to support opportunities for East Jutland food business to contribute with solutions to the global food challenges:

- The international brand identity is activated through attraction of international conferences on food and bioresources. There will be an examination of whether there are grounds for establishing an international top conference that can be held annually on an alternating basis in cooperation with Regio Foodvalley in the Netherlands.
- Business Region Aarhus is working to become a member of EIT FOOD, which
 is the EU's largest initiative for promoting Europe's global competitiveness in
 the food sector. This will provide opportunities to seek special EU funds reserved for EIT FOOD.
- The two international events European Food Venture Forum and European Bioeconomy Venture Forum unite their strengths into one large scale venture capital event: Food & Bioeconomy Venture Forum. The ambition is to position the venture capital event as a globally known and recognised event which strengthens access to venture capital for promising companies.





Strategic action plan for food and bioresources 2020-2022



Increased sustainable growth through structured cooperation

The secretariat of Business Region Aarhus will in collaboration with other stakeholders link companies and knowledge institutions along the value chain in the East Jutland ecosystem closer together. East Jutland companies will be able to get specific inspiration for how they can sustainably strengthen their businesses in cooperation with other companies and knowledge institutions. The following initiatives are in action:

1/ Structured development of the ecosystem

The ecosystem for food and bioeconomy in East Jutland will be developed in a structured way. This means the ecosystem will be developed within the specific food-related specialisation areas such as ingredients, bioeconomy, packaging, processing equipment and food product development. The East Jutland municipalities with the largest specific business concentration within each specialisation area will drive the development of the relevant specialisation area for the whole of East Jutland together with the Business Region Aarhus secretariat. The effort will be open and accessible to all food-related companies in East Jutland.

2/ New knowledge and increased cooperation

Several seminars will be held with presentations and discussion of central, current themes which contribute to the development of food-related companies, such as automation, robot technology and the linkage between food and health. The thematic seminars are developed, for example, in cooperation with Food & Bio Cluster Denmark and business promotion players such as Vaekstfonden, Innovation Fund Denmark, Business Hub Central Denmark and the local business service offices.



Development of sustainable solutions

The capability of developing new sustainable solutions in cooperation among companies, knowledge institutions and public authorities will be strengthened further in East Jutland. Strengthened innovation contributes to job creation, development of more sustainable solutions for the global challenges and strengthening of the companies' competitiveness. This increases interest from international companies in making investments in East Jutland. The following initiative is set in motion:

1/ East Jutland Food Partnership

A funding pool is available to the East Jutland Food Partnership for realisation of initiatives that strengthen the innovation of East Jutland food companies. The initiatives will especially focus on smaller companies that do not have their own innovation section. The East Jutland Food Partnership will consider possible projects at the annual meetings.

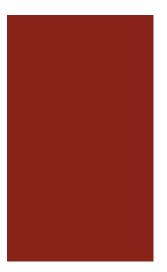
Well-qualified workforce

The task force emphasises that municipalities have an important role in encouraging that young people choose a food-related higher education with good job opportunities, and thereby ensure that the companies have access to sufficient qualified labour. Recruiting qualified labour at all levels is an overall challenge for food companies. The challenge is greatest when it comes to the short and medium-length higher educations, for example, industry technicians, operations managers, and engineers. The effort is supported by the HEADSTART initiative, which focuses on attracting specialists from abroad. The following initiative is set in motion:

1/ Attraction of highly skilled labour

In 2018 and 2019, Business Region Aarhus was a partner in the development of Career Day ¬¬ an English-language, food-specialised job expo at Agro Food Park. This effort is developed further in cooperation with the HEADSTART initiative. Career Day will create an effective job match between companies and knowledge institutions on one side and students and job-seeking graduates on the other side.

Below are details on how the initiatives will be carried out and how much funding Business Region Aarhus allocates for implementation of the initiatives.





International visibility

WHY

The national organisation Food & Bio Cluster Denmark will work with international marketing of Denmark as a food nation from 2021. It is appropriate to have a division of labour, in which international marketing from the national level is combined with regional players profiling the central hub of foods internationally. A common brand identity for the internationally unique concentration of the whole value chain of food players in East Jutland will have benefit both externally and internally. Externally, potential international investors and partners will be able to spot the complete East Jutland ecosystem more easily. Internally, the development of a brand identity will contribute to a sense of community among the local businesses - being part of something larger - and increased attention on the many other relevant food product competencies and partners that can be found within an hour's drive in East Jutland.

The aim of developing a trustworthy brand identity is:

- a noticeable increase in international knowledge of and recognition of the East Jutland food ecosystem
- · attracting international food-related companies
- that the companies find that it becomes easier to recruit international labour.

HOW

The effort is developed in cooperation with the HEADSTART project, which will increase the attraction and retention of international labour. Internationally competitive companies and knowledge institutions establish a common identity and a matching brand name for the East Jutland food sector's position of strength in cooperation with a communications agency. This includes a strategy for how the ecosystem is promoted in a reliable way, and how wide ownership of the common brand is created among East Jutland companies and knowledge institutions. To increase the reliability of the common brand identity, it is essential to strengthen and communicate fact-based knowledge about the ecosystem's development. Unifying activities which support the international positioning in connection with the brand must be developed.

WHO	Business Region Aarhus facilitates the process in cooperation with the international companies and knowledge institutions in East Jutland. Cooperation on promotion with Invest in Denmark, Food Nation, Food Organisation of Denmark, interest organisations and Food & Bio Cluster Denmark.
WHEN	In 2020, there will be clarification of how an effort can appropriately be developed to support the national cluster organisation. Then a common brand identity will be developed, and the strategy for anchoring and promotion will be determined. The results of a branding process can only be expected to appear after several years. But, especially internally, there will be an ability to reap rewards in a short amount of time in the form of strengthened solidarity and cooperation.
RESOURCES	In 2020-2022, Business Region Aarhus allocates 100,000 DKK annually to realise the initiative in cooperation with internationally competitive companies and knowledge institutions in East Jutland and in coordination with Food & Bio Cluster Denmark.

Solutions for global food challenges

WHY

East Jutland companies and knowledge institutions are leaders in expertise on sustainable solutions for food and bioenergy. With several initiatives, East Jutland food related businesses will strengthen their opportunities for solving the global food challenges and, at the same time, strengthen their competitiveness:

- a) Realisation of the initiatives in the partnership agreement with Regio Foodvalley in the Netherlands, with the joint mission of developing a sustainable food products system.
- b) Aarhus University urges Business Region Aarhus to become a member of the large European consortium EIT FOOD, which aims at strengthening the EU's worldwide competitiveness in food production. By obtaining membership in EIT FOOD, East Jutland players get access to seeking development funding from a special EU-supported pool totalling €50,000 annually. At the same time, the membership gives East Jutland food businesses easy access to cooperation with leading knowledge environments in Europe.
- c) Combination and further development of the events that provide venture capital by merging European Food Venture Forum and European Bioeconomy Venture Forum into Food & Bioeconomy Venture Forum.
- d) Hosting of international conferences contributes to raising the profile and to stimulating new thinking and innovation. We will generally support the attraction of international conferences. The international conferences will support the forthcoming brand identity for the East Jutland food sector's position of strength.

In addition, the basis for initiating a new international top conference must be examined, possibly in cooperation with Regio Foodvalley in the Netherlands. This is in line with the partnership agreement with Regio Foodvalley to stimulate development of sustainable and climate-friendly solutions in agriculture and foods. At the top conference, new knowledge could be presented, and the development of new products and solutions could be stimulated.

HOW a) The cooperation with Regio Foodvalley is developed in close dialogue with Regio Foodvalley. Among the first activities, an intensive workshop is planned to strengthen the cooperation among the food innovation ecosystems, with the participation of key players from Regio Foodvalley and Business Region Aarhus. b) Business Region Aarhus applies for admission to EIT FOOD. c) The municipalities of Viborg and Aarhus are interested in combining the two international capital events European Food Venture Forum and European Bioeconomy Venture Forum into Food & Bioeconomy Venture Forum. The aim is to develop the joint event further so that it becomes a leading global event in foods and bioeconomy. The joint event will be held alternately in Viborg and Aarhus. d) There will be continuous screening of potential international conferences that can be attracted to East Jutland. The concept for a possible top conference is that the venue alternates between Business Region Aarhus and Regio Foodvalley in the Netherlands. Examples of content elements can be: Presentation of newest application-oriented research, student challenges, awarding of the best solutions, matchmaking, visits with innovative food businesses, etc. Business Region Aarhus will promote the various initiatives WHO in cooperation with the relevant stakeholders. The central partners for attracting international conferences are the East Jutland tourist destination associations, Aarhus University, VIA University College, the Central Denmark EU Office, large companies, Food & Bio Cluster Denmark, and other national, regional and local business promotion stakeholders. **WHEN** The various initiatives will immediately be put into action. The work on attracting international conferences is an ongoing effort. In relation to a possible top conference, there will be clarification during 2020 as to whether there is a basis for an annual top conference in cooperation with Regio Foodvalley, Aarhus University, Wageningen University & Research, and other key players. If the occasion should arise, the conference will first be held in East Jutland in 2021

and in Regio Foodvalley in 2022.

s. **16**/23

Strategic action plan for ood and bioresources 2020-2022

RSSOURCES

- a) Business Region Aarhus allocates 40,000 DKK annually to the Regio Foodvalley collaboration in 2020-2022.
- b) Business Region Aarhus allocates 40,000 DKK annually to membership in EIT FOOD in 2020-2022.
- c) Business Region Aarhus allocates 25,000 DKK in 2020 and 50,000 DKK in 2021 and 2022 to the joint international venture capital event.
- d) In all, 600.000 DKK is earmarked for the effort, allocated over 2020-2022; the allocations are 150,000 DKK in 2020 and 225,000 DKK annually in 2021-2022. In relation to concrete conference opportunities, possible national and EU co-funding sources will be identified.

In relation to the ability to realise a possible international top conference, sponsor packages will be prepared, and the top conference will require paid registration.



Structured development of the ecosystem

WHY

Through structured development of the East Jutland ecosystem for food and bioeconomy, the competitive strength of the companies is increased.

The effort will contribute to making it easier for food businesses to find relevant partners in the East Jutland food ecosystem. For instance, this will occur by creating transparency within the ecosystem and promoting increased cooperation both within and outside the ecosystem. In addition, there will be a focus on the potential for growth in startups and scaleups.

The growth of new food companies contributes to new jobs, new sustainable solutions and new talents and strengthen the food chain of the whole ecosystem for food innovation in several ways:

- Development and commercialisation of new products, services and solutions for the future's challenges.
- Through innovation collaborations, in which the innovation strength of a new company is utilised in cooperation with one or more specific challenges or potentials at a well-established company. Several smaller companies can also collaborate on innovation – possibly in cooperation with a research and education institution.
- Through acquisition, in which the innovative smaller company is bought by a large company.

HOW

The initiative will develop East Jutland's special positions of strength within food and bioeconomy. The secretariat of Business Region Aarhus facilitates cooperation among municipalities across their administrative borders to realize the potential in these business positions of strength. In so doing, the municipalities together support the development of the business specialisations in East Jutland.

The business specialisations are particularly located in the following municipalities:

Commercial specialisation	Municipality
Ingredients	Hedensted, Horsens and Aarhus
Bioeconomy and circular economy	Viborg
Packaging	Horsens
Processing equipment	Silkeborg, Skanderborg and Aarhus
IT and automation	Viborg, Horsens and Aarhus
Agricultural innovation	Odder, Favrskov, Horsens, Viborg and Aarhus
Development of food products	Norddjurs, Samsø, Syddjurs, Horsens, Randers and Aarhus

HOW -continued	The secretariat of Business Region Aarhus coordinates and activates the cooperation with players in the ecosystem for foods and bioeconomy. This can, among other things, include: - planning and holding of theme seminars with good cases and presentations of good and not-so-good experiences.
	 a digital portal with a categorised overview of which players in the East Jutland ecosystem can help with expertise in the various parts of the food sector. Digital maps of the individual parts of the food sector in East Jutland can support the effort. project applications to foundations and the Danish Executive Board for Business Development and Growth.
	Facilitating the framework to let students and new companies come forth with solutions for the challenges and possibilities at existing companies.
WHO	The target group for this outreach effort is small and medium-sized companies, as they often do not know where they can find relevant expertise and partners in the ecosystem. The secretariat of Business Region Aarhus will cooperate closely with the organisations working to promote the competitiveness of businesses in the food sector. The effort will especially take place in close cooperation with the national cluster organisation Food & Bio Cluster Denmark.
WHEN	The initiative is established and developed in East Jutland during the strategy period. There will be work on making this a nationwide initiative as a part of the national cluster organisation Food & Bio Cluster Denmark's activities. The effort is coordinated in collaboration with Food & Bio Cluster Denmark, and opportunities for cooperation are clarified with Business Hub Central Denmark.
RESOURCES	Business Region Aarhus allocates 150,000 DKK in 2020 and 300,000 DKK annually in 2021-2022 to realise the effort.

New knowledge and increased cooperation

WHY	Theme seminars are a well-proven format to present new knowledge, stimulate new thinking and innovation, and strengthen familiarity with each other with a view to increased cooperation. Thus, Business Region Aarhus carried out 12 theme meetings at companies in the 12 municipalities during the previous strategy period. The two hours network meetings attracted 40-110 participants per meeting. The meetings have generally got very good feedback – they are described as a good way to gain new knowledge and to get to know each other better. The seminars in the new strategy period are themed after the current drivers of innovation and growth: health, climate and sustainability, and new technologies – including automation, use of robots, 3D printing, block chain, etc. The goal is at least 80 registered participants per network event – including at least 50% from companies.
HOW	The theme seminars are carried out in an established pattern - one annual meeting per "driver of innovation and growth" - and focus on presenting the latest new knowledge and the best cases. The theme seminars are upgraded in relation to the previous strategy period: There will be a greater focus on presentation and discussion about good practice that can contribute to business development and new collaborations, and there will be an examination of whether there is interest in extending the seminars to more fully deal with the themes covered. It is important the theme seminars are also attractive to the many international employees among the food businesses and knowledge institutions in East Jutland. The seminars are held at companies spread around East Jutland.
нwно	The organizer is Business Region Aarhus in close cooperation with the relevant partners. The individual events are carried out in close cooperation with relevant knowledge institutions.
WHEN	Three events will be carried out per year during the period 2020-2022.
RESOURCES	Business Region Aarhus allocates 100,000 DKK annually in 2020-2022.

The East Jutland Food Partnership

WHY	Companies and knowledge institutions in the East Jutland Food Partnership have a funding pool to realise projects that strengthen innovation, especially among new companies and established companies without their own innovation department. The projects must, among other things, strengthen growth with the aim of increasing the number of startups and scaleups, including creating several new businesses based on research results, and encourage researchers and students to start a business. This aims to strengthen job creation as well as strengthening the innovation power in East Jutland and Denmark. It is valuable for the large/existing companies to have a strong environment of innovative startups with which they can establish cooperation. This as part of the continuous effort to develop new, innovative solutions in relation to products, processes, business models, etc.
HOW	The East Jutland Food Partnership will consider possible projects at the annual meetings. The projects must, among other things, contribute to new thinking and strengthening innovation environments and activities. In the development of incubator environments, the frameworks can, for example, be strengthened for generating and maturing ideas that can lead to establishment and development of new companies, or that can be acquired by existing companies via an exchange of ideas. The projects can also contribute to realising facilities that provide companies access to labs/ research infrastructure, access to knowledge/advice, etc.
WHO	The projects can be developed in cooperation with knowledge institutions, business promotion agencies, public institutions, innovation environments and foundations.
WHEN	The East Jutland Food Partnership will consider possible projects at the annual meetings in 2020-2022.
RESOURCES	Business Region Aarhus allocates 150,000 DKK in 2020 and 200,000 DKK annually in 2021 and 2022 to the pool.

Attraction of well-qualified workforce

WHY	Many food-related companies are growing and experiencing big challenges in recruiting highly skilled labour. The job expo Career Day creates an effective job match between food-related companies and knowledge institutions on one side and students and graduate jobseekers on the other. Business Region Aarhus has a special focus on supporting the companies' options for recruiting highly skilled international labour.
HOW	Career Day is a platform where food-related companies can present their job opportunities for Danish and international students and graduates. Students from a wide range of higher educational backgrounds take part in Career Day. At Career Day in 2019, more than 350 students and jobseekers obtained more knowledge about the career opportunities in the food sector. They got the opportunity to hear inspiring presentations and speak with the 31 food-related companies looking for new employees.
WHO	Agro Food Park, Foodjob Nordic, HEADSTART and Business Region Aarhus are responsible for Career Day, with Agro Food Park as the operator.
WHEN	Career Day is an annual event, normally held in September.
RESOURCES	Business Region Aarhus allocates 25,000 DKK annually in 2020-2022.

