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# A Strong Partnership Built on Trade and Collaboration

Economic opportunity is the foundation for well-being in any society. Trade partnerships between countries, more than anything else, create economic opportunity. Danes and Americans are doing business, building relationships, and developing new ideas every day.

All of this creates economic opportunity. Denmark is a small, open, and innovative economy that relies on interaction with other parts of the world. Accessing markets, capital, and new knowledge is essential for us to thrive and develop as a country. This is why our relationship with the U.S. is so important.

The U.S. is the largest export market for Danish companies. In 2021, the exports increased from an already record level and is now more than 25 billion USD. And when it comes to fastest growing sources of FDI in the U.S, Denmark ranks as number 7 in the world with a 16,7 pct. growth from 2015 to 2020.

Danish research institutions and students come to the U.S. to gain knowledge and look for opportunities to cooperate with American universities – many of which are world leaders in their field. In addition, many

Danish companies have established themselves in the U.S. because they want to be close to consumers and – in many cases – to be part of an industry knowledge hub that is essential for their growth and success.

The economic interaction with the U.S. benefits Denmark, which means jobs and opportunities for Americans. In addition, the Danish economic footprint significantly contributes to many local economies throughout the U.S. This publication illustrates the solid financial ties between our two countries. We are proud that around 150.000 jobs in the U.S. currently exist because of the U.S. trade relationship with Denmark, either directly by Danish companies or by the American export of goods and services to Denmark.

The Danish Government wishes to strengthen the existing ties between us further. That is why we emphasize the partnership model. Our efforts in the U.S. are not only to build on the Danish commercial strongholds but also on our capabilities to cooperate with U.S. counterparts. Denmark is present in many U.S. locations, where the primary mission of these offices will be to establish and reinforce even stronger

economic relations between Denmark and the U.S. We sincerely hope that even stronger cooperation and partnerships will come from the work carried out by our efforts across this vast nation.

Christina Markus Lassen, Ambassador of Denmark to the United States

Thomas Bustrup,
Deputy Director General of the
Confederation of Danish Industry

# **Trade and Investments**

912 **Danish companies** employ **78,600** people in the U.S.

**Jobs from export** of goods and services from the U.S. to **Denmark employ 70,700** people in the U.S.

In total jobs

U.S.

FDI

When it comes to fastest growing sources of FDI in the U.S. Denmark ranks as number 7 in the world with a 16,7 pct. growth from 2015 to 2020.

In total iobs

\$7.4 billion U.S. FDI in Denmark

Ey. Denmark

**727 U.S.** companies employ **37,550** people in Denmark

**Jobs from export** of goods and services from Denmark to the U.S. employ 98,250 people in Denmark

billion billion **Danish FDI Danish exports** in the U.S. to the U.S.

\$17.3

billion

**U.S.** exports

to Denmark

Job multiplier

Every time a job is created, additional jobs are created to support it. It is called the multiplier effect. If a conservative multiplier of 1.6 is applied, the total number of U.S. jobs supported by economic interaction with Denmark is 388,480.

# Official Danish Missions in the U.S.



# A high-performing Economy

Denmark is a high-performing market economy founded on liberal market principles. It is also a highly globalized economy that is more open than most countries in terms of trade and investments. As a result, Denmark has fostered advanced industry and world-class companies. This framework that sustain a solid foundation for high living standards, gives Danes the freedom to pursue their dreams and goals.

Danish prosperity has been built on trade with other countries. Nearly half of Denmark's private production of goods and services is sold to customers abroad. In addition, roughly 40 percent of the private-sector jobs in Denmark have been created thanks to the ability of Danish companies reaching people and markets worldwide.

Denmark is also capitalism with soft edges. The foundation for growth and prosperity goes hand in hand with principles of equality, social cohesion, and concern for the environment. The Danish social model's cornerstones are widespread wealth allocation, free

education, free healthcare, and a system that helps unemployed workers find new work or obtain appropriate retraining.

Another defining element is the close cooperation between Danish public authorities and the private sector in terms of both policy formulation and policy implementation. It is a model that works to the benefit of private companies since it results in a well-educated workforce, a high degree of unity and stability in society, and an almost total absence of corruption.

According to the UN, it has made Denmark one of the happiest countries in the world. In addition, according to the World Bank, Denmark has remained the number one European country for ease of doing business.

An efficient public sector, and a long-term focus on policies and reforms that will promote balance in society and a well-functioning private sector, are among the primary reasons for Denmark's top ranking.

### **Facts about Denmark**

Capital: Copenhagen

Population (in millions): 5.8

GDP per capita (\$): 60,500

GDP (\$ billion): 352

The #1 European Country for ease of doing business according to the World Bank.

The #1 most digitalized economy and society in Europe according to the EU Commission.

Consequently, Danish companies benefit from a culture with a strong tradition of cooperation, balance, and trust. Moreover, the Danish labor market demonstrates a culture that underpins a trust-based collaboration between employers, employees, and the state. Trust is also one of the reasons why Denmark, according to the EU's digital index, is Europe's most advanced digital economy. Most companies rapidly embrace digital technologies, and the public sector delivers many services through the internet.

Against this backdrop, Danish companies are exploring economic opportunities around the world. For example, in the U.S., Danish companies are active in a wide range of sectors – with a few sectors being key: Health care, energy, environment, food and agriculture, shipping, and defense industry.



# **Defense Industry**

Whether it is for national security, emergency preparedness, or the development of military capabilities, state-of-the-art equipment is critical. Therefore, the western alliance must continue to maintain and develop technologies and capabilities together in peacetime and times of crisis. It leads to increased innovation and enables improved interoperability amongst our armed forces. As such, it is a vital priority of the Kingdom of Denmark to maintain and further develop its strong ties with the U.S. as our closest and most important ally.

In the summer of 2021, The Danish Government announced a new national strategy for the defense industry. A central part of the strategy is to build additional avenues for increased cooperation with allied nations.

# Innovative and Value-Driven Solutions Supporting the Warfighter

The Danish defense industrial base is at the forefront of innovation and technology with products and services used in several operational environments through deployments with U.S. troops in Afghanistan, Iraq, and other conflict zones. As a globally renowned knowledge-intensive country, Denmark has distinguished capabilities within critical areas such as AI, cyber, drone- and robotics, high-precision engineering, design and machining, IRS and sensor technology, and much more. In close collaboration between industry, government, and leading research institutions, the Danish ecosystems effectively develop critical capabilities to support tomorrow's warfighter.

### **Danish-American Collaboration**

As two of the eight founding partner-nations of the F-35 program, Danish and U.S. companies work closely together to deliver this 5th generation capability. Danish companies continue to supply and develop key components and software for the F-35 Lightning II. Moreover, Danish solutions are used in many integrated platforms and weapon systems as key components. Several Danish defense contractors have established offices and subsidiaries in the U.S., for example, in Virginia, Texas, and Georgia.

### **Energy Security is Critical**

It is more evident than ever that solid security policies are closely linked with energy policies. To ensure operational resiliency and provide mission assurance for the warfighter, reliable energy systems and critical infrastructure are crucial. Decades of developing and modernizing energy systems and policies in Denmark have resulted in world-leading capabilities and infrastructure that generate independence and increased operational efficiency. At the same time, it also offers sustainable solutions for decarbonization to combat increasingly disruptive climate challenges.

### **DANISH DEFENSE INDUSTRY ALLIANCE - A PLATFORM** FOR INCREASED COLLABO-**RATION AND GROWTH**

The Danish government authorities, represented by the Ministry of Defense and Ministry of Foreign Affairs, and anchored at the Danish Embassy in Washington DC, have introduced a new strategic initiative to promote increased collaboration and partnerships in the defense industrial base in the North American markets.

This shared initiative and strategic platform, called the Danish Defense Industry Alliance (DDIA), aims to boost engagement activities and commercial partnerships between North American and Danish industry players.

### **Bringing Stakeholders Together to Locate Innovative Products and Technology**

The DDIA brings together leading companies from the Danish defense industry base and creates settings

The founding alliance partners of the DDIA are:

**INVISIO:** Tactical communication systems

MDSI: Mission systems, joint domain integration, computer-based modelling and simulation

Multicut: High-precision CNC machining, mechanical joining

Terma: Advanced aerostructures, avionics, intelligence surveillance reconnaissance (ISR), radar systems, electronic warfare systems, artificial intelligence

**UXV Technologies:** Ground control stations, sensor payloads

Weibel Scientific: Radars for instrumentation, space situational awareness, long range drone detection, air and missile defense

for North American stakeholders to come together and interact with the companies. By that, the DDIA is making it easy and convenient for North American industry, government, and other stakeholders to locate unique products and technologies that can develop into new promising partnerships. This creates both growth through jobs and investments and contributes to the development of new critical capabilities for the Warfighter. The products and services of the companies in the DDIA consist of diverse and highly specialized capabilities.

# Food & Agriculture

Instability in global supply chains and increasing threats to food safety is high on the agenda worldwide. At the same time, we are facing a global climate crisis that requires all industries to rethink and innovate productions to ensure long-term sustainability. The food and agriculture sector stands at the center of these challenges, which brings a unique opportunity for the sector to become a crucial part of the solutions.

### A Burning Platform

In the U.S., climate change is back on the political agenda, with a focus on green investments across several industries, one of them being the food and agriculture sector. As a result, on the federal and state levels, the attention and actions toward the sector's green transition become more and more evident, creating a platform for change that Denmark and Danish companies can contribute to.

### Partnering Up

As a frontrunning nation within the green transition of the food and agriculture sector, Danish companies can be valuable partners for the U.S. industry. The Danish food and agriculture cluster is highly efficient, with years of experience developing environmentally sustainable and resource-optimizing solutions for production chains. This yields opportunities for collaborating with American partners and promoting Danish know-how and solutions in an American context.

### **Accelerating Green Transition Together**

To approach the opportunities within the U.S. market, Denmark actively engages in partnerships across specific sectors within the food and agriculture industry. Due to a shortage of labor combined with a call to reduce antibiotics and GHG emissions in U.S. pig production, there is a demand for new solutions among U.S. producers. As a result, Denmark has formed an alliance with companies providing innovative and automated equipment for more efficient production to show how to improve production and answer the challenges ahead.

In California, some of the most ambitious legislation to reduce GHG emissions has been implemented. With the country's largest dairy production, Californian farmers need new sustainable solutions to meet reduction targets. Therefore, Denmark and California have entered an official partnership on sustainable dairy production, agreeing to knowledge-share, co-develop and test solutions.

Last but not least, the use of biotechnology within food production and agriculture is an inherently green transition. Denmark has several solution providers, multiple universities, and a government committed to this agenda, who are already taking action to explore how public, private and academic partnerships can accelerate biosolutions in the U.S.

# GREEN GAS IN THE U.S.

The gas market in the U.S. is currently undergoing a considerable transformation. The transformation is partly caused by a growing demand for green gas and the Russian invasion of Ukraine.

### **Both Environmental and Job Benefits**

The U.S. has announced aggressive goals of reducing GHG emissions, implementing the federal Renewable Fuel Standard, and several states implementing food diversion laws. Besides the obvious environmental benefits of biogas, biogas production also creates numerous jobs and local investments in rural areas, thereby supporting economic development in rural America.

The Danish company, Nature Energy, is the world's first fully integrated renewable natural gas (RNG) company, introducing a strong business model for financing, building, owning, and operating large-scale biogas plants. Today, Nature Energy owns and

operates 13 large scale biogas plants, treating more than 4.4 million tonnes of organic waste and converting it into more than 6.3 million MMBTU of green biogas.

### Green Gas in the American Gas Grid

Nature Energy's model differentiates from the "classic" way of building small biogas plants on individual, larger farms by working with groups of small to medium farmers to build more efficient, large-scale shared plants. Nature Energy's approach to biogas production can, therefore, be part of the development of the U.S. biogas market, thus increasing the overall percentage of RNG in the American gas grid and countering the adverse effects of global warming. Nature Energy has embarked on an ambitious international growth journey and is planning to invest 5.5 billion DKK over the next five years. They are committed to expanding in the U.S. market and already have six projects in North America and several more in the pipeline.

### A model of co-ownership

Nature Energy's model is based on regional networks of large-scale, centralized plants that take in manure from several small and medium sized farms. The collected manure is co-digested with various biomasses, such as food waste and organic industrial waste, and all of the produced biogas is upgraded to RNG and injected into the national gas grid. Nature Energy's model is based on a circular value chain where the farmers receive the treated products from the biogas production in return for handing over their manure, which can be used as a fertilizer on their fields.

tureenergy

The global energy sector is currently undergoing a period of rapid changes to decarbonize our society. The demand for clean, efficient, and reliable energy systems is increasing, and the U.S., like Denmark, is taking significant steps toward improving energy efficiency and implementing renewable energy in the grid. Danish experience shows that this transformation can happen without compromising electricity prices or reliability.

### **Ambitious Targets on Wind**

The U.S. is building the largest offshore wind pipeline in the world. By 2050 the US has pledged to have an installed capacity of 110 GW compared to today's 42 MW. Billions of dollars are committed to the offshore growth but just as important the U.S. already well-developed onshore wind industry is also set to continue its growth, with an ambition to have onshore wind energy account for 20 percent of the U.S. electricity demand in 2030. It is expected that the U.S. will see a combined new onshore and offshore new installations of at least 9 GW annually towards 2050. This is to be compared to a total overall installation of around 7 GW of wind power in Denmark today.

While the Danish wind journey started during the oil crisis in the 1970s, more than 47 percent of the Danish electricity consumption is covered by wind power alone, and the reliability is among the top in Europe. Moreover, over the years, the efforts to increase renewable energy production have made Denmark a global leader in R&D activities in this area, making Danish companies and competences a natural partner in reaching the ambitious American targets.

### Energy Efficiency Leads to a More Green and Resilient Economy

Energy efficiency is a broad field that refers to products and practices that help reduce energy consumption and create more efficient and resilient production and consumption methods within various industries. Leading U.S. states, such as California, have set ambitious energy and climate targets and specific energy efficiency targets. As a result, California leads the way toward a more green and resilient economy in the U.S. This creates opportunities for strong partnerships between Danish and American companies and organizations within areas such as the sustainable buildings sector, district energy, and the food and beverage processing industry.

### Biogas as a Source of Green Gas

The U.S. generates large amounts of food waste, livestock manure, and wastewater, which must be managed daily. Biogas plants turn these organic wastes into a source by capturing the methane to generate renewable energy and convert nutrients into rich fertilizer. The American biogas industry has many prospects but needs commercially proven, cost-effective solutions to address critical barriers to growth. Biogas plants have existed in Denmark since the 1970s, which has brought vital competencies to Danish companies. Uniting Danish biogas companies with their U.S. counterparts can help unlock commercial opportunities and accelerate sustainable biogas projects.

### NEW POLITICAL PUSH FOR OFFSHORE WIND

When the Biden Administration announced a new goal of 30 GW of offshore wind capacity in the U.S. by 2030, Ørsted, the global leader in offshore wind, was quick to react. Offshore wind expects to deliver clean, renewable energy and establish a just transition to a new heavy industry in America. However, according to the Administration, working-class America has not benefitted from the American energy boom but has faced air and water pollution in their communities. As such, when the Administration speaks of "environmental justice," they aim to improve conditions for these historically disadvantaged communities.

### Ørsted's Multi-pronged Strategy

Ørsted picked up the mantle, as evidenced in their investment strategy. The plan to develop their current portfolio of offshore wind projects (a market-leading five GW, by the way) rests on four strong pillars: American partnerships, supply chain investment, equitable jobs, and stakeholder engagement.

### Partnering with an Experienced Incumbent

Ørsted is executing its chosen strategy of investing in heavy manufacturing across the country, ports up and down the coasts and American workers through the industry's first national partnership with North America's Building Trades Unions. Ørsted is leading the way in the U.S. and is doing so with experienced local partners with Eversource, New England's largest utility, and PSEG, a trusted utility partner in New Jersey.

### **Creating a Supply Chain**

Investing in new vessels and factories across the country, Ørsted is creating a supply chain of thousands of jobs, ensuring sustained economic benefit for coastal and inland communities. Ørsted has invested more than 500 million USD in vessel building and steel manufacturing in more than a dozen U.S. states.

### **Creating Equitable Jobs**

Ørsted prioritizes union and "family-sustaining" jobs, tapping into the administration's vision for a more equitable future for the American middle class. This was cemented in May of 2022 when Ørsted signed an agreement with North America's Building Trades Union, ensuring that all of Ørsted's contractors and sub-contractors will be unionized.

### Stakeholder engagement

Ørsted has understood the need to let everyone's voice be heard. From fishers to tribal lands, the outreach work of an offshore wind developer is genuinely diverse. For instance, Ørsted continuously holds "port hours," where everyone can voice their opinion over any proposed impacts on the area where they live.



### LEVERAGING DENMARK'S **EXTENSIVE EXPERIENCE DEVELOPING OFFSHORE** WIND OF THE COAST OF **NEW YORK**

Around the world, Denmark is widely known for its ambitious green transition and more than 30 years of experience in developing offshore wind. To leverage this extensive experience and know-how, Denmark has partnered with 22 countries worldwide, responsible for more than 60% of global emissions - one of these partners being the U.S.

### **Ambitious Targets Lead to Partnerships**

Though the Federal Administration in the U.S. has recently set national targets for greenhouse gas reduction for 2030 and 2050, a significant degree of the green transition is driven on a state level. Here New York has taken the lead with a target of installing 9GW offshore Wind by 2035.

For that reason, Denmark is a close partner to NYSERDA, and the two authorities entered into a partnership through a Memorandum of Understanding (MoU) in 2018. This is the first official partnership NYSERDA has engaged in with a foreign government, and it has since been extended to allow for continued value creation.

### **Bringing Stakeholders Together is Key**

Through close collaboration, wind energy experts from the Danish Energy Agency and at the Danish Embassy in Washington D.C. have been able to share experiences and comment on the design of the regulatory framework, streamlining crucial processes to attract investors and ensure a cost-effective, fast expansion of offshore wind in New York. There has also been a strong focus on bringing key stakeholders together. For example, bringing New York decision-makers to Denmark to experience the offshore wind industry, explore an operating offshore wind farm, and meet with experts. And by bringing Danish companies together with potential local partners and decision-makers by co-hosting events in New York.

### Impactful Partnerships

Over the past four years, the Government-to-Government partnership on offshore wind between Denmark and New York has significantly impacted the build-out of the pipeline in New York by discussing critical topics revolving around offshore wind development and exploring partnership opportunities between local and Danish companies.

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### NYSERDA

The New York State Energy Research and Development Authorities, known as NYSERDA, promote energy efficiency and renewable energy sources. Collectively NYSERDA's efforts aim to reduce greenhouse gas emissions, accelerate economic growth, and reduce customer energy bills.

# COPENHAGEN FIRST-MOVERS

Copenhagen Infrastructure Partners (CIP), with partner Avangrid Renewables, was the first developer to secure the final investment decision for their Vineyard Wind (VW) offshore wind farm. In November 2021, the project broke ground, and in 2024 all 800 MW are expected to produce clean power for Massachusetts.

### **Revitalizing Cities**

After acquiring the rights to the VW site in 2016, VW established its headquarters in New Bedford, a city on the South Coast of Massachusetts. The project will also utilize the New Bedford Marine Commerce Terminal for staging and construction of the project. The former whaling port, which today relies on fishing, is the first port in the U.S. designed specifically for offshore wind construction.

## Workforce Training, Union Jobs, and Outreach is the Key to Succes

The VW-run "Look Local First" initiative sets up buyer/employer events to qualify even more local suppliers in New Bedford and beyond. VW is committed to hiring Massachusetts labor before looking outside the state.

To that end, VW signed the first offshore wind project labor agreement with the Massachusetts Building Trades Union to ensure that out of the 1,000 construction jobs created, 500 will be from the local building trades. In addition, VW has set very high diversity goals, with targets of 10% women and 20% black, indigenous, and people of color.

Finally, Vineyard Wind holds monthly port hours for fishers to ensure consistent engagement with local stakeholders and regularly meets with the community and civic groups of all kinds.

### About the project

Wind farm capacity: 800 MW Local jobs during construction: 3,600 full time equivalent job years

Households served: 400,000

CO2 avoided each year: 1,600,000 tons

# Environmen

Water is essential to our lives. We all rely on water, from community wellbeing to sustaining ecosystems to powering economies. However, many of the biggest global challenges are related to water.

Pressure on regional water supplies, new water management strategies, and high water loss are dominant features in water-scarce regions. Water quality requirements, PFAS challenges, digitalization, and high energy costs for treatment are predominant themes on the wastewater side.

In the U.S. alone, the Environmental Protection Agency estimates a need to invest around USD 740 billion to maintain American water infrastructure over the next 20 years. In addition, many cities face the challenge of coping with the increasing frequency of exceptionally high wastewater volumes arising from heavy rainfall events, often in combination with sea-level rise.

### Bridging the Gap Between the U.S. and Danish **Water Sectors**

Since 2014, the Danish Water Technology Alliance (WTA) has fostered peer-to-peer knowledge exchange and collaboration between the Danish and the U.S.

water industry. Over the years, the WTA has engaged with hundreds of ambitious U.S. utilities. Utility visits, best practice workshops and seminars, feasibility studies, and inspirational fact-finding trips to Denmark have been accomplished, where hundreds of U.S. water professionals have experienced state-ofthe-art solutions in operation and met peers abroad.

### Sustainable, Efficient, and Resilient Water Management

Close collaboration between regulators, utilities, universities, and the private sector has allowed Denmark to secure a global leadership position in integrated water management, water efficiency, and wastewater treatment. Since 1980, Denmark has managed to reduce water consumption by 40 percent, nationwide, the non-revenue water in pipelines has been reduced to less than 6 percent on average, and wastewater is now treated efficiently with a strong focus on energy and resource recovery. As a result, the Danish water sector expects to become energy and climate-neutral before 2030. In addition, several Danish wastewater treatment plants are net-energy producers and sell heat and power converted from sludge back to the grid in a best practice circular economy.

### The Water Technology Alliance:

The WTA comprises a wide range of Danish water technology and solutions providers, world-leading Danish utilities such as Aarhus Vand. Vandcenter Syd, HOFOR, and BIOFOS, and the Danish Ministry of Environment. Furthermore, The Danish Industry Foundation has also supported the alliance. The activities are anchored at the Danish Consulates in Chicago, IL, Houston, TX, and Palo Alto, CA.

# GROUNDWATER IN CALIFORNIA

As the U.S. requires water solutions that can deliver and purify water to a growing global population safely, effectively, and sustainably, significant investments are made in the American water infrastructure. To support the transition, the Danish Water Technology Alliance has been present in California to build relations and foster partnerships between the American and Danish water sector since 2016. Combining green diplomacy and commercial efforts brings Danish suppliers and Californian decision-makers closer together to secure effective water solutions.

### An Extensive Public-Private Partnership

The first Memorandum of Understanding between California and Denmark was signed in 2017 and expanded and extended in spring 2021.

The purpose of the Memorandum of Understanding between California and Denmark is:

- Contributing to creating a more efficient and sustainable system for managing water resources.
- Contributing to creating wastewater treatment techniques that are more resource- and climate-friendly.
- Encouraging innovation in the water sector that calls for and supports technological advancement and entrepreneurship.
- Inspiring initiatives that contribute to a carbon-neutral economy.

### Collaboration on Sustainable Groundwater

In 2014, the State of California enacted the Sustainable Groundwater Management Act, which requires local agencies in high- and medium-priority groundwater basins to develop and implement groundwater sustainability plans and to assist local agencies as they develop these plans. As a result, the California Department of Water Resources (DWR) will conduct airborne electromagnetic (AEM) surveys in California's high- and medium-priority groundwater basins. Based on the California-Denmark



# Shipping

More than 80 percent of global trade is carried by sea. As a result, the maritime sector is the backbone of international trade while also being the most efficient and cost-effective mode for the transportation of goods. However, as one of the hard-to-abate sectors accounting for 2-3 percent of global emissions, Denmark has continued to raise its ambitions. Denmark aims for zero-emission shipping in 2050 with the U.S. in international fora. Continued efforts to ensure a greener sector facilitating international trade require a good infrastructure, unimpeded trade, and global regulation to create a level playing field.

### A Modern Green Maritime Cluster

Denmark is a world-leading maritime nation with shipping at its core and focuses significantly on decarbonizing future shipping supply chains. Danish shipping companies have global operations and are responsible for moving a substantial part of the goods and commodities transported around the globe today.

Danish maritime competencies rest upon a bedrock of competitive and stable framework conditions and strong maritime competencies in combination with business insight, innovation, and close cooperation throughout the domestic maritime sector.

Denmark is known worldwide for supporting a level playing field for the global maritime industry and quality shipping, including high standards in marine health, safety, and environmental protection.

### Danish Activities in the U.S.

Danish shipping companies have a strong presence in the U.S., with subsidiaries across the country and activities in almost every state along the American coastline.

Danish-operated ships call at U.S. ports thousands of times every year and are thus responsible for a significant portion of containers, dry cargo (iron ore, coal, etc.), gas, and crude and fuel oil being transported in and out of the country.

# MISSION INNOVATION ZERO-EMISSION SHIPPING MISSION

Emissions from shipping are projected to grow through 2050 if no action is taken. Together with the U.S., Norway, and NGOs, Denmark is committed to helping avoid this outcome. The countries are leading on implementing a Zero-Emission Shipping Mission under the Mission Innovation framework that will focus on the entire value chain: the ship, the fuel production and the fuel infrastructure, driving the sector to a tipping point in its transition to zero-emissions as soon as possible.

### **Urgency Requires Cooperation**

It has to be a practicable and viable choice to succeed with emission-free shipping by 2030. This creates an urgent need to develop, demonstrate and deploy zero-emission ships, fuels, and fuel infrastructure in a coordinated fashion to overcome a situation where each part of the value chain waits for the others. This concrete cooperation between Denmark and the U.S. will help develop, test, and commercialize maritime and energy technologies and prepare the market for zero-emission vessels.

### Together the members of the Mission Innovation will:

- Increase engagement with the private sector to link up decarbonization efforts across the value chain and promote/facilitate public-private partnerships.
- Increase international exchanges and sharing of best practices, including sharing domestic efforts on innovation for zero-emission shipping (e.g., policies, programs, and public-private partnerships).
- Engage in research, development, and demonstration activities that will help accelerate commercial readiness of maritime and energy technologies, paving the way for well-to-wake zero-emission vessels.

# **Health and** Life Sciences

Strong and well-functioning healthcare systems are essential, not only for our well-being but for sustaining and growing our societies and economies - most recently evidenced by the COVID-19 pandemic and longterm by the challenges posed by aging populations.

The U.S. and Denmark both have world-class healthcare systems. While their systems may differ, they both possess high potential for mutual learning and expanded collaboration. The Danish healthcare system is known for its state-of-the-art digitalization and pervasive use of data across systems, providers, research, etc. The U.S. healthcare system is known for its world-class specialized treatments and extensive application of innovative, cutting-edge technologies.

### **Mutual Challenges and Priorities**

Innovation, research, and development are vital components in a global push toward more effective pathways to new treatment, new medicines, and more sustainable healthcare systems. The U.S. and Denmark are committed to healthcare innovation and a willingness to succeed through public-private partnerships that transform new ideas and knowledge into tangible solutions and treatments that improve

patient output while keeping costs low. Through the exchange of best practices, experiences, and solutions, we can meet future demand and ensure that everyone benefits.

On a policy level, the U.S. and Denmark share challenges of managing public health, chronic diseases, health equity, health data, and climate action. Our end goals are the same - to ensure sustainable health systems that can tackle transformational challenges of increased life expectancy, rising chronic diseases, and disparities.

The Danish and U.S. healthcare systems and communities focus on developing and implementing solutions for precision medicine, genome medicine, patient-centered care, personalized care, data, digital healthcare, and telehealth.

On the level of a solution, Danish life science companies are well-known leaders in the innovative treatment of diseases such as diabetes and obesity, cancer, depression, Alzheimer's, skin disorders, and allergies, as well as cluster leaders in medical device technologies such as hearing aids and disposable devices.

The Danish healthcare industry has a strong presence in the U.S., especially in New Jersey, Massachusetts, North Carolina, California, Texas, and Minnesota. Investments span jobs and development through direct manufacturing, supply chains, equity, education, and research.

### **BIOBRIDGE**

Denmark and the Texas Medical Center (TMC) have created a global life science agreement to advance commercial and clinical innovation and to enable research collaboration and knowledge transfer.

Texas Medical Center is the world's largest hospital complex and contains more than 60 internationally recognized hospitals, universities, institutions, and clinics with more than 120,000 employees and 10 million patient visits annually.

In 2019, the Danish Minister for Health, and President of the Texas Medical Center, signed a Memorandum of Understanding that formalizes the collaboration between the Danish and Texas life science ecosystems. Known as the BioBridge, the agreement brings together government, academic and research institutions, and innovative organizations to collaborate on

1) Innovation and Commercialization and 2) Research and Education with goals in the following areas:

- Identify and create tangible business opportunities for Danish companies at Texas institutions and hospitals with medical devices, digital and telehealth, pharma and biotech, and operational solutions. Starting with the concept to design to commercialization
- Transfer knowledge between Denmark and Texas hospital ecosystems on specific problems and encourage collaboration and pilots to find joint solutions in healthcare
- Increase international governmental collaboration between Denmark and the U.S., including regional governments
- Support efforts to bring innovation and knowledge-intensive life science investments from Texas to Denmark

Today more than 20 Danish companies are participating in the BioBridge partnership, which continues to hold high-level delegation visits to Texas and Denmark as well as roundtables, workshops and panel debates within the priority focus areas of infection prevention, patient security, resource management and patient engagement.

Over the past three years, the BioBridge's activities and programs in life science have progressed with success in the following commercial segments:

- Medical equipment and rehabilitation emphasize increasing the quality and patient experience through new and innovative medical equipment and treatment methods.
- Digital and telehealth focus on improving the health of the patient and their experience with the health care provider through digital platforms, data, and new technology. Strong growth in demand has been due to COVID-19.
- 3. Operational and logistical solutions where hospital systems, services, and operating models are improved through innovative technologies and sustainable solutions all of which can reduce costs, time, mistakes, and carbon footprint while enhancing the quality of the health services and work environment.
- Robotics, which has also experienced rapid growth due to COVID-19.



# **Alabama**

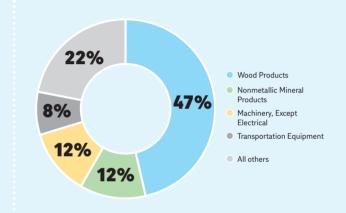
Economic footprint, state by state



**1.005**jobs supported
by Danish
companies

jobs supported by export of goods to Denmark

644 jobs supported by export of services to Denmark



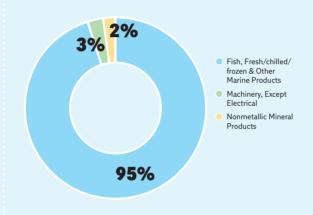
1,674
jobs supported in total



# **Alaska**

# 119 jobs supported by Danish companies 12 jobs supported by export of goods iobs supported by export of services to Denmark



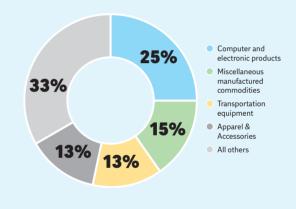




# Arizona









45

## **Arkansas**

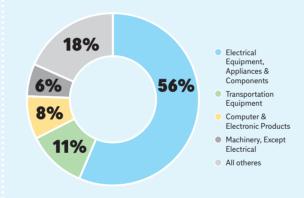


1.986 jobs supported by Danish companies

97 jobs supported by export of goods to Denmark

410 jobs supported by export of services to Denmark



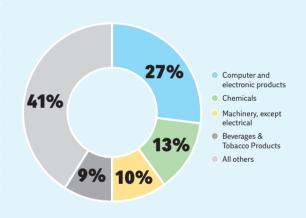




# **California**



13,797 jobs supported in total



\$365.0 M Annual export of goods to Denmark

# Colorado

2,736 jobs supported by Danish

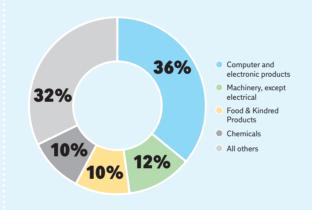
companies

jobs supported by export of goods to Denmark

43 1,001 jobs supported by export of services to Denmark

3,780

jobs supported in total

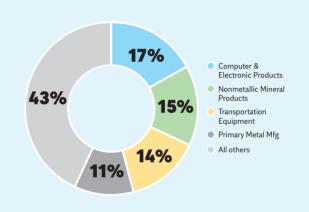


\$8.3 M Annual export of goods to Denmark

# Connecticut



3,095 jobs supported in total



\$11.9 M Annual export of goods to Denmark

### **Delaware**

# 125 4 175

304
jobs supported in total

jobs supported by

export of goods

to Denmark

jobs supported

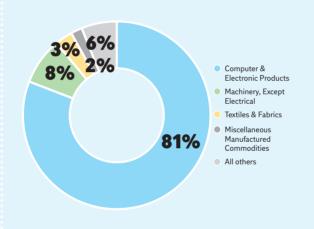
by export of ser-

vices to Denmark

jobs supported

by Danish

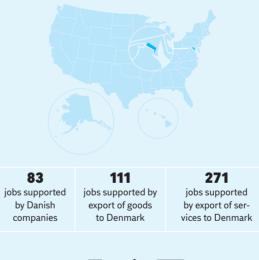
companies



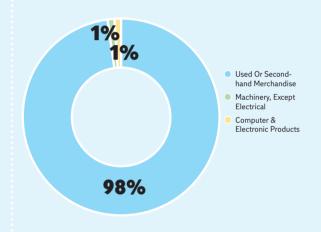
\$0.8 M

Annual export of goods to Denmark

# **District of Columbia**



465
jobs supported in total





# **Florida**

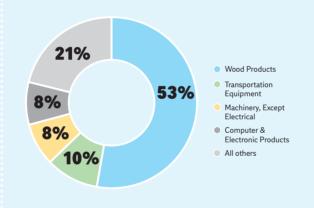
companies





to Denmark

vices to Denmark

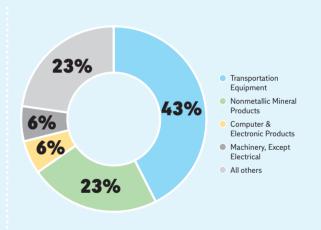




# Georgia









# Hawaii

by Danish

companies



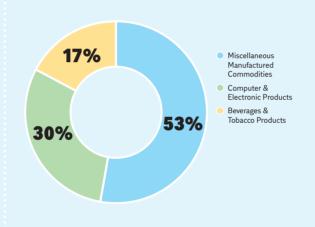
263
jobs supported in total

export of goods

to Denmark

by export of ser-

vices to Denmark

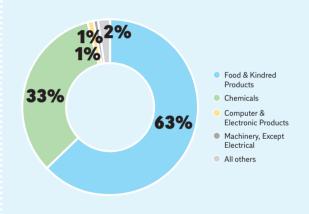




# Idaho



406
jobs supported in total



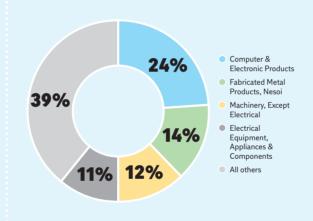
\$14.3 M

Annual export of goods to Denmark

# Illinois





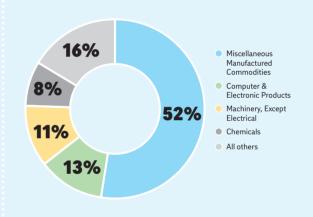




# Indiana









# Iowa

1,606

jobs supported

by Danish

companies

511

jobs supported

by export of ser-

vices to Denmark

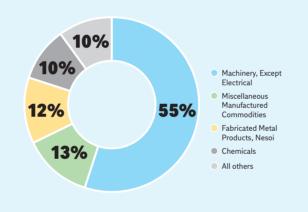
2,298
jobs supported in total

181

jobs supported by

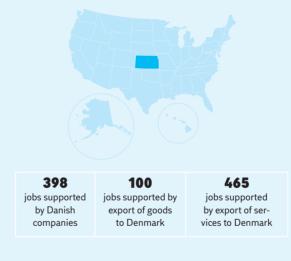
export of goods

to Denmark

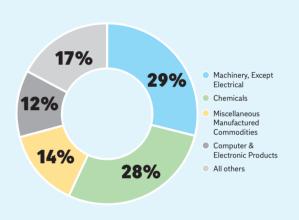




# **Kansas**



963
jobs supported in total



\$19.0 M

Annual export of goods to Denmark

# Kentucky

by Danish

companies



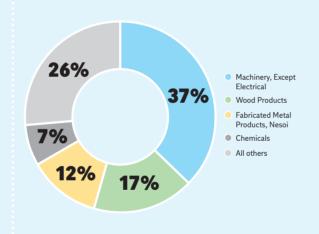
**948** jobs supported in total

export of goods

to Denmark

by export of ser-

vices to Denmark



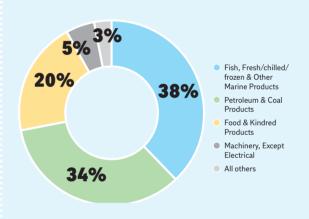
\$13.1 M

Annual export of goods to Denmark

# Louisiana



1,236
jobs supported in total



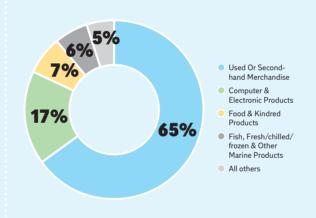
\$76.4 M

Annual export of goods to Denmark

# Maine

# 0 58 225 jobs supported by Danish companies population to Denmark population in the companies co

283
jobs supported in total

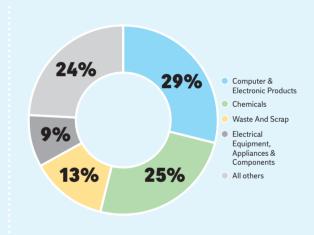




# **Maryland**









## **Massachusetts**

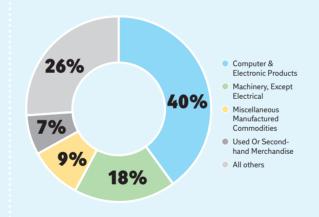


**1,124** jobs supported by Danish companies

**333** jobs supported by export of goods to Denmark

**1,445** jobs supported by export of services to Denmark

2,902
jobs supported in total



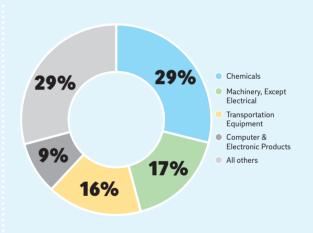
\$64.0 M

Annual export of goods to Denmark

# Michigan



2,545
jobs supported in total



\$29.0 M

Annual export of goods to Denmark

## Minnesota

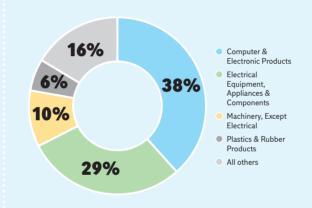


**4,221**jobs supported by Danish companies

**374**jobs supported by export of goods to Denmark

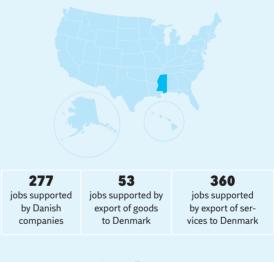
**1,056** jobs supported by export of services to Denmark



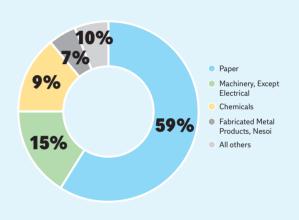




# Mississippi



**690** jobs supported in total



\$10.2 M

Annual export of goods to Denmark

# Missouri

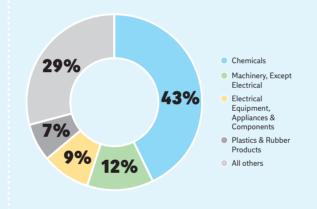


**1,520** jobs supported by Danish companies

jobs supported by export of goods to Denmark

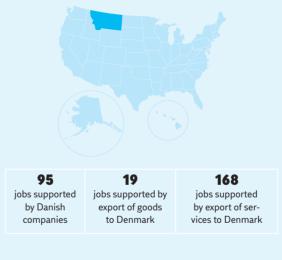
**1,026** jobs supported by export of services to Denmark

2,661
jobs supported in total

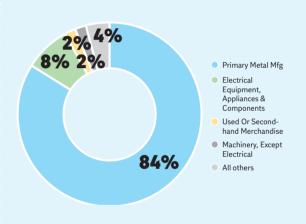




# **Montana**



282
jobs supported in total



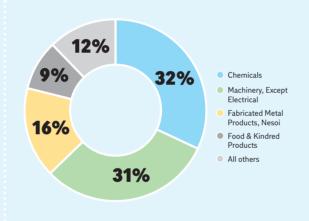
\$4.0 M

Annual export of goods to Denmark

## Nebraska

# 409 jobs supported by Danish companies 85 jobs supported by export of goods to Denmark 338 jobs supported by export of services to Denmark



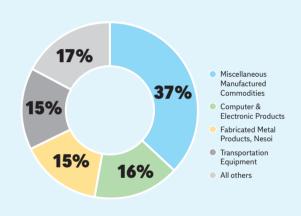




# Nevada









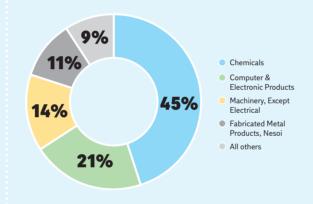
# **New Hampshire**

**569**jobs supported
by Danish
companies

**223**jobs supported by export of goods to Denmark

**248**jobs supported
by export of services to Denmark

1,040 jobs supported in total



\$42.6 M

Annual export of goods to Denmark

# **New Jersey**

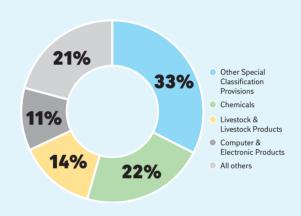


jobs supported by Danish companies jobs supported by export of services to Denmark

9,277
jobs supported in total

export of goods

to Denmark



\$89.6 M

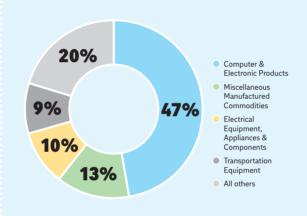
Annual export of goods to Denmark

# **New Mexico**

jobs supported by Danish companies jobs supported by export of goods to Denmark

**281**jobs supported
by export of services to Denmark



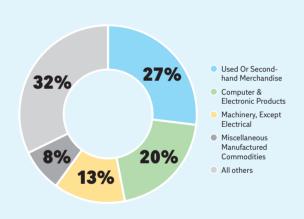




# **New York**







\$89.6 M

Annual export of goods to Denmark

# **North Carolina**

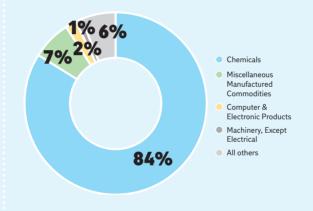


2.938 jobs supported by Danish companies

1.695 jobs supported by export of goods to Denmark

1.584 jobs supported by export of services to Denmark



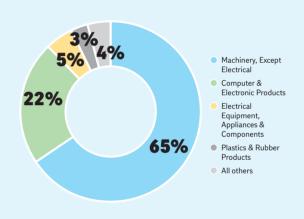


\$325.0 M Annual export of goods to Denmark

# **North Dakota**



274 jobs supported in total



\$1.0 M Annual export of goods to Denmark

# Ohio

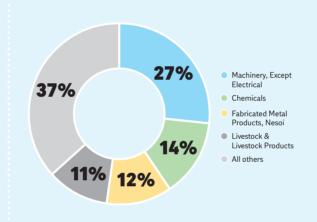
companies

# 643 jobs supported by Danish export of goods 1,948 jobs supported by export of ser-

vices to Denmark

2,800 jobs supported in total

to Denmark

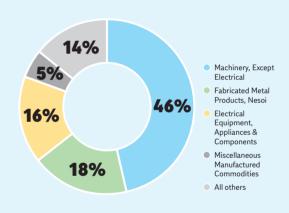




# Oklahoma









# Oregon



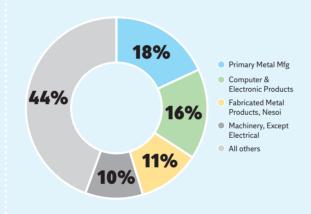
1,529 jobs supported

by Danish companies

137 jobs supported by export of goods to Denmark

683 jobs supported by export of services to Denmark

2,349 jobs supported in total

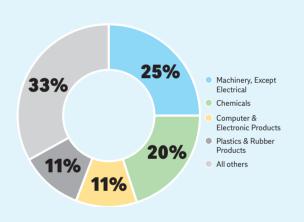


\$26.3 M Annual export of goods to Denmark

# **Pennsylvania**



5,814 jobs supported in total



\$51.0 M Annual export of goods to Denmark

16

jobs supported

by Danish

companies

# **Rhode Island**

30

jobs supported by

export of goods

to Denmark

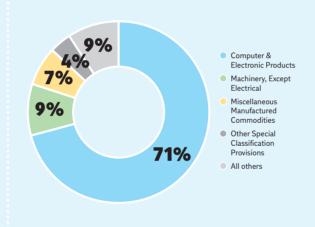
189

jobs supported

by export of ser-

vices to Denmark

235
jobs supported in total

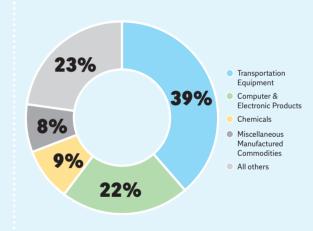




# **South Carolina**







\$28.5 M

Annual export of goods to Denmark

# **South Dakota**

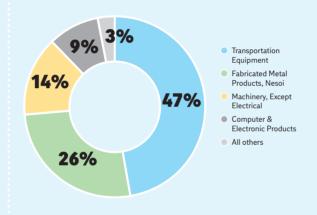


jobs supported by Danish companies

jobs supported by export of goods to Denmark

ted by jobs supported ods by export of services to Denmark



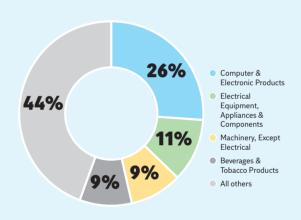




# **Tennessee**







\$20.0 M

Annual export of goods to Denmark

85

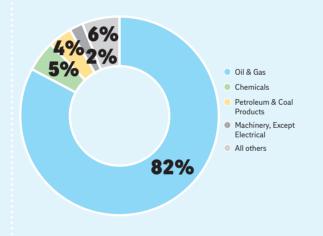


5,181 jobs supported by Danish companies

4.756 jobs supported by export of goods to Denmark

4.516 jobs supported by export of services to Denmark

14,453 jobs supported in total

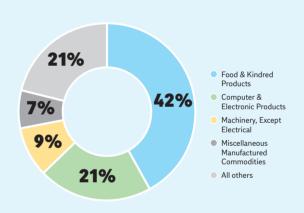




# Utah







\$10.2 M Annual export of goods to Denmark

# **Vermont**

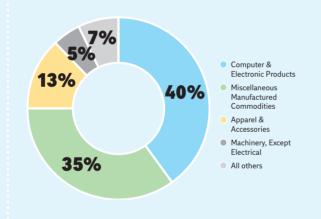
companies

# 0 15 108 jobs supported by Danish export of goods by export of ser-

**123**jobs supported in total

vices to Denmark

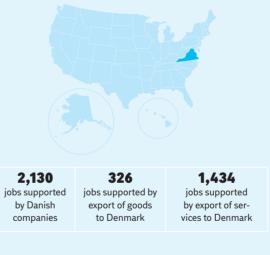
to Denmark



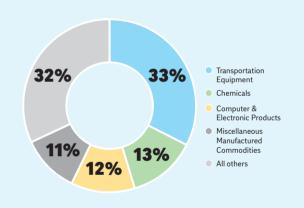
\$3.0 M

Annual export of goods to Denmark

# Virginia



3,890 jobs supported in total



\$62.4 M

Annual export of goods to Denmark

# **Washington**



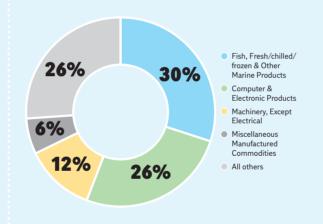
1,306 jobs supported

by Danish companies

247 jobs supported by export of goods to Denmark

1.178 jobs supported by export of services to Denmark

2,731 jobs supported in total

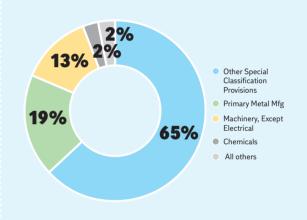


\$47.2 M Annual export of goods to Denmark

# **West Virginia**



368 jobs supported in total



\$3.2 M Annual export of goods to Denmark

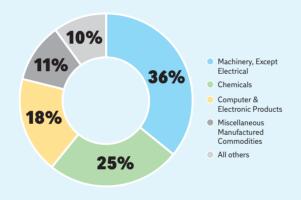
# Wisconsin



**1,295**jobs supported by Danish companies

**327** jobs supported by export of goods to Denmark 969 jobs supported by export of services to Denmark

2,591
jobs supported in total

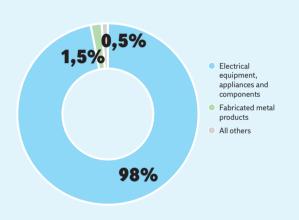




# **Wyoming**



100
jobs supported in total



\$3.5 M

Annual export of goods to Denmark

U.S.-owned companies have a strong presence in Denmark with more than 700 subsidiaries employing almost 38,000 people.

Investments from the U.S. have been finding their way to Denmark as companies seek world-leading efficiency in cross-border trade, stellar contract enforcement and a hassle-free experience when dealing with authorities.

Denmark offers world-class R&D and innovation clusters within life science, cleantech, tech, food, and maritime industry providing excellent cooperation and testing opportunities for U.S. corporations. At the same time, Denmark's geographical location and #1 ranking in Europe on ease of doing business makes our country the preferred choice for U.S. companies when establishing European or Nordic headquarters.

Firms considering operating in Denmark can draw on Invest in Denmark's world-wide network of advisors. Invest in Denmark is an entity under the Ministry of Foreign Affairs of Denmark, and their advisors are ready to guide U.S. firms across multiple areas as they explore business opportunities in Denmark.

www.investindk.com



# Methodology

# Direct jobs created by Danish companies in the U.S.

The analysis of direct jobs created by Danish companies in the U.S. is based upon data from the "Denmark in the U.S." booklet from 2019, data from Statistics Denmark (DST) and D&B Hoovers.

The DST data show that Danish companies employed 78,618 persons in the U.S. in 2020. DST has compiled this information based on phone interviews. In these interviews, DST based their data on head count, i.e. two part-time employees count as two in the dataset.

DST does not account for the location of jobs by state. The number of direct jobs created on a national level, as presented by DST, is distributed at the state level by using data from D&B Hoovers. According to D&B Hoovers, Danish companies employed 49,219 persons in the U.S. The difference between D&B Hoovers and DST is due to the fact that DST based their data on head count, i.e. two part-time employees count as two in the dataset whereas D&B Hoovers uses full-time equivalents, i.e. two half-time employees count as one in the dataset.

The state-level distribution of jobs in this booklet is conducted by with data from D&B Hoovers and the "Denmark in the U.S." booklet from 2019. A basis of distribution has been applied which we believe constitute a sound methodology.

## Jobs supported by exports of goods

These are calculated based on a U.S. Department of Commerce study which concluded that the export of \$191,461 of goods supports one U.S. job. By dividing the value of exports of goods in 2020 from the U.S. to Denmark by 191,461, it is estimated how many jobs in the USA can be indirectly attributed to exports of goods to Denmark. Data on exports of goods are from the U.S. Census Bureau, USA Trade Online.

## Jobs supported by exports of services

Exports of services on the national level are for 2020 and are from the U.S. Bureau of Economic Analysis. Exports of services on the state level are estimated by distributing the total national exports of services by state according to the percentage of the annual average national service-providing workforce present in each state in 2020 as reported by the U.S. Bureau of Labor Statistics. The number of jobs supported is then calculated based on a U.S. Department of Commerce study which concluded that the export of \$149,120 of services supports one U.S. job.

# Multiplier

Estimates of multipliers vary across sectors and geographical location. As an aggregate multiplier 1.6 is a conservative estimate. This metric indicates the number of additional jobs created as a consequence of every direct job resulting from companies' exports. These additional jobs are, for example, created by suppliers and distributors.



