



VEJLE'S RESILIENCE STRATEGY

“We transform challenges
into new opportunities”



VEJLE

Vejle
...make it happen



VISION

Vejele seeks to turn its current challenges into opportunities. Our ambition is to become an innovative lighthouse that demonstrates how small cities can solve big problems and show great responsibility. With our resilience strategy we invite all partners to take action and cooperate in the development of tomorrow's resilient Vejele - a cohesive, robust and sustainable city.

Introduction

Vejle was selected to join the 100 Resilient Cities (100RC) global network in 2013. Cities from across the world will develop a resilience road map and share best practice to tackle the physical, social and economic challenges facing the 21st century.

www.100resilientcities.org

The partnership with 100RC has been a major driving force for the development of Vejle's resilience strategy, the first of its kind in Denmark and Europe.

This document introduces the Municipality of Vejle's resilience strategy for 2016-2020. Our resilience strategy consists of a range of existing actions and new actions, and will support the vision "Vejle - We Make it Happen" and the values for co-creation, innovation and sustainable growth.

A total of 100 ambitious initiatives were identified during the 100RC process through collaboration and participation of everyone in the city, 41 of which we aim to deliver between 2016 and 2020. The remaining initiatives will be developed during this period and delivered over a longer time scale. Our actions are structured around four strategic pillars, and 12 goals.

The actions in the strategy are owned by the City Council and the respective committees and administrations. Political backing and funding sources are still to be discussed and agreed in the city.

The resilience strategy, goals and actions will be regularly updated and the resilience strategy can be followed via **www.vejle.dk/resiliens**

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Letter from the Mayor

Arne Sigtenbjerggaard



Vejle's Resilience Strategy – an invitation to cooperate

It is with great pride that the Municipality of Vejle hereby announces its Resilience Strategy - the first in Europe.

Vejle is the only city in Scandinavia to be selected as part of the Rockefeller Foundation's 100 Resilient Cities, where they work with cities like Rio de Janeiro, Rotterdam, Rome, Durban and New York to develop cities' adaptability to future challenges.

These challenges include the consequences of climate change, as well as the implications of social and economic crises. International collaboration helps to create more vigorous, robust and forward-looking cities.

Membership of the 100RC network offers us a fantastic opportunity to collaborate with a range of international players with the goal of making Vejle a more resilient city. Over the past 3 years, we have focused on identifying challenges and opportunities to develop our city into an even better place to live for all our citizens.

The resilience strategy focuses on four central development areas, aligning with our modern welfare society. These are the Co-creating City, Climate Resilience, Social Cohesion and Smart City. Within each area, we have identified a list of specific actions, which we will work on carrying out during the coming years – hopefully in collaboration with our new international partners.

In Vejle, we are privileged to have a good starting point. But it is important that we continue developing and sharing our experiences with others working to develop a resilient city of the future. With the resilience strategy, we are building on the City Council's vision "We Make it Happen". We are ambitious on behalf of Vejle and have a strong will to strengthen the city's resilience, create a strong community and ensure the positive development of our society.

Vejle seeks to turn its current challenges into opportunities. Our ambition is to become an innovative lighthouse that demonstrates how small cities can solve big problems and show great responsibility. With our resilience strategy we invite all partners to action and cooperate in the development of tomorrow's resilient Vejle - *a cohesive, robust and sustainable city.*

A handwritten signature in black ink, reading "Arne Sigtenbjerggaard". The signature is written in a cursive, flowing style with a large, prominent initial 'A'.

Letter from the President of 100 Resilient Cities

Michael Berkowitz



100 Resilient Cities – Pioneered by the Rockefeller Foundation, is pleased to partner with the Municipality of Vejle to release the first resilience strategy in the Scandinavian region, and in Europe. This marks a turning point in an extraordinary journey for this incredible Danish city, which continues to build its reputation as a global thought-leader and innovator in urban resilience ideas and practices.

First and foremost, I'd like to thank the City Council of Vejle and Mayor Arne Sigtenbjerggaard for his vision, passion, and dynamic partnership with us over the past three years. Jonas Kroustrup, the city's Chief Resilience Officer, and the senior city officials who provided him with extraordinary support, have gone above and beyond to produce this visionary document.

Building city resilience requires recognizing the interplay of a city's strengths, weaknesses, shocks, and stresses. It is also about bolstering the foundation of a city so that it can respond to new, unforeseen events, and plan for the unknown. While Vejle is relatively small in terms of its size and population, it has proven to be capable of addressing these big challenges, and is an inspiration to other cities in its region.

Vejle has put in tremendous efforts to integrate resilience as an organizing principle. At the core of this journey is the city's proud identity and history stretching back to King Bluetooth himself. Vejle has gone to great lengths to demonstrate that it is a place of cutting-edge thinking and innovative partnerships, including those with 100RC Platform Partners such as Arcadis, a global firm specializing in design, infrastructure and water management. Vejle is also at the forefront of demonstrating how the lauded Scandinavian model can evolve given the imminent challenges and opportunities at its doorstep – whether it be increased immigration, climate change or adapting to new technologies.

This strategy, which is the result of many months of research, stakeholder engagement, self-assessment, and analysis, looks to identify a tactical road-map for the future. It identifies a range of goals and concrete initiatives which will address the interplay of the city's challenges and opportunities.

100 Resilient Cities is committed to working with the municipality of Vejle to implement the vision laid out in this strategy. With the support of 100RC's Platform of Partners—a powerful cadre of public, private, non-profit, and academic organizations—we will bring important resources to this partnership. In turn, Vejle will play a critical role in informing the market, spurring on development of new tools and services that cities around the world can use to build their own resilience. Once again, congratulations to Vejle!

A large, stylized handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke.

Resilient Vejle Partnerships

In Vejle, we believe in co-creation and strong partnerships. Our future work on resilience will be supported and implemented by our existing partnerships with the business sectors, education institutions and housing committees. It is by joining forces with our partners that we aim to build resilience in Vejle. An overview of our existing partnerships includes;

The Innovation Committee

”THE INNOVATION COMMITTEE DEVELOPS AND TESTS IDEAS THAT CAN FORM THE FUTURE OF VEJLE. WE SEE IT AS OUR TASK TO CHALLENGE AND HELP THE MUNICIPALITY WITH DEVELOPING A FORWARD-THINKING, INNOVATIVE AND RESILIENT SOCIETY THAT IS ATTRACTIVE FOR BOTH THE BUSINESS COMMUNITY AND FOR THE CITIZENS. THE RESILIENCE STRATEGY POINTS TOWARD A RANGE OF OPPORTUNITIES, WHERE THE INNOVATION COMMITTEE WILL BE ABLE TO CONTRIBUTE BY DEVELOPING SOLUTIONS”

Torben Christensen, administrative director at Good Food Group A/S, vice president of The Innovation Committee

The Innovation Committee was established in 2014 as a business policy committee consisting of seven business leaders, three representatives from the education institutions of Vejle, as well

as seven politicians from the City Council. The work of the Committee is based on the vision of the City Council “We Make it Happen”, and involves challenging and testing scenarios for the future Vejle.

The Business and Education Liaison Committee

”THE COMMITTEE IS IN DIALOGUE WITH THE LOCAL BUSINESS COMMUNITY AND THE QUALIFYING EDUCATIONAL INSTITUTIONS TO DEVELOP RESILIENT SOLUTIONS FOR THE SOCIETAL CHALLENGES WE FACE. THIS INCLUDES BUT IS NOT RESTRICTED TO CLIMATE CHANGE AND SMART CITIES, THE COMMITTEE ALSO IDENTIFIES GROWTH POTENTIAL FOR THE CITY. VEJLE’S MEMBERSHIP OF THE 100RC NETWORK WILL FACILITATE ACCESS TO NEW AND EXCITING INTERNATIONAL MARKETS.”

Jacob Madsen, Vice President for Danfoss, Chairman of the Business and Education Liaison Committee

The Business and Education Liaison Committee was established in 2014 and is composed broadly of representatives from the business sector, educational sector and the City Council. The Committee’s work includes maintaining and attracting more job opportunities to the municipality and strengthening public - private collaboration.

The Innovation Committee.
Photo: Nils Rosenvold



The Business and Education Liaison Committee.
Photo: Nils Rosenvold



Housing Policy Steering Group

”THE HOUSING ASSOCIATIONS ARE ACTIVE PARTNERS IN THE DEVELOPMENT OF THE CITY, AND IN FINDING COMMON SOLUTIONS TO THE CHALLENGES OF URBANIZATION, CLIMATE CHANGE AND FLOODING. RESILIENCE IS A NEW WAY TO CREATE VALUE FOR THE ENTIRE CITY AND STRENGTHEN ITS COHESION ACROSS RESIDENTIAL AREAS THROUGH A BROAD JOINT EFFORT”

The social housing organizations in Vejle (AAB, ØsterBO, Lejerbo and Domea)

The aim of the Housing Policy Steering Group is to advise the housing associations and the municipality on housing policy, and integration of social housing residential developments. The Steering Group sets the policy direction and ensures political dialogue.

Council of Education

”THE EDUCATIONAL INSTITUTIONS OF VEJLE APPROACH RESILIENCE WITH AN EXCITING NEW LEARNING PERSPECTIVE. WE WORK CLOSELY WITH THE MUNICIPALITY OF VEJLE AND THE BUSINESSES OF THE AREA TO DEVELOP THE EDUCATION OF THE FUTURE AND PREPARE OUR STUDENTS TO MANAGE A TECHNOLOGICALLY AND SOCIALLY CHANGING SOCIETY.”


Erik Knudsen, principle for University College Lillebælt, member of the Council of Education

The Municipality of Vejle and the educational institutions in Vejle have been collaborating with the Council of Education for many years. Our aim is to jointly develop Vejle as an attractive city for education and ensure that all young people have the best possible opportunity for completing a high quality education.

Some of the institutions we are in dialogue with include Rødkilde Gymnasium, Rosborg Gymnasium & HF, Southern Denmark Technical College (SDTC), Campus Vejle, School of social health, Business Academy Lillebælt and University College Lillebælt.

Through the Partnership the Municipality of Vejle will invite stakeholders to participate in building resilience capacity for the city. Photo: The Municipality of Vejle



A photograph showing three young people (two girls and one boy) looking at a large digital display of a city map. The display is projected onto a table and shows a green landscape with white roads and buildings. The boy on the left is wearing a black jacket with red stripes on the sleeves. The girl in the middle is wearing a grey hoodie. The girl on the right is wearing a white t-shirt with colorful floral patterns and a bracelet. They are all looking down at the map with interest.

”WITH THE RESILIENCE STRATEGY WE ARE CONSTRUCTING THE FOUNDATION FOR THE COMING GENERATIONS AND SECURING A CITY AND SOCIETY THAT IS PREPARED FOR WHAT TOMORROW BRINGS”

Jonas Kroustrup, Chief Resilience Officer

PURPOSE OF VEJLE'S RESILIENCE STRATEGY

1

Purpose of Vejle's resilience strategy

Vejle's resilience strategy will strengthen the foundation of our city during both good and bad times. Our work on resilience is across the municipality, civil societies and the business community, to enhance our capacity and jointly turn challenges into new opportunities. It is also by joining forces with our existing and newly established partnerships that we aim to build resilience in Vejle.

What is urban resilience?

"URBAN RESILIENCE IS THE CAPACITY OF INDIVIDUALS, COMMUNITIES, INSTITUTIONS, BUSINESSES, AND SYSTEMS WITHIN A CITY TO SURVIVE, ADAPT, AND GROW NO MATTER WHAT KINDS OF CHRONIC STRESSES AND ACUTE SHOCKS THEY EXPERIENCE."

100 Resilient Cities

We act on new challenges to create opportunities

Vejle is responding to the city's needs through an increase in housing provision and economic growth, but the city needs to do more in light of its challenges. Recently, we have begun to witness the potential consequences of climate change, globalization, immigration and population growth – challenges, which to a large extent will affect the welfare of our society, and our future.

Some of our core challenges

- **Climate change and flood risk** will have physical, social and economic consequences
- **Urbanization** will have an impact on quality of life and put pressure on infrastructure, both within Vejle and regionally
- **Infrastructure Demand** will create a need for new smart, safe and inclusive infrastructure development, covering physical as well as digital
- **Changing industries, global economy and new technology** will create a turbulent job market and introduce vulnerable employment conditions
- **Demographic changes in society** will require innovative initiatives to ensure community cohesion and maintain an equitable society

We have identified the challenges, but not yet their long term implications. The resilience strategy focuses particularly on the climatic, economic and social challenges which are putting our city under pressure. These challenges need to be addressed through new partnerships, and innovative approaches. It will require us to work together, and collaborate across organizations – both now and in the future. We call this resilience through co-creation.

Through the resilience strategy, we wish to consider the following:

- **How do we ensure that the children and youth of tomorrow, including vulnerable people and immigrants have the best conditions to meet a new reality?**
- **How can Vejle strengthen its foundation for sustainable growth and development turning its future challenges into new opportunities?**
- **How can Vejle continue to be an inclusive, safe and secure society despite social and demographical changes?**
- **How can we create an attractive city environment while simultaneously protecting Vejle from climate change?**
- **How can Vejle keep up with regional urbanization, changing industries, new technology and global economies?**
- **How do we collaborate to make Vejle the resilient city of tomorrow and secure a prosperous future?**

Resilience creates value

Our long term effort for a resilient Vejle will not only contribute to minimizing the risks and costs, but it will also create stability and safety; increase our welfare conditions, our spirit of entrepreneurship, and our investments and business development opportunities.

Vejle's participation in 100 Resilient Cities is a unique opportunity to collaborate with international networks and gain access to new knowledge. At the same time, 100 Resilient Cities will in the long term become a source for resilience building solutions for cities, which will create opportunities for businesses, both in Vejle and in the rest of Denmark. Through the resilience strategy, we set a foundation for our young generations to ensure a city and a society that is prepared for the future.

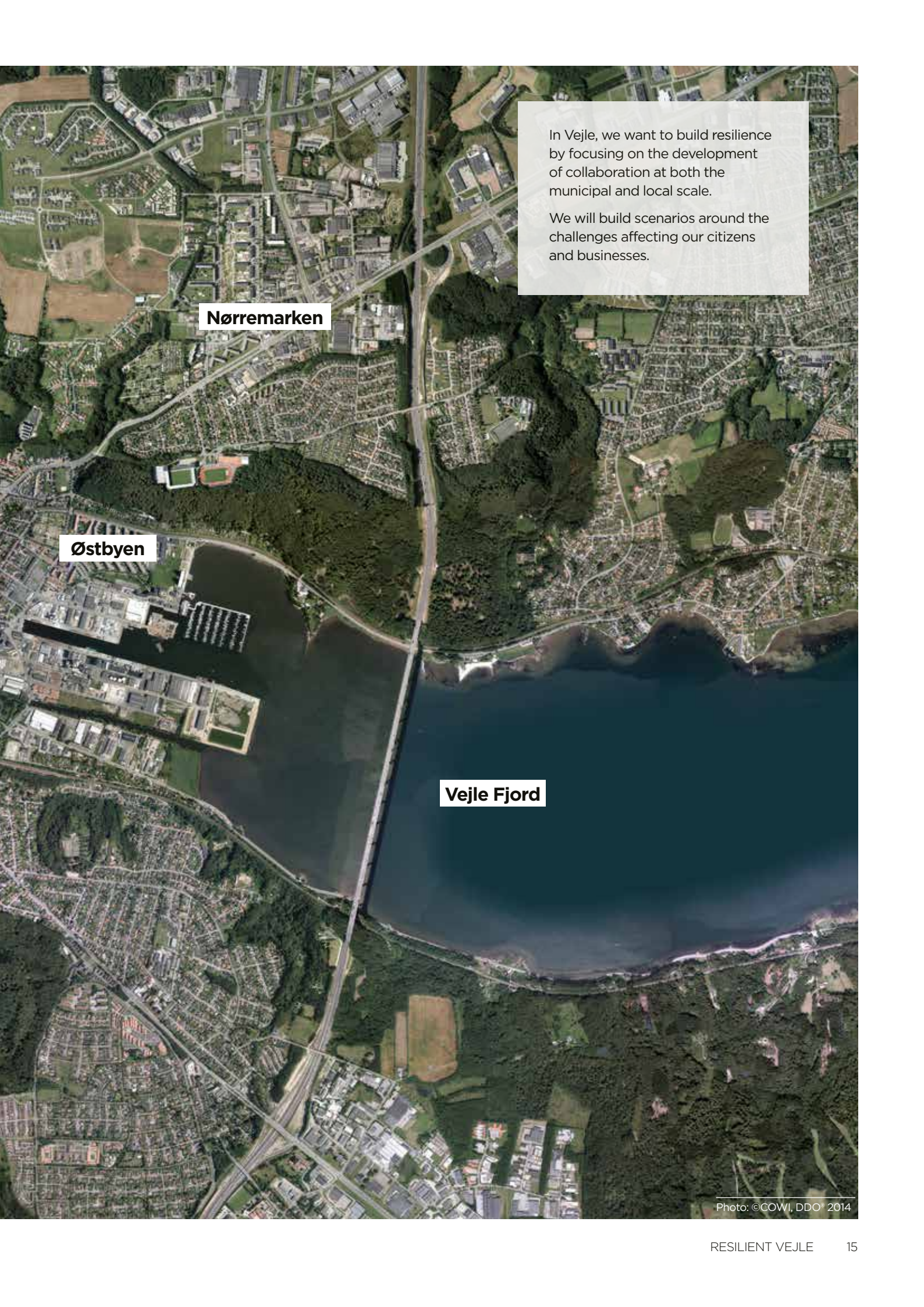


Vejle is a good example of a medium sized Scandinavian city and municipality.

With its 111,000 inhabitants, Vejle is the 6th largest municipality in Denmark.

The city itself is the 9th largest with 54,000 citizens.

The municipality has a stable economy and experiences positive growth and development.



In Vejle, we want to build resilience by focusing on the development of collaboration at both the municipal and local scale.

We will build scenarios around the challenges affecting our citizens and businesses.

Nørremarken

Østbyen

Vejle Fjord

Photo: ©COWI, DDO 2014



Photo: Nils.Rosenvold



Photo: TREFOR



Photo: TREFOR

Introduction to Vejle

THE RESILIENCE CAPITAL OF DENMARK

Vejle – a modern city

Today we are poised to make a big leap and a decisive step in the city's history - we are well on our way to becoming a larger and more modern city.

Origin of Vejle: Water as an asset

The name Vejle comes from the ancient Danish word 'wæthel' which means fjord. Vejle has always seen water as an asset, and forms part of its history and identity. The first settlements, dating back to the 12th century, were built in the middle of Vejle Stream Valley where the Grejs Stream meets Vejle River, just as it runs into the fjord. Since the first settlements, the water has been the symbol of life in Vejle.

Setting of Vejle: Water and the city

Vejle's beautiful location between Vejle Stream Fjord and Vejle Valley creates opportunities to use nature to create an attractive city. In the centre of Vejle two valleys meet; Vejle Stream Valley from the west - Denmark's longest Tunnel Valley, and the Grejs Valley from the North - the largest gorge in Denmark.

Economy and business

Industry and manufacturing still characterize Vejle today. However in recent decades a number of creative businesses and IT companies are emerging, many of which are located in 'The Spinning Mill', one of Denmark's largest development and innovation environments. Today, Vejle serves as a logistical centre in Denmark and forms part of largest regional collaboration - The Triangle region.

Integration

In 2012 Vejle was announced as the Best Municipality for Integration in Denmark, and is currently considered as an exemplar municipality for welcoming refugees.

Innovation in Vejle

Vejle is amongst the first cities in Denmark to implement innovation as a strategy across all its administrations.

Sustainability

Vejle has a long and proud tradition of sustainable practices. Sustainable growth is a term central to the City Council's vision 'Vejle - We Make it Happen'.

Vejle – the digital provincial city

The Municipality of Vejle is at the forefront of the development of smart-city solutions in Denmark. This development was driven initially by the needs of our citizens, businesses and organizations.

City development in Vejle

Vejle was the first municipality in Denmark to implement an architecture policy. In recent years the city has undertaken extensive urban development.

“VEJLE IS A SMALL PLACE WHERE BIG THINGS HAPPEN”

Vikram Singh, 100 Resilient Cities



A person is walking away from the camera on a path at night. The path is lined with lights that reflect on a body of water in the foreground. The background is dark with many small, glowing lights, possibly from buildings or streetlights. The overall atmosphere is serene and futuristic.

A Co-creating City

We will create tomorrow's resilient city through productive partnerships across public and private sectors.

A Climate Resilient City

We will use water and climate change as drivers for development of the city.

A Socially Resilient City

We will increase social and economic cohesion and create the best conditions for future generations.

A Smart City

We will embrace new technologies and improve co-creation, efficiency, outreach and inclusivity.

**OUR STRATEGIC PILLARS,
GOALS AND ACTIONS**

2



Vejle's Strategic Pillars

Our resilience strategy is framed around four strategic pillars, 12 goals and 100 actions. This section includes the actions that we will develop and launch between 2016 and 2020. Each pillar is further defined by a number of goals.

1. A Co-creating City

We will create tomorrow's resilient city through productive partnerships across public and private sectors.

Goals:

- 1.1 We will make resilience central to the Municipality's vision and plans**
- 1.2 We will use co-creation to build resilience capacity**
- 1.3 We will develop innovative resilient city solutions and scale up best practices**

In Denmark, we have a long tradition of co-creation; collaboration between public and private institutions, businesses, and communities in the city to address challenges. We want to ensure that the concept continues to be a key aspiration for resilience and resilience building actions.

Co-creation is a cross-cutting pillar that integrates across all the other pillars. We will focus on developing, integrating and implementing resilience across the various sectors and departments in the municipality to continue to improve our public-private innovation work.

We want to work with those who have the drive and desire for action – be it locally, regionally, nationally or internationally. In our co-creative city we will primarily focus on integrating resilience into our municipal strategies.

2. A Climate Resilient City

We will use water and climate change as drivers for development of the city.

Goals:

- 2.1 We will protect Vejle and turn the water into an asset for urban and social capital**
- 2.2 We will establish public-private partnerships for resilient utilities**
- 2.3 We will secure growth by using sustainable resources, renewable energy and green transport**

Water in Vejle is both an asset and a challenge. Vejle city is designated as one of ten Danish risk areas where there is a significant flood risk due to rising sea levels, increasing rainfall and flooding. There are several large key physical assets in Vejle. All are well maintained and monitored but it is also apparent that there is a need to address the coming risk in relation to flooding and increase in rain, as this will pose a serious treat in future years.

Our assets are vulnerable to climate change, this includes the harbour, the coastal area, the urban core and some of our infrastructure (small bridges and tunnels in west side urban core). Our water and sewage system are not prepared for heavy rain and flooding, some of the energy transformer stations and communication infrastructure in the city are also vulnerable to flooding. Today, we have a well-functioning emergency response capability, as well as climate and risk management action plans but we need to explore new innovative solutions that create attractive urban environments while protecting us from the potential risks associated with increased water.

3. A Socially Resilient City

We will increase social and economic cohesion and create the best conditions for future generations.

Goals:

3.1 We will strengthen social resilience across the municipality together with our citizens and businesses

3.2 We will make urban spaces and social housing central to community cohesion

3.3 We will invest in Vejle's youth

The strategy process has identified a number of emerging social challenges that can adversely affect the quality of life and welfare in Vejle today and in the future. Our diagnostic analysis suggests an increased risk of polarization, which can happen to more vulnerable groups at a time of increased immigration. Furthermore, the diagnostic work also raised a concern about the challenges facing the youth of Vejle. It indicated a widening gap and loss of social cohesion between groups in society across economic status, culture and local identity. The diagnostic work took a holistic approach to the perception of social services and welfare in Danish society, and reviewed the existing initiatives from five different perspectives (strategic; geographical; thematic; methodological perspectives; whilst also considering the different target groups).

The principles of social resilience focus on reinforcing the societal shift from compensation thinking to resource building. This shift is under way in Vejle. However, the strong Danish welfare model is under economic and demographic pressures and the role of municipalities is changing. The public sector will no longer be a welfare services enterprise, but rather will function as a democratically run community of active, responsible and resourceful citizens, businesses and institutions. This is partly about delivering better and smarter services - and promoting a municipality that is robust and durable, not only economically but also socially.

4. A Smart City

We will embrace new technologies and improve co-creation, efficiency, outreach and inclusivity.

Goals:

4.1 We will use Smart technologies to create an efficient society

4.2 We will support youth education in digital technologies

4.3 We will facilitate public access to open data towards creating a digital society

New technologies, better collection and use of data, and automation will help us generate efficient and innovative ways of addressing a variety of challenges around both climate change, urban development and economic growth whilst also improving our social resilience. Digital technologies provide a major innovation potential and an opportunity to make Vejle even more attractive. Our ambition is to make Vejle a Resilient Smart City - a city that acts intelligently in creating opportunities and in responding to shocks and stresses. A Resilient Smart City that is safe from cyber-attacks; digitally inclusive; trustworthy in its use of data; and has a strong and well-functioning digital infrastructure.

Section 5 includes the list of our 100 initiatives and actions. Our feature goals and actions are presented in full later in this chapter.

Criteria for Vejle's Strategic Pillars

Focus on challenges and imbalances – especially 'wicked' problems and vulnerable citizens

Use sustainable resource strategies – socially, economically and environmentally

Integrate across the public sector and include citizens and businesses

Address global challenges and share solutions with other cities

Lead to local impact, for example more jobs or increased quality of welfare

Demonstrate novelty and innovation



A Co-creating City



A Climate Resilient City



A Socially Resilient City



A Smart City

Strategy terminology

Strategic pillar: is a strategic direction to deliver the City's Resilience Vision

Goal: is a tangible and attainable objective for the strategy

Lighthouse Action (Priority Action):

An action that is a priority to Vejle's resilience, which we will work with supporters to implement

Supporting Action: is an action that supports a Lighthouse action or which in itself is important for Vejle's resilience

Initiative: Projects, plans and ideas that will support Vejle's resilience development

Timeframe

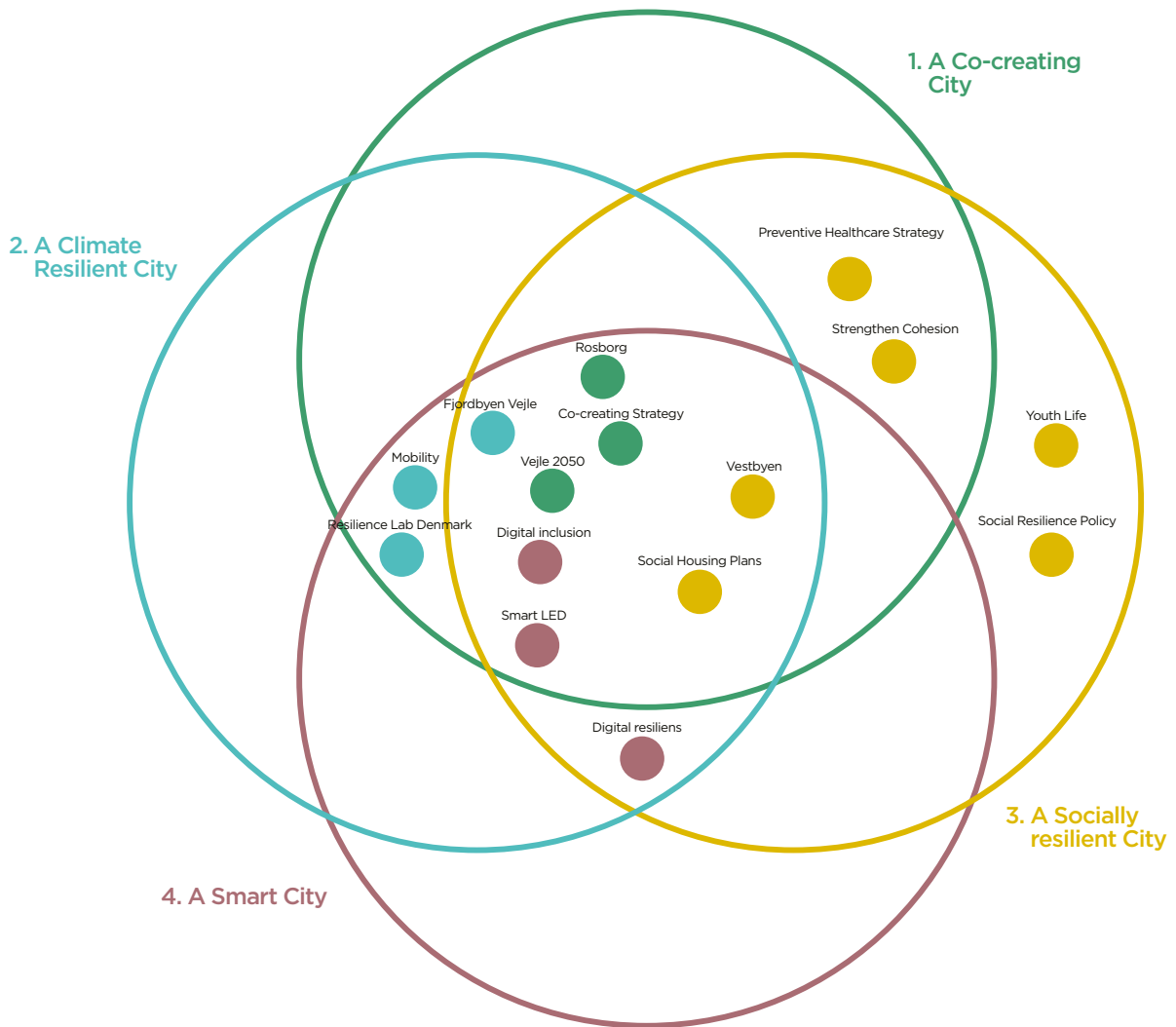
Ongoing: An action or initiative that is already underway in the city and contributing to Vejle's resilience, which will continue to be taken forward

Short: Delivered within 2 years

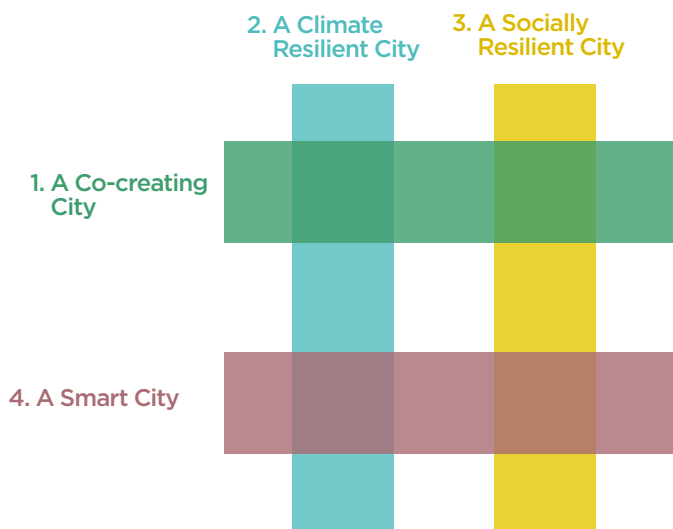
Medium: Delivered within 2-5 years

Long term: Delivered beyond 5 years

Actions



Strategic Pillars



The initiatives within the Strategic Pillars have different characteristics and can be categorized as amongst other things:

- Integrating resilience into new visions, policies and strategies for Vejle's development.
- Introducing new methods of strategic thinking and planning to incorporate resilience.
- Rethinking existing efforts and using resilience as a holistic and dynamic approach.
- Some new initiatives have been derived directly from the strategy process, others are initiatives that are already under development, but have been revisited and further developed to increase their resilience value through the strategy process.
- The time frame is short, medium or long term.

VEJLE 2050



“THE PROVINCIAL CITY VEJLE, HAS DECIDED TO BECOME A GLOBAL FRONT RUNNER. THE CITY WANTS TO BE A LIGHTHOUSE FOR THE DEVELOPMENT OF RESILIENCE - THE ABILITY TO REMAIN TRUE TO ONE’S SELF IN THE MIDDLE OF A WORLD OF CHANGE.”

Tor Nørretranders, From the newsmagazine ‘Føljeton’

Photo: Nils Rosenvold

VEJLE 2050

Integrate resilience into the development of vision 'Vejle 2050' and into the municipal development plans

Description: The collective vision 'Vejle - We Make it Happen' has set ambitious targets for Vejle's development. The vision sets Vejle as a leader in attracting people and businesses, creating first class learning environments and in providing good welfare services. In light of the potential shocks and chronic stresses facing our city, such as urbanization, climate change and immigration, we need to make resilience central to our local development plans. We will work with local business, housing organizations, and education institutions to address the challenges and identify opportunities in Vejle to collectively incorporate resilience into the upcoming municipal plan and support long term planning of the city. We will develop a plan for cooperation between the municipality, the educational institutions and the business sector in 2016.

Objective: To work collaboratively across public and private institutions to address our challenges and make resilience central to municipal plans. This includes demographic, residential and societal changes that technological advancements will bring. Resilience will be incorporated into the forthcoming municipal plan, to secure full integration of future city plans and city development plans.

Action owner: Vejle Kommune - Kommunaldirektørens stabe, Velfærdsforvaltningen, Børne- og Ungeforvaltningen, Økonomi-, Arbejdsmarkeds- & Sundhedsforvaltningen, Teknik & Miljø, Kultur & Fritid

Timeframe: Medium-term

Resilience value: The effect will be a visionary and progressive development of Vejle city, which will allow us to consider challenges before they occur. The project will create the foundation for collaboration with 100 RC platform partners and knowledge institution.

- Work with various city stakeholders towards securing long term integrated planning
- Promote economic growth and prosperity
- Increase cohesive and equitable communities

Goals 1.1 :

We will make resilience central to the Municipality's vision and plans

Supporting Action 1.1.B:

Establish a Resilient Vejle Committee

Description: The Municipality of Vejle will partner with housing, business and educational organizations to establish a 'Resilient Vejle' committee responsible for monitoring the implementation of the strategy, coordinating the actions across the different stakeholders, and raising any new challenges.

Action owner: Municipality of Vejle

Timeframe: Short to Long-term

Resilience Value:

- Cross disciplinary collaboration
- Sharing of knowledge across different sectors
- Multiple benefits of actions

Supporting Action 1.1.C:

Develop a new education strategy

Description: In 2016, Municipality of Vejle will collaborate with the Board of Education to develop a plan that positions Vejle as an education hub. The municipality and the city's educational institution will collaborate on developing strong educational offers that are widely and inclusively available, and benefit the most vulnerable groups as well as the most talented.

Action owner: Municipality of Vejle

Timeframe: Short-term

Resilience Value:

- Increased social cohesion
- Collaboration across public and private sector
- Multiple benefits of actions

CO-CREATION STRATEGY



CO-CREATION STRATEGY

Deliver an action plan for co-creation between citizens, businesses, unions and institutions

Description: Vejle wants to be a resilient and collaborative council. A municipality that together with its citizens and the entire city creates common and better welfare services for all citizens. This will require collaboration with stakeholders and organizations from outside the municipality. Co-creation is an approach that has achieved widespread popularity for the City Council's strategic work in recent years. We need to nurture and develop this concept collaboratively with the engagement and interest of our stakeholders. The co-creation strategy will set the direction that the municipality will take to plan for and address the challenges of potential shocks and chronic stresses in the future. We will develop a methodology and action plan to enhance the quality of our welfare services without increasing in public spending. We will address the challenges together with our citizens and partners outside the municipality.

Objective: To support all types of co-creation across The Municipality of Vejle. This will improve the quality of life of the citizens through clarity of the concept, principles and rules of co-creation.

Action owner: Municipality of Vejle. Office of the Chief Executive, Welfare Administration, Children and Youth Administration, Economy- Labor market and Health Administration, Technical & Environment, Culture & Leisure.

Timeframe: Medium-term

Resilience value: The resilience strategy and indeed co-creation in general, is perceived as the optimum approach for developing organizational capacity for resilience.

- Improving quality of life through the provision of strong and robust welfare services
- Creating equitable and cohesive communities
- Increased welfare through developing and delivering 'bottom-up' ideas

Goals 1.2:

We will use co-creation to build resilience capacity

Supporting Action 1.2.B:

The Welfare Laboratory

Description: The Welfare Laboratory is part of the 10 innovation objectives of the Welfare Administration in 2015-2016, a strategic innovation initiative that identifies new methods, technologies and solutions to the challenges of the 21st century. It is targeted at people experiencing severe physical disability, mostly living in assisted living facilities. A selected panel of experts from the city will collaborate to identify holistic solutions to improve welfare standards and to build their resilience to potential shocks or stresses. Co-creation is a significant element of the Welfare Laboratory ethos.

Action owner: Municipality of Vejle

Timeframe: Medium-term

Resilience Value: Cross disciplinary collaboration to minimize human vulnerabilities

Supporting Action 1.2.C:

Resilience Art Festival

Description: We will promote active citizenship by organizing an art festival in 2017 where the arts will be used to examine, explore and demonstrate the resilience of Vejle. Activities could include 'Imagining Rosborg in 2050', or 'a vision for Vejle 2050' amongst other ideas.

Action owner: Municipality of Vejle

Timeframe: Medium-term

Resilience Value:

- Promote social cohesion, social networks and integration
- Creative community engagement through visualizing challenges and identifying opportunities with artists
- Community engagement that strengthens cultural and social identity

ROSBORG



City Council - workshop in the Rosborg area.

ROSBORG

Use Rosborg as a laboratory to address the challenges and opportunities that Vejle will face in 2050

Description: Vejle will need to find solutions to a number of potential shocks and chronic stresses, including climate change, urbanization, demographic changes, digital development, etc. We will use Rosborg district to develop and test innovative solutions, share lessons learnt, and scale up best practices across Vejle. Rosborg covers an area of 80 hectares and is expected to be completed by 2040-2050.

Objective: To explore innovative solutions to address the potential shocks and chronic stresses facing the city and to share these globally with other cities. Rosborg will function as a 'test-area' and contribute to leading the way in resilient city planning. We want to explore what creates 'the good life'.

Action owner: Municipality of Vejle. Technical & Environment Department, Office of the Chief Executive.

Timeframe: Long-term

Resilience value: The project will contribute insight into the methodology for developing greenfield and derelict land around cities, helping to solve global challenges arising from increasing urbanization.

- Use innovation to address challenges and foster long term planning
- Share best practice knowledge within Vejle, and potentially within Denmark
- Potentially generating new jobs and economic growth



City Council member Peder Hummelose, Chairman for the Technical Committee in the Municipality of Vejle. Discussing the development of Rosborg with students from Aarhus School of Architecture.

Goals 1.3:

We will develop innovative resilient city solutions and scale up best practices

Supporting Action 1.3.B:

Hold a resilience exhibition in Bylaboratoriet

Description: We will hold an exhibition for schools and investors to showcase the resilience journey underway as part of the 100RC program, including the development of the key strategic pillars, goals and actions. The aim of the exhibition is to initiate dialogue on delivering the actions, and to identify additional resilience building ideas that could be implemented in Rosborg.

Action owner: Municipality of Vejle

Timeframe: Short-term

Resilience Value:

- Share knowledge with stakeholders within the city
- Community engagement around the future of Vejle and Rosborg

FJORDBYEN VEJLE



Photo: Nils Rosenvold.

FJORDBYEN

Use 'Fjordbyen' as a laboratory for climate change adaptation and flood control

Description: Vejle's assets and communities are threatened by flooding from the fjord. The city's edges should be safe and protected during storms and rising water levels. We want to use 'Fjordbyen' as a laboratory to improve water management by exploring innovative and integrated solutions such as retrofitting new public spaces. Our aim is to encourage economic growth whilst reducing risk. This action will also be included in the City Development Plan. We will reduce the risk of flooding by taking the following measures;

- Design flood defenses to encourage investment, development and real estate value
- Use Østbykvarteret as a demonstration area where flood management interventions have a recreational and community value.
- Protect the hinterland areas of the Grejs River by installing integrated flood solutions along the road infrastructure to decrease the waterflow

Objective: Improve living with, and alongside water, to promote economic growth whilst simultaneously reducing flood risk.

Action owner: Municipality of Vejle: Technical & Environment Department, Office of the Chief Executive.

Timeframe: Long-term

Resilience value: We will engage with stakeholders, experts and citizens to promote inclusive design through community engagement.

- Protect and minimize risks to vulnerable assets within the city
- Adapt to impacts of a changing climate
- Build infrastructure with multiple benefits for the community

Facts:

By 2050

- Water level in the fjord: + 25 cm
- 100 year storm: + 200 cm

By 2100

- Water level in the fjord: +69 cm
- 100 year storm: + 244 cm

Source: The Governments mapping of dangers and risks of flooding

Goals 2.1:

We will protect Vejle and turn our water into an asset to improve our urban and social capital

Supporting Action 2.1.B:

Smart Water Vejle

Description: We want to design and install a sluice and water distribution system, to minimize the risk of flooding along the Grejs River and control the water levels.

Action owner: Municipality of Vejle, Technical and Environmental Department

Timeframe: Medium to Long-term

Resilience Value:

- Protect and minimize risk to vulnerable city assets
- Empowering community by collaboratively installing the sluice
- Potentially generating jobs

Supporting Action 2.1.C:

Host a Vild med Vand 'Into the Water' 2.0 event

Description: Vild med Vand is an annual summer event to bring communities together in the new town of Vejle Fjord. The city is transformed with a series of activities to suit everyone's interests, including water sports, fashion shows, music, art, and architecture..

Action owner: Municipality of Vejle, Culture Administration

Timeframe: Ongoing

Resilience Value:

- Create greater awareness and appreciation of natural and physical assets in the city
- Promote community cohesion
- Engage communities with the organization and operations of the event
- Strengthen the sense of identity within the city
- Promote economic growth

RESILIENCE LAB DENMARK

“WE ARE NOW WELL ON THE WAY TO SOLVING SOME OF THE CHALLENGES THAT THE ‘WILD’ WATER AND WEATHER CAUSE. BUT IT IS HARD WORK, COLLABORATION BETWEEN THE UTILITIES AND THE MUNICIPALITY WILL BE THE KEY TO SECURING ROBUST AND RESILIENT SOLUTIONS - BUT WE NEED TO SOLVE THIS ONE STEP AT A TIME.”

Director Mikael Schultz, Wastewater Vejle A/S



Illustration: CrossMind Reklamebureau



**RESILIENCE
LAB DENMARK**

ENERGY WATER DATA

RESILIENCE LAB DENMARK

Set up public private partnerships to generate simulations of the potential energy water and data challenges in Vejle in 2050, and leverage existing knowledge to identify solutions

Description: Resilience Lab Denmark is an innovative partnership for energy, water and data. Vejle will serve as a demonstration city where simulations and solutions to the challenges are implemented. The immediate action will be to generate simulations for optimizing energy and water supplies to Vejle whilst reducing environmental impacts.

Objective: To strengthen and coordinate the innovative projects around energy, water and data. The partnership will gather knowledge and share this with other 100RC network cities to grow an integrated resource library.

Action owner: Resilience Lab Denmark is a quatro helix collaboration of the Green Tech Center, VIA University College, The Municipality of Vejle, Vejle Wastewater and TREFOR.

Timeframe: Medium-term

Resilience value: A coordinated partnership and approach to develop solutions for cities that are increasingly resource demanding.

- Develop new ways of improving security of supply, and reduce vulnerability
- Use the challenge to generate opportunities with multiple benefits
- Build infrastructure with multiple benefits for the community



CEO Jørgen Andersen,
Green Tech Center

”RESILIENCE LAB DENMARK AND THE RESILIENCE HOUSE WILL BECOME HUBS FOR RESILIENT CITY SOLUTIONS ACROSS THE WORLD. A HUB FOR KNOWLEDGE INSTITUTIONS, BUSINESSES AND GOVERNMENTS, WHOM IN A MULTIDISCIPLINARY COLLABORATION WILL DEVELOP INNOVATIVE SOLUTIONS THAT CAN RESIST CLIMATE CHANGE.”

Goals 2.2:

We will establish public-private partnerships for resilient utilities

Supporting Action 2.2.B:

Create the Vejle Resilience House

Description: The 100RC activities have influenced the Green Tech Center to develop a new 'Resilience House'. It will attract organizations focused on urban resilience topics (climate change, water, urban developments) to work together to address our resilience challenges, identify solutions and apply them in Vejle.

Action owner: Green Tech Center

Timeframe: Short-term

Resilience Value:

- Generate innovative resilience solutions that foster long term planning of the city
- Share knowledge across Vejle, Denmark and internationally across 100RC cities
- Generate jobs and attract talent and expertise into Vejle

Supporting Action 2.2.C:

Develop a holistic strategic wastewater plan for Vejle

Description: The Municipality of Vejle is one of few municipalities developing a holistic wastewater strategy that addresses the challenges of climate change, water supply, existing municipal water plans, and water quality. We want to pioneer this integrated approach and set a benchmark for other cities. The plan will review the current systems and identify where further investment is needed to secure a fit-for-purpose and resilient wastewater system for Vejle.

Action owner: Municipality of Vejle

Timeframe: Short-term

Resilience Value:

- Provide robust and resourceful infrastructure
- Promote a healthy environment for the community
- Engage the community in the planning and maintenance of the city's infrastructure
- Share knowledge with other municipalities and global cities
- Generate jobs and economic growth

MOBILITY



MOBILITY

Reduce traffic congestion by planning a 'cycle super-highway' through central Vejle

Description: Municipality of Vejle will plan a super cycle highway across central Vejle to reduce the current reliance on cars, reduce traffic congestion, decrease CO₂ emissions, and improve the health and wellbeing of our citizens. We will also explore opportunities to improve the cycling facilities throughout the city.

Objective: To develop a 'cycle super-highway' to connect people to important destinations such as the railway station, and across neighborhoods (Fjord City in the west and Rosborg).

Action owner: Municipality of Vejle: Technical & Environment Department in collaboration with the Danish Cyclist Association.

Timeframe: Short-term

Resilience value: Promote the health and wellbeing of communities in Vejle and reduce congestion in central parts of the city.

- Encourage green modes of transport to contribute to a cleaner environment
- Connect communities and neighborhoods across the city
- Reduce time lost in traffic congestion and lengthy commutes



Goals 2.3:

We will secure growth by using sustainable resources, renewable energy and green transport

Supporting Action 2.3.B:

Explore the use of autonomous vehicles

Description: We want to explore opportunities and technologies for autonomous vehicles by leveraging the knowledge and innovation within Vejle and Denmark. The aim is to ease traffic congestion, reduce energy consumption and decrease emissions in the city.

Action owner: Municipality of Vejle

Timeframe: Medium-term

Resilience Value:

- Potential health and wellbeing benefits to the community
- Contributes to a cleaner environment
- Potential integration with wider smart technologies within the city

Supporting Action 2.3.C:

Achieve energy neutral waste collection trucks

Description: We will invest in converting waste to biofuels to run our waste collection trucks to reduce CO₂ emissions and energy consumption within Vejle, and move towards the use of more green energy. If successful, we aim to convert our bus fleet into biofuels.

Action owner: Municipality of Vejle

Timeframe: Medium to long-term

Resilience Value:

- Contribute to clean environment and zero waste energy
- Generate jobs within the renewable energy sector

SOCIAL RESILIENCE POLICY

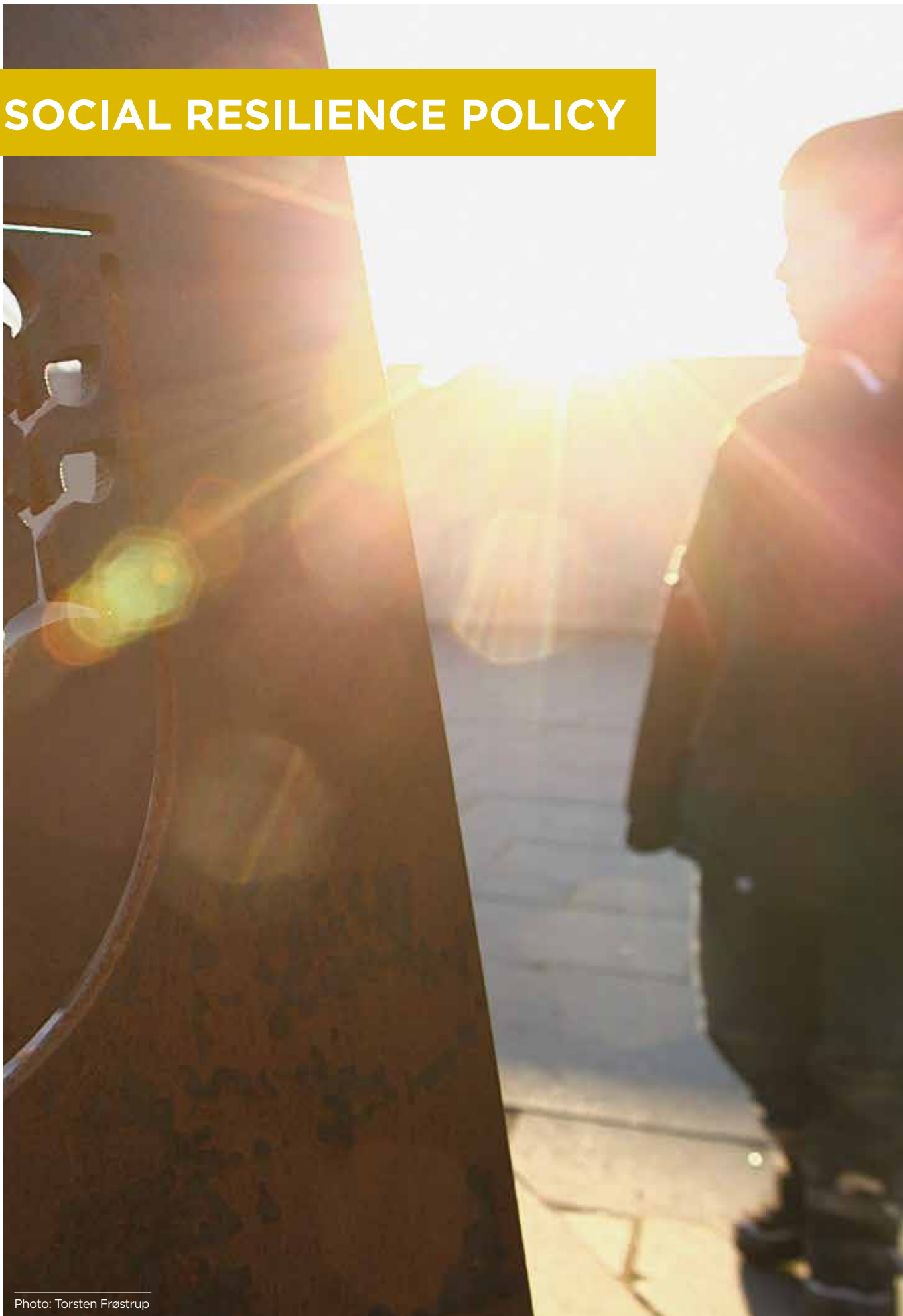


Photo: Torsten Frøstrup

SOCIAL RESILIENCE POLICY

We will increase social and economic cohesion and create the best conditions for future generations.

Description: The municipality's administration departments currently have individual strategies, norms, rules and values. When a citizen experiences a problem that requires support from the municipality in which a number of administrations need to be involved, the coordination of efforts can be complex and often confusing for those involved. The development of this policy recognizes that a requirement for common practices and approaches is needed.

Objective: To facilitate and participate in the development of a social resilience policy that aims to create a cross-department set of values and welfare solutions that will bring a fundamental change to the system. The main focus will be the change from a compensation based approach to an approach where citizens are encouraged to make the changes themselves with the support of the municipality and the public services.

Action owner: Municipality of Vejle: Welfare Administration, Children and Youth Administration, and Economy- Labor market and Health Administration.

Timeframe: Short-term

Resilience value: People, organizations and associations need to be able to take action themselves, rather than action being taken on their behalf. We want to collaboratively identify and take action with our citizens.

- Contribute to effective management and leadership in the city
- Work collaboratively to improve the quality of life for Vejle citizens
- Prevent social polarization

"WE SHALL NOT ONLY HAVE PRAGMATIC SOLUTION BASED DIALOGUES - BUT ALSO DIALOGUES THAT FOCUS ON WHAT WE LOVE AND WHAT WE SEE AS THE WONDERFUL AND INSPIRING THINGS IN OUR LIVES. THE BIGGEST THREATS AGAINST RESILIENCE ARE A LACK OF DIALOGUE ABOUT, AND VISION FOR WHAT A MEANINGFUL LIFE IS; A LACK OF LEADERSHIP AND PEOPLE WHO DARE; A LACK OF COMMUNITY ON WHAT WE DESIRE AND LONG FOR."

Finn Thorbjørn Hansen, Professor of Philosophy, Aalborg University and manager of the research project "Contemplation-driven innovation in The Municipality of Vejle"

Goals 3.1:

We will strengthen social resilience in Vejle in collaboration with our citizens and businesses

Supporting Action 3.1.B:

'Who controls the orchestra?' pilot project

Description: 'Who Controls the orchestra' is an interdisciplinary educational pilot project in collaboration with the police, addressed at primary school teachers, SSP employees, nurses, workers, young consultants, and professional social counselors in Vejle. It seeks to establish a common methodology for early crime prevention and identification of suspicious behaviors.

Action owner: SSP, Children and Youth Administration

Timeframe: Short-term

Resilience Value:

- Work collaboratively to ensure a safe and secure urban environment
- Engage community and empower stakeholders to participate in making the city safe and secure
- Strengthen social cohesion and social identify for young citizens

Supporting Action 3.1.C:

The 'Master of one's life' program

Description: The program allows citizens and public employees to find new approaches to helping people with disabilities to better achieve their own goals, champion a greater share of their own life, and become more active citizens contributing to the development of society.

Action owner: Municipality of Vejle, Welfare Administration

Timeframe: Short-term

Resilience Value:

- Empower the community to help vulnerable groups
- Establish social networks
- Promote inclusivity amongst the vulnerable groups

WEST CITY



WEST CITY

Use of the West City as a laboratory for social cohesion

Description: A number of efforts are taking place to integrate a comprehensive approach to building resilience within existing projects around Vestbyen. The area includes social housing, The Spinning Mill (one of Denmark's largest development and innovation environments), FabLab (Manufacturing Laboratory - contains digital fabrication, design and innovation training for school students), and a number of urban gardens. We are keen on drawing parallels from URBACT to build environmental and social resilience.

Objective: To develop Vestbyen to become a resilient and self-sufficient community by setting up a Coordination Group within the Municipality to combine the various initiatives taking place to strengthen resilience and social cohesion. This will include efforts around our EU projects.

Action owner: Municipality of Vejle. Welfare Administration, Children and Youth Administration, Economy- Labor market and Health Administration and, Technical & Environment Department.

Timeframe: Short-term

Resilience value: This responds to current and approaching challenges of great importance to local communities.

- Cross disciplinary collaboration to foster long term planning
- Better use of existing facilities to increase social cohesion
- Ensure effective management and leadership in the city

"THE MOST IMPORTANT CROP WE HAVE ARE COMMUNITIES - GOOD COMMUNITIES GROW STRONG NEIGHBORHOODS AND CITIES, WITH CITIZENS THAT ARE INTERESTED IN EACH OTHER AND IN MOLDING THE CITY. THE DISTANCE BETWEEN PEOPLE DECREASES WHEN THEY ARE NOT ONLY STRANGERS PASSING ON THE STREET, AND IF WE CAN SUPPLEMENT THAT EFFECT WITH A WISH TO DO SOMETHING GOOD FOR THE WORLD - IN THE FORM OF SELF-SUFFICIENCY, SUSTAINABILITY AND ECOLOGY - THEN WE WILL HAVE COME A LONG WAY."

Charlotte Virkelyst, Chairman for Grow Vejle

Goals 3.2:

We will make urban spaces and social housing central to community cohesion

Supporting Action 3.2.B:

Maintain the Grow Vejle association

Description: Grow Vejle is a community driven association established in 2013 with the aim to promote awareness of the value of healthy and fresh food whilst minimizing damage to the environment. Grow Vejle provides mobile urban gardens for citizens who do not have the opportunity or time to own a garden and locates them in vacant and parking lots. Food growing therefore becomes a catalyst to bring people together.

Action owner: Community run organization 'Grow Vejle'

Resilience Value:

- Promote environmental awareness and secure locally produced food
- Promote social cohesion
- Lead a healthy lifestyle

Supporting Action 3.2.C:

Establish the URBACT Resilient Europe initiative

Description: URBACT Resilient Europe stems from the work with 10ORC. It is a collaborative project between a network of cities across Europe, including **Vejle, Glasgow, Rotterdam, Burgas** and **Thessaloniki**. The aim is for the cities to work together to learn and share experiences from one another to build resilience. Three topics have been identified: Resilient People, Resilient Places and Resilient Institutions.

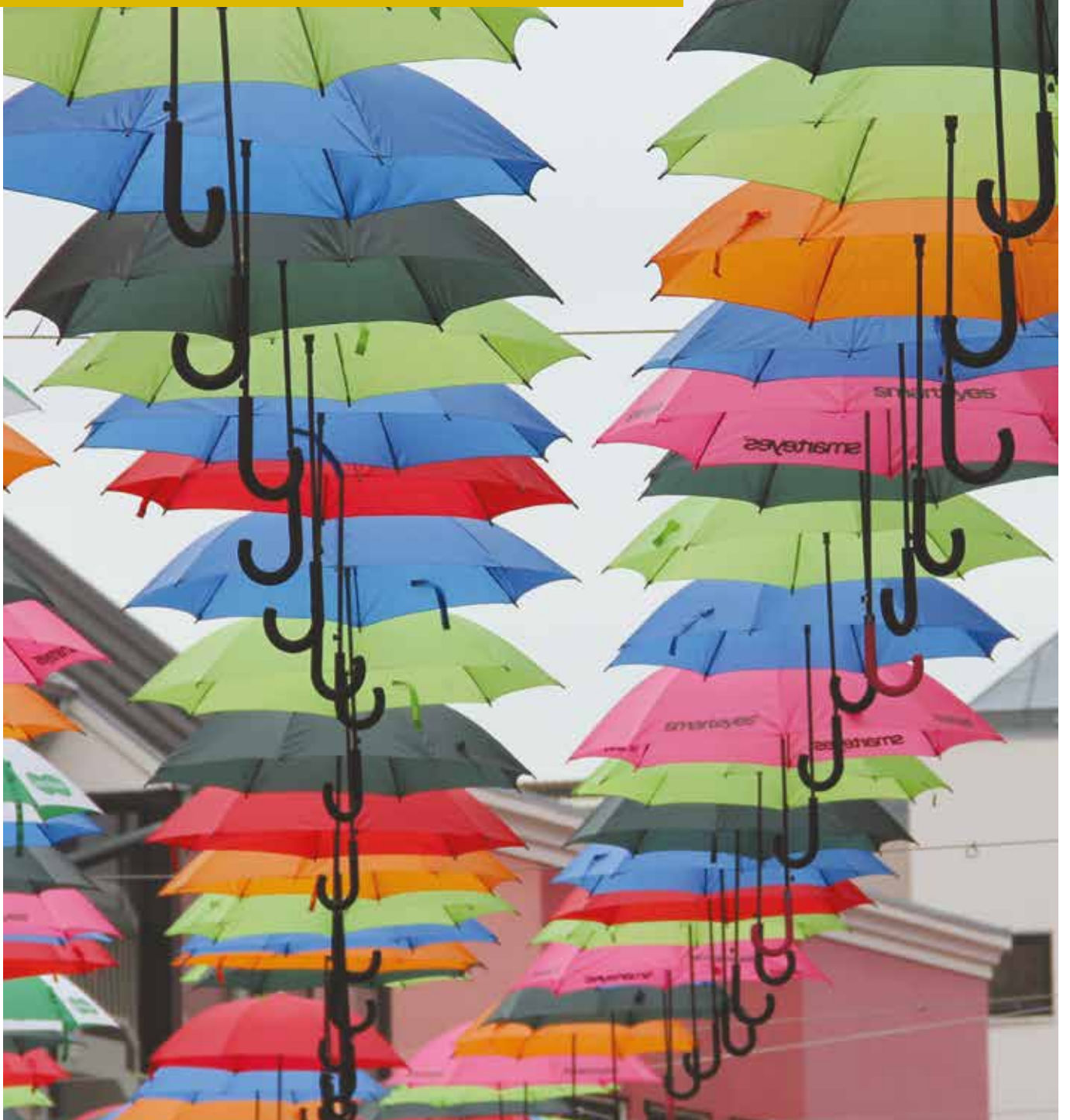
Action owner: Municipality of Vejle

Timeframe: Short-term

Resilience Value:

- Collaboration to foster long term planning
- Sharing of knowledge and best practice across different sectors
- Ensure effective and collaborative management and leadership

STRENGTHEN COHESION



"THE NEXT GENERATION IS OUR FUTURE - WE NEED TO CREATE THE BEST CIRCUMSTANCES FOR THEM. ALL THE INITIATIVES WE HAVE UNDERWAY AND THE SOCIETY WE HAVE CREATED WILL SHAPE THE FUTURE. WE ALL PLAY A SIGNIFICANT ROLE IN CREATING A SOCIETY THAT IS BASED ON DIALOG AND COHESION - WE MUST TAKE THAT ROLE SERIOUSLY."

Rafel Shamri, Winner of The European Citizenship Prize 2015

STRENGTHEN COHESION

Create new platforms for communities

Description: Social cohesion in Vejle is under pressure, there is a growing need for strong communities and venues for people to come together. Strengthening social cohesion is an important element for developing a resilient and sustainable society in Vejle. We believe that place has an influence on the creation of communities, and is a catalyst towards fostering dynamic social cohesion. We will initially focus on retrofitting The Spinning Mill and encourage the use of this old industrial building as communal spaces for communities to come together, and in creating an exciting environment for innovation, art and businesses.

Objective: To create new community spaces to strengthen cohesion. We want the city spaces to be the venues where dynamic cohesion is being developed and citizens can actively engage with each other. This will also improve civil involvement in integration to ensure social cohesion.

Action owner: Municipality of Vejle: Welfare Administration, Children and Youth Administration, Economy- Labor market and Health Administration, Technical & Environment Department, and Culture & Leisure Department.

Timeframe: Short-term

Resilience value: This responds to current and approaching challenges of great importance to local communities.

- Promote social cohesion across cultures
- Empower the community through citizen engagement
- Strengthen cohesion across the city



Goals 3.2:

We will make urban spaces and social housing central to community cohesion

Supporting Action 3.2.E: Investigate Vestergade as a facility for vulnerable citizens

Description: In collaboration with the KFUM's (YMCA) social workspace The Parasol, we have designated Vestergade, a street in Vejle, as a space for people with drug addictions to gather. This focuses on the welfare of the addicts and functions in an open and transparent way so that the local community of shops and residents are engaged and can offer support the addicts in a safe way.

Action owner: Municipality of Vejle

Timeframe: Short-term

Resilience Value:

- Promote social cohesion
- Create inclusive spaces

Supporting Action 3.2.F: Establish The Embassy Café

Description: The Embassy Café is located in one of the city's popular parks. It offers an opportunity for people with learning difficulties to operate the cafe and the adjacent ice rink. The café demonstrates that everyone in Vejle is able to contribute to the operation of the city.

Action owner: Municipality of Vejle

Timeframe: Short-term

Resilience Value:

- Empower vulnerable parts of the community
- Promote social cohesion and inclusivity
- Participate in the economic activity of the city

SOCIAL HOUSING MASTER PLANS



Foto: AAB



SOCIAL HOUSING MASTER PLANS

Develop social housing estates ‘Løget’ and ‘Nørremarken’ with possible investments from the Municipality and external financing bodies

Description: The social housing master plans are 4-year plans to improve the social housing environment in Løget (989 households) and Nørremarken (1,061 households). These masterplans focus on four main areas: Safety and well-being; Employment and education; Parental responsibility; and Crime preventive.

Objective: The masterplans aim to improve the social housing estates, strengthen social cohesion, stimulate economic growth, and reduce the gap between neighborhoods in Vejle.

Action owner: The not-for-profit housing associations ØsterBO, Lejerbo and AAB along with The Municipality of Vejle.

Timeframe: Short-term

Resilience value: Strengthen local identity and engage citizens to promote social cohesion and urban equality..

- Foster long term planning
- Improve the quality of life
- Promote economic growth

“IN NØRREMARKEN YOU COULD ALWAYS JUST KNOCK ON THE NEIGHBOR’S DOOR TO BORROW WHATEVER YOU WERE SHORT OFF, WHEN YOU NEEDED IT. IT HAD AND STILL HAS COMMUNITY THAT OTHER AREAS OF THE CITY PROBABLY WON’T BE ABLE TO BOAST ABOUT.”

Mahmoud El-Hassan from the book
“From my world – stories from Nørremarken”

Goals 3.2:

We will make urban spaces and social housing central to community cohesion

Supporting Action 3.2.H:

The Stairway Ambassadors initiative

Description: Stairway Ambassadors is an initiative where residents of two neighborhoods in Vejle welcome new residents and help them settle in their new homes with the aim to build inclusive communities. The initiative is part of the social housing masterplans.

Action owner: Municipality of Vejle

Timeframe: Short-term

Resilience Value:

- Promote social cohesion
- Establish social networks
- Promote social integration
- Build inclusive communities

Supporting Action 3.2.I:

The Health Agents program

Description: The Health Agents program is aimed at volunteers who would like to acquire training in health to help others lead a healthier lifestyle. After the training, volunteers will be given the opportunity to participate in creating health driven activities in Løget, Nørremarken and other neighborhoods in Vejle.

Action owner: Municipality of Vejle

Timeframe: Short-term

Resilience Value:

- Engagement and community participation
- Promote education for the common good
- Improve health and wellbeing of the community

STRATEGIC PREVENTIVE INVESTMENTS



STRATEGIC PREVENTIVE INVESTMENTS

Applying resilience learning from other sectors to public health and wellbeing

Description: Research shows that early intervention, such as 'good investments' result in direct benefits to vulnerable citizens and families. We will designate an area as a social laboratory where initiatives on strategic prevention and investment models can be tested. This could include an increased focus on parenting and family relationships or investigating the relation between resilient communities and public health. We want to ensure that our vulnerable citizens are not worse off.

Objective: To improve the quality of life, with a focus on breaking the cycle of negative social heritage and promoting robust public health. This is to ensure "good investments" at the right time.

Action owner: Municipality of Vejle: Welfare Administration, Children and Youth Administration and, Economy- Labor market and Health Administration.

Timeframe: Medium to Long-term

Resilience value: Strategic preventative investments can turn a negative life around, so that citizens can succeed socially, undertake training, find employment, and have good physical and mental health status.

- Avoid negative social heritage and increase social mobility
- Healthy citizens with courage and vigor in life
- Investigate new public investment models

"WE NEED TO LOOK AFTER PEOPLE FROM EARLIER STAGES. WE MUST INVEST IN PICKING UP ON CHALLENGES BEFORE THEY TURN INTO BIG PROBLEMS. BUT ONE MUST BELIEVE THAT IT IS POSSIBLE, SO THAT WE DON'T END UP WITH A DOUBLE BILL!"

Deputy Director, Vejle Youth Educational Guidance,
Trine Rosenbeck

Goals 3.3:

We will invest in Vejle's Youth

Supporting Action 3.3.B:

The AFKOS initiative

Description: AFKOS, (Outpatient Parenting Competencies Observations and Support), is an initiative that helps parents develop parenting skills. The initiative is targeted at parents evaluated by the social services as needing additional support to ensure the wellbeing and development of the child.

Action owner: Municipality of Vejle

Timeframe: Short to Medium-term

Resilience Value:

- Promote education and training
- Engagement and community participation
- Ensure health and wellbeing of children

Supporting Action 3.3.C:

Early intervention for families with alcohol problems

Description: The action aims at using early intervention as a preventive measure in families with alcohol problems. We will focus on assisting the parents and improving the child's environment by reducing stress factors.

Action owner: Municipality of Vejle

Timeframe: Medium-term

Resilience Value:

- Engagement and community participation
- Promote education and training for vulnerable families

YOUTH LIFE

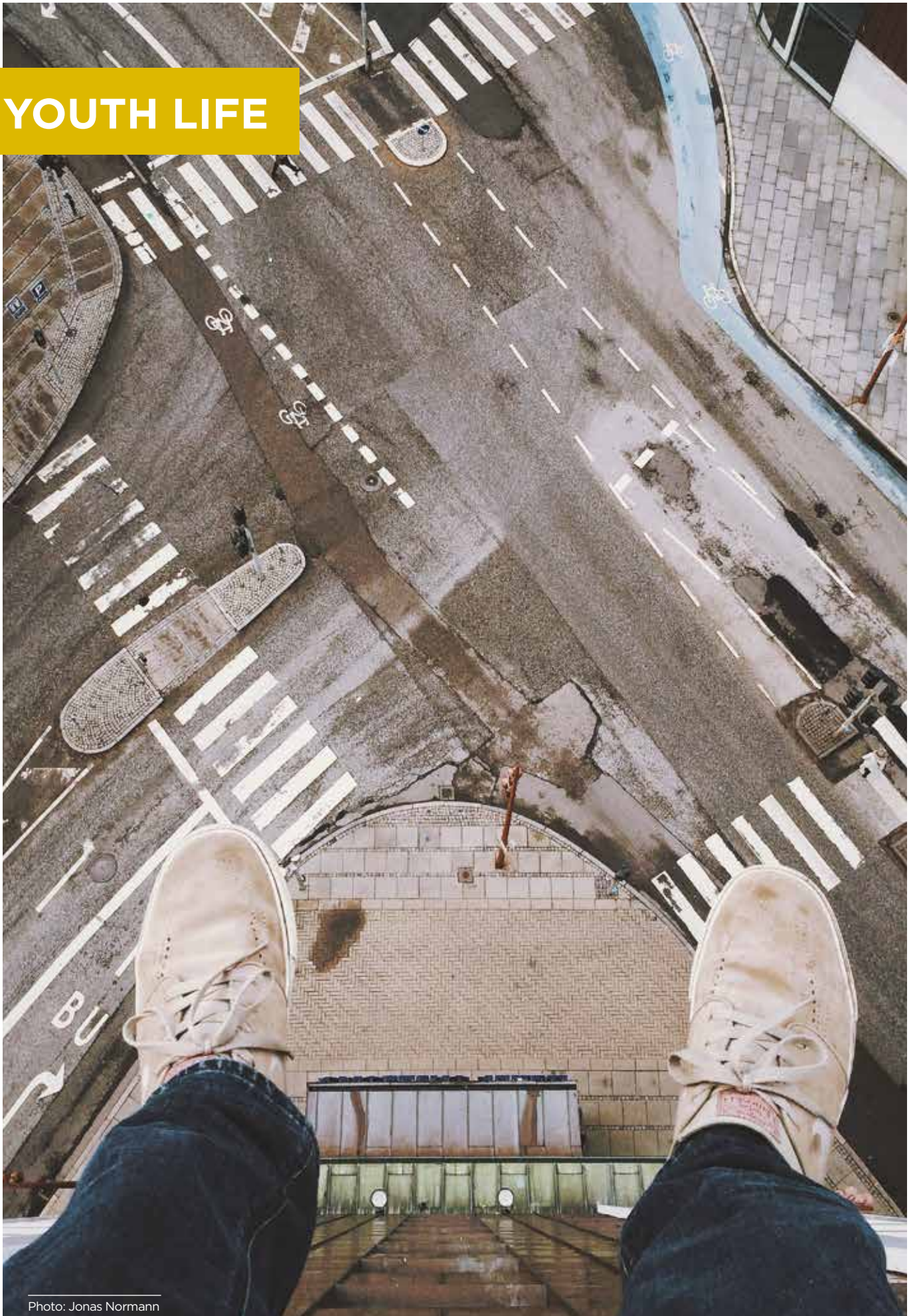


Photo: Jonas Normann

YOUTH LIFE

Develop initiatives to help the vulnerable youth groups in the city

Description: Our future society will be shaped by our younger generation. We will examine initiatives that can be launched to help improve the lives of our vulnerable youth. We will promote initiatives that prevent radicalization, and encourage them to complete secondary school. We will target vulnerable groups such as people with mental vulnerability, homeless or drug addicts.

Objective: To better understand what initiatives can kick-start to achieve a positive route for youth in Vejle, and in particular to help shape the future of vulnerable youth. This includes preventing radicalization of young and vulnerable groups.

Action owner: Municipality of Vejle. Welfare Administration, Children and Youth Administration, Economy- Labor market and Health Administration and, Culture & Leisure Department.

Timeframe: Medium to Long-term

Resilience value: Focusing on the most vulnerable youth and integrating them into the educational system, work force and society.

- Engagement and community participation
- Promote education for the common good
- Promote social cohesion

"IN THE POST-MODERN SOCIETY WE LIVE IN TODAY, WE ARE A COMMUNITY FOR INDIVIDUALS AND WE ARE INDIVIDUALS THAT WORK TOGETHER IN A COMMUNITY. THERE IS NOT ONE TRUTH, BUT MANY TRUTHS. WE MUST LISTEN TO THE OTHERS AS WE DO NOT HAVE ALL THE ANSWERS OURSELVES. NO MAN IS AN ISLAND. IT IS NOT ENOUGH TO 'JUST BE ME'."

Vicar Erik Steen Nielsen

Goals 3.3:

We will invest in Vejle's Youth

Supporting Action 3.3.E:

The SPOR 18 Initiative

Description: Our youth's mental health is under pressure. SPOR 18 is an initiative that offers advice to young people to help them address problems such as loneliness, sadness, anxiety, sexuality, stress and others. SPOR 18 is run by counselors and professionals trained in mental health. (SPOR = Track)

Action owner: Municipality of Vejle

Timeframe: Ongoing

Resilience Value:

- Promote the health and wellbeing of vulnerable youth communities
- Promote social cohesion

Supporting Action 3.3.F:

'Through Fire and Water' initiative

Description: The initiative started in 2007 and is aimed at giving firefighter training courses to vulnerable young people from the city's schools aged between 13 and 16 years. The training takes place in Vejle fire station and the lessons include first aid, basic firefighting and smoke diving. The objective is to build their self-esteem, confidence and instil a sense of community spirit.

Action owner: Municipality of Vejle, SSP

Timeframe: Ongoing

Resilience Value:

- Promote educational and training development
- Exposure to potential future jobs
- Promote social cohesion

ADVANCED SMART LIGHTING



ADVANCED SMART LIGHTING

Using the streetlights to integrate smart technologies

Description: We aim to replace the lighting fixtures with LED lights and integrate wireless communications, sensors, plug-in for electric car or other future technologies with the new streetlights, to manage traffic, receive parking information, climate information, tourist services and others. By the end of 2015, more than 40% of the lights have already been replaced.

Objective: Use the upgrade of lighting to integrate various city systems and lay the foundations for subsequent smart city solutions. This could include wireless communications infrastructure, sensors, plugs for electrical vehicles and other future modes of transport.

Action owner: Municipality of Vejle: Technical & Environment Department, and Economy- Labor market and Health Administration.

Timeframe: Short to Medium-term

Resilience value: Financially stronger solutions for lowering energy demand and carbon emissions.

- Promote a smart and longer term planning
- Engage community in smart solutions
- Promote knowledge around smart approaches



Goals 4.1:

We will use Smart technology to create an efficient society

Supporting Action 4.1.B:

Investigate an Intelligent traffic management for Vejle

Description: A lot of time is being wasted at traffic lights in Vejle, costing hundreds of millions of Danish krone yearly. We want to address this by undertaking a feasibility study for an intelligent traffic system, and to understand its contribution to a greener, better managed urban environment.

Action owner: Municipality of Vejle

Timeframe: Ongoing

Resilience Value:

- Promote smart and green mobility infrastructure
- Promote long term planning
- Improve air quality
- Improve health and wellbeing of the community

Supporting Action 4.1.C:

Develop a smart digital parking strategy for Vejle

Description: The Municipality of Vejle will develop a digital smart parking strategy, which will include the development of an application ('app') with features such as pay by phone, and identification of the location of nearest available parking spot.

Action owner: Municipality of Vejle

Timeframe: Ongoing

Resilience Value:

- Improved decision making
- Promote smart infrastructure
- Contribute to a cleaner environment

DIGITAL INCLUSION



Photo: VejleMuseerne



"DIGITAL DEVELOPMENT MOVES FASTER AND FASTER, THIS CAN PRESENT NEW EDUCATIONAL / DIGITAL OPPORTUNITIES, BUT ONLY IF WE INCLUDE CHILDREN, TEACHERS AND RESEARCHERS IN THE PROCESS. AS A COMMUNITY WE MUST PREPARE CHILDREN FOR A DIGITAL FUTURE THAT WE DON'T YET FULLY UNDERSTAND. THIS IS ONE OF THE MOST IMPORTANT TASKS OVERALL. NOT JUST IN TERMS OF LEARNING, BUT ALSO WHEN IT COMES TO PREPARING A SMART AND RESILIENT CITY TO FUTURE CHALLENGES."

Development Consultant, Jacob Knudsen, VIFIN

DIGITAL INCLUSION

Provide citizens, youth and elderly people, with the necessary support to keep up to date with digital technologies

Description: Denmark is at the forefront of digitalization due to our high educational levels and the fact that we use digital functions as part of our daily life e.g. Digital Post. However, some of our young and older generations, along with some businesses find it difficult to navigate through the digital world and therefore are at risk of being digitally excluded. We will develop plans to make the people in Vejle 'smart' and central to the digital society. The municipality also recognizes the role schools can play and hence has set the 'Vejle Digital School' initiative to start preparing the young generation today for the jobs of the future.

Objective: To ensure everyone in Vejle has the necessary digital skills required for optimized education and employment.

Action owner: Municipality of Vejle. Economy-Labor market and Health Administration, Children and Youth Administration and, Welfare Administration.

Timeframe: Short-term

Resilience value: Enable citizens to participate and become active in digital communities.

- Ensure digital inclusivity for all citizens of Vejle
- Promote education and training
- Encourage social cohesion

Goals 4.2:

We will support young citizens education in digital technologies

Supporting Action 4.2.B:

The FABlab@schoolsdk initiative

Description: The Municipality of Vejle, in collaboration with Aarhus municipality, Silkeborg municipality, Stanford University, and Aarhus university, is giving students the opportunity to examine, test and design new digital technologies. The aim is to allow the pupils to see themselves as designers and problem solvers and not just users. Through this exposure, we aim to prepare them and give them an insight on the jobs of the future.

Action owner: Municipality of Vejle, The Spinning Mill

Timeframe: Ongoing

Resilience Value:

- Promote education and training to the future generation
- Integrate the youth into the city's economic growth

Supporting Action 4.2.C:

The Robot laboratory at SDE

Description: Southern College has established a new CNC technology center in cooperation with the Municipality of Vejle. The center will include a CNC technology zone, and a robot machining center for teaching and/or training. School students can visit the center to get training on technology education through concept development, programming and use of small industrial robots to inspire them for the future. The center aims to ensure that there is the necessary skilled workforce for the jobs of the future.

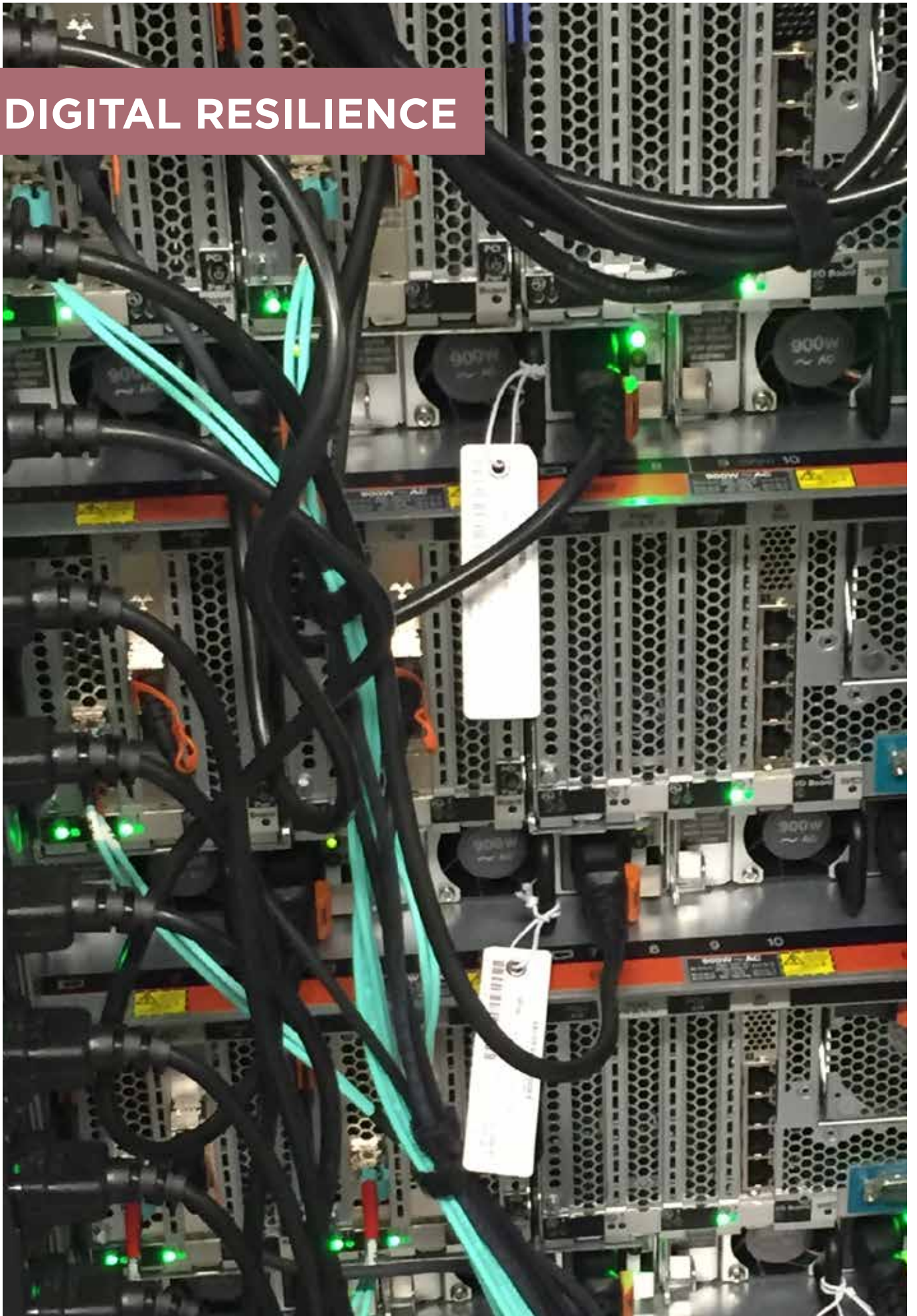
Action owner: Syddansk business school

Timeframe: Ongoing

Resilience Value:

- Promote education and training to the future generation
- Encourage social cohesion

DIGITAL RESILIENCE



DIGITAL RESILIENCE

Develop a set of standards to be shared across the council to increase digital resilience and cybersecurity

Description: Smart City solutions help to solve some of the challenges and risks that Vejle as a city is facing. However, there is a risk that new technologies bring new risks and threats. We therefore need to increase our focus on cybersecurity and the reliability of the Smart City elements introduced in the city. The aim of Digital Resilience is develop a set of standards that focus on cybersecurity and the reliability of our smart city infrastructure.

Objective: To ensure our systems are able to continue working during a shock or failure e.g. flooding or cyber-attacks. Clear rules for what data we collect how we store and use it will also be included.

Action owner: Initially Municipality of Vejle: Economy- Labor market and Health Administration and, Technical & Environment Department. The second phase, will aim to involve key players from utility and telecommunication companies.

Timeframe: Short-term

Resilience value:

- Reduce vulnerability of digital systems
- Promote long term planning
- Ensure reliable and robust infrastructure and communication

Goals 4.3:

We will facilitate public access to open data towards creating a digital society

Supporting Action 4.3.B:

Develop the Vejle Open Data initiative

Description: We will make data freely available in Vejle to support the economic growth of the city, and ensure transparency in the public administration. Opening up the data will allow businesses and entrepreneurs to develop new business services and business models.

Action owner: Municipality of Vejle

Timeframe: Ongoing

Resilience Value:

- Ensure effective management and leadership
- Promote economic growth
- Generate jobs

Supporting Action 4.3.C:

Participation in the Smart Mature Resilience project

Description: Smart Mature Resilience (SMR) is an EU project that aims to develop guidelines on resilience assessment and implementation to increase Europe's resilience to shocks and stresses. SMR will develop and validate the guidelines using three pilot projects covering security sectors, climate change and social dynamics.

Action owner: Municipality of Vejle

Timeframe: Ongoing

Resilience Value:

- Foster long term planning
- Share knowledge and learnings amongst cities
- Generate jobs

**"IN VEJLE WE BELIEVE
THAT STRATEGIES BECOME
REALITY BECAUSE THERE
IS POLITICAL WILL AND
ACTION BEHIND THEM."**

Mayor Arne Sigtenbjerggard





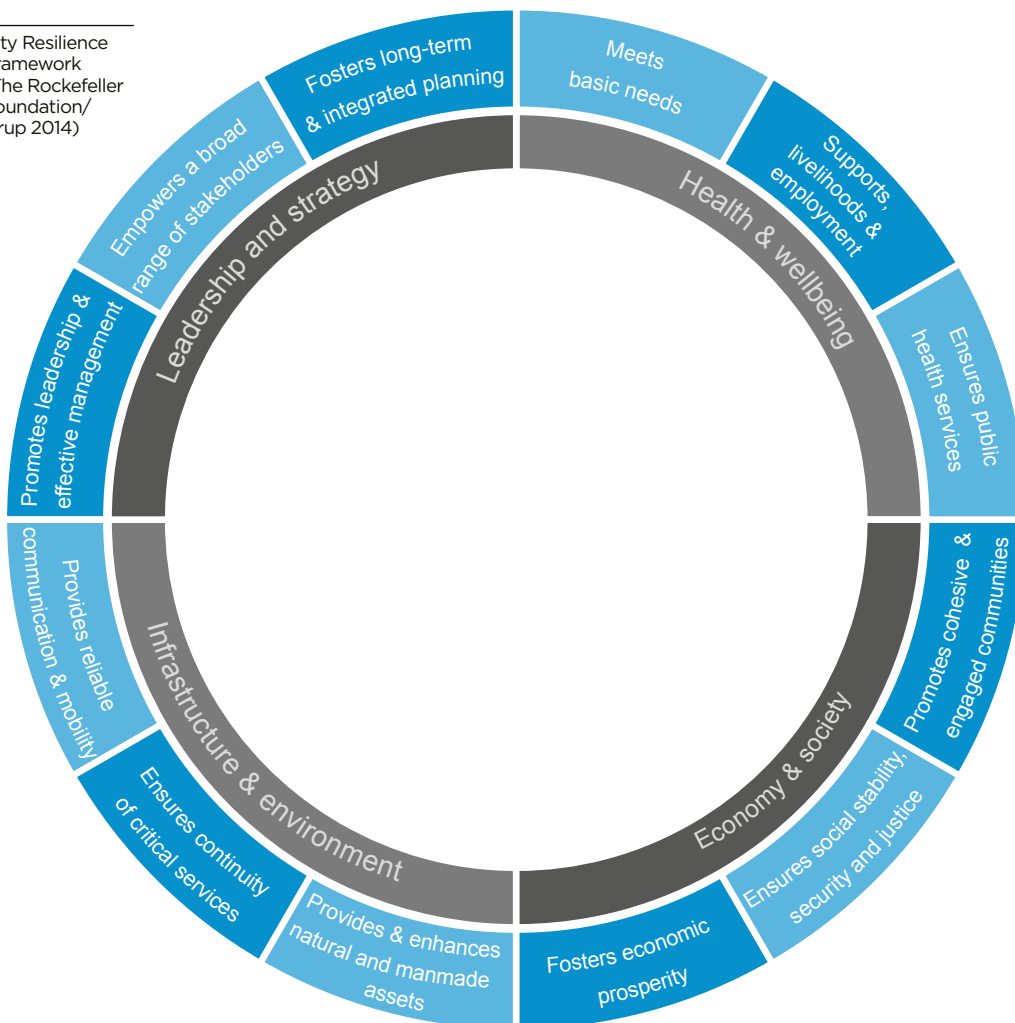
THE STRATEGY PROCESS

Veje's approach to resilience

”URBAN RESILIENCE IS THE CAPACITY OF INDIVIDUALS, COMMUNITIES, INSTITUTIONS, BUSINESSES, AND SYSTEMS WITHIN A CITY TO SURVIVE, ADAPT, AND GROW NO MATTER WHAT KINDS OF CHRONIC STRESSES AND ACUTE SHOCKS THEY EXPERIENCE.”

100 Resilient Cities

City Resilience Framework
(The Rockefeller Foundation/
Arup 2014)



City Resilience Framework

Vejle's understanding of resilience is shaped by the City Resilience Framework (CRF), developed by The Rockefeller Foundation and Arup (2014), and used by 100 Resilient Cities (100RC) as the foundation of a holistic approach to city resilience. The CRF provides a lens through which the complexity of cities and the numerous factors that contribute to a city's resilience can be understood. It comprises four dimensions and twelve key drivers, as illustrated by the two rings of the diagram.

A resilient city also exhibits seven qualities, which should be evident in the way the city – or any system, function or asset within the city – operates. These qualities are:

Reflective - able to learn from past experiences to inform future decisions.

Resourceful - able to recognize alternative ways to use resources at times of crisis, in order to meet needs or achieve goals.

Inclusive – able to create a shared sense of ownership in decision making throughout the city, incorporating the knowledge and perspectives of all majority and minority groups.

Integrated – able to coordinate work across institutions and systems to catalyze additional benefits.

Robust – comprising well-conceived, constructed and managed systems, capable of withstanding sudden shocks.

Redundant - purposefully incorporating spare capacity to accommodate disruption due to extreme pressures, surges in demand or an external event.

Flexible - willing and able to adopt alternative strategies in response to changing circumstances or sudden crises.

Vejle's resilience strategy is Denmark's first fully integrated response to city resilience. It addresses future uncertainty. Its holistic approach is essential to help tackle the shocks and stresses we face today, as well as tomorrow, and to transform our challenges into opportunities. Through cooperation with 100RC, Vejle has gained access to a framework, methods and tools for diagnosing shocks and stresses, and for enhancing resilience through strategic urban development.

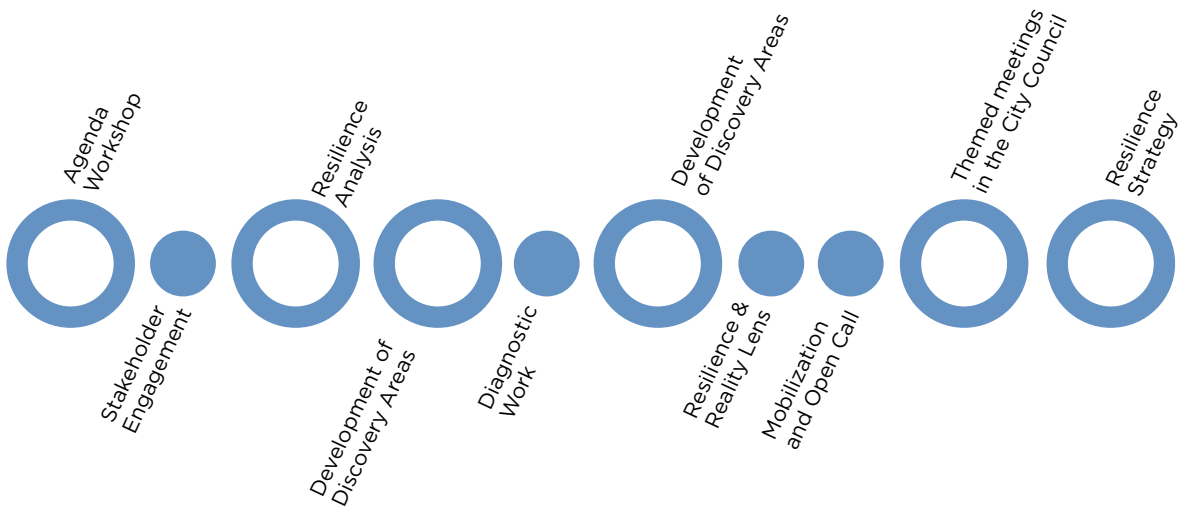
Resilience Strategy Development

This Resilience Strategy builds on our existing capabilities, and addresses cross-cutting and emerging shocks and stresses within the environment, the economy and society. The strategy was developed by identifying the gaps in our existing approach to the city’s resilience, which may prevent us from adequately addressing the shocks and stresses we face. We have reviewed the city’s current and future plans, projects and aspirations against the CRF and 100RC methodology, to determine how they contribute to our resilience agenda. In doing so, we have also identified new opportunities that would strengthen our overall approach to resilience.

In Phase I of Vejle’s resilience strategy development, we looked at the city holistically to develop a Preliminary Resilience Assessment (PRA). We held a number of workshops to develop an understanding of the shocks and stresses facing the city, the vulnerable assets, people’s perceptions and the city actions.

The PRA indicated that whilst there is a number of actions being taken across the drivers of the City Resilience Framework, these are not perceived by stakeholders as strengths for the city. The stakeholders particularly identified weaknesses related to ‘cohesive communities’ and ‘empowerment of stakeholders’. These perceptions arise from the fact the welfare

system is currently under pressure, both nationally and in Vejle, from demographic changes and increased polarization of communities. A number of cutbacks to existing initiatives are expected, which means the apparent good performance of the past is not expected to continue. Promoting social cohesion and citizen empowerment are huge concerns for stakeholders, and would require new and innovative cross-department initiatives to address them. Climate change, in particular flooding, was also identified by stakeholders as a stress that needs to be addressed. Our Preliminary Resilience Assessment led us to four discovery areas, which we focused on in greater detail as we developed the resilience strategy.



In Phase II we explored a series of research questions and activities to identify gaps in knowledge/action and resilience building opportunities within the discovery areas. Workshops were carried out across stakeholder groups between September and December 2015. Gaps, opportunities, goals and actions were identified across the four discovery areas.

Stakeholder mobilization, dialogue and co-creation

During the process, Vejle focused on engaging with municipal employees and businesses through a series of open events, meetings and conferences. We have established partnerships and collaborations with businesses, housing associations, and educational institutions, which were instrumental in identifying resilience actions. As part of our commitment to the 100RC network and strengthening the resilience of Vejle, we have encouraged professionals to take part in developing new resilience initiatives and opportunities for the city. We have engaged with them during the strategy process through workshops and conversations and invited communities from across the city to present their best resilience ideas and initiatives, through an Open Call from first of November 2015 to late January 2016.

A variety of these initiatives identified collectively have contributed to the Priority Actions (Lighthouse Actions) described in Chapter 2. The combined 100 Actions and Initiatives will be further developed, and facilitated by Vejle in 2016-2020.

Resilient Vejle team meeting.



The political process

The City Council is the unifying and leading body for Vejle's resilience strategy. To assist the strategy development through the political process, we published a collection of examples from existing resilience activities in Vejle, including political delegations to Glasgow, Rotterdam, Eindhoven and Barcelona, and discussions at City Council meetings and Financial and Specialist committees.

Value Creation

The resilience strategy process has been the catalyst for a number of long-term political and strategic resilience agendas, a comprehensive development process at the political and professional level, the agreement of a number of actions, and inception of two major EU projects in Vejle. The partnerships we have established during the process have led to a number of "city laboratories for resilience", such as the Resilience Lab Denmark.

Workshop with students "The Future Resilient City."



Workshop with Arcadis.



Vejle's Resilience Diagnostic

A shock is a sudden, acute event that may affect the city, such as a major flood or disease outbreak.

A stress is a chronic condition that gradually weakens the city's fabric on a daily or cyclical basis, such as high rates of unemployment or severe traffic congestion.

In Vejle, the stresses we face on a daily basis are more significant than the relatively minor risk we face from major shocks. The primary focus of this resilience strategy is therefore to address our stresses. These challenges are well known; what remains to be seen is how they will manifest themselves in the long term.

Climate and flooding

Over recent decades, our climate has changed, increasing the risk of major floods in Vejle significantly. The threat of flooding is both a sudden shock and a long-term stress to the city.

Over the past few hundred years, floods were recorded in the city every 4 or 5 years, however in the past decade, this rate has increased significantly. International organizations including the Intergovernmental Panel on Climate Change (IPCC) and the Danish Meteorological Institute expect that climate change will bring more extreme rainfall, continued sea level rise and warmer weather in the future. The probability of flooding will increase over time, risking major damage to coastal areas by the fjord, harbor area and city centre. The impact of a 100-year storm could be disastrous.

The Municipality of Vejle has carried out several climate change and flooding risk and impact analyses. A Climate Change Adaptation Plan was developed in 2014, as well as a Risk Management Plan in connection with the EU Floods Directive, which has recently been approved by the City Council. These analyses suggest that the risk of flooding is increasing in large parts of the city.

To tackle this challenge, an investigation has been launched to consider the city's hydrological conditions and drainage system as well as conditions around the fjord.

These analyses sought to optimize the city's existing systems, reducing flood risk and allowing us to assess future climate risks and impact to the overall system. The current model has identified a number of critical issues as well as recommendations to address them. A proposal has also been developed to integrate flood protection into the overall urban development plan around the inlet.

Through the resilience strategy, Vejle has further identified the physical, social and economic implications of these flood risks, including increasing pressure on the city's basic functions and utility supplies. As a result, Vejle has taken the initiative to work more closely with energy, water and telecommunication utility companies. Climate change affects all communities and may lead to an increase in the polarization of society due to differentiated impacts between neighborhoods. Flooding also poses an increased risk of disease spreading if water from the sewage systems overflows. Over time this could discourage investment in the city. The threat of flooding also implies higher insurance premiums and lower levels of economic growth. Neither private citizens nor companies will settle where they are threatened by water.

In the short term, we are concerned with optimizing the city's capacity to withstand the risks we're facing. This includes both the technical infrastructure needed to manage water flows, as well as overall organizational readiness. In the long run this means looking at shocks and stresses as well as opportunities. Several physical changes are taking place in Vejle at the moment, especially in the most climate vulnerable areas of the city. We have to act now to ensure we put in place durable and sustainable solutions; adaptation to climate change must be integrated into existing urban development plans.

Regional urbanization

Rising population and regional urbanization pose an increasing challenge to Vejle's infrastructure and mobility capacity. Expansion of transport systems is expected to increase to the extent that it totally overshadows all positive initiatives to reduce CO₂ in other sectors including heating, electricity and agriculture. Alongside rising energy prices this trend has led to the development of Vejle's Strategic Energy Plan in 2010. The resilience strategy will continue this work and develop initiatives in transport and mobility, renewable energy and sustainability. This will help to reduce CO₂ emissions and contribute to a cleaner, healthier city. Furthermore, Vejle will work to make its climate challenge a driver of new jobs in Vejle's "green" business sector.

Smart, safe and inclusive infrastructure

Through the strategy process, Vejle mapped the city's assets and infrastructure to identify critical areas with potential for innovation. This evaluation found that day-to-day, the Municipality of Vejle manages its infrastructure and assets well, and that all relevant plans are up to date. However, there are also some areas, especially around the fjord in the west of the city and central areas that are particularly vulnerable to climate change and increased urbanization. Further work is needed in these areas to ensure increased accessibility and inclusiveness for vulnerable social groups.

Digitalization - new solutions and challenges

The city, its businesses and citizens are in the process of implementing new digital and smart technologies. The municipality is using these in citizen and public services, as well as energy and education. Digitalization is a driver of efficiency, growth and job creation, and will provide solutions to many of the stresses the city faces. But it also has the potential to exacerbate divisions in our society, between those with access and those without. As the city becomes more dependent on digital systems, the issue of IT security for the city's functions, services and supplies is also becoming more pressing.

Changing industries and the future labor market

The financial crisis in 2009 taught us that our industries and economy are even more closely connected to the global economy than we ever imagined. We are now facing an era in which industries and technology are evolving and creating new opportunities but the labor market is also more turbulent, new skills are required and employment conditions are more precarious for some. To ensure economic resilience, the Municipality of Vejle will continue to develop a collaborative relationship with local businesses and help to prepare future generations for these conditions.

Our welfare model is facing increasing pressure

Social and economic changes are placing increasing pressure on the strong Danish welfare model's capacity to provide high quality public services. Demographic changes - such as aging communities and immigration - are increasing the social divide and presenting additional stress to public social services, city functions and utilities, which is leading to a rise in inequality, vulnerable groups and marginalized citizens. The influx of immigrants is also accelerating the continued stress on the welfare system, by increasing the growth in unskilled labor, therefore increasing unemployment and financial instability.

Vejle will therefore place a greater focus on being a flexible and adaptable municipality - both as an organization and as a community. Through the development of the resilience strategy, Vejle has identified opportunities to increase public spending for vulnerable families and youth, to improve the quality of life for immigrants and to improve certain residential and urban areas. The resilience strategy also reveals an increasing need for innovative actions that address social cohesion as our society becomes more diverse, especially in relation to immigration and vulnerable children and young people.

Responding to our Stresses - Discovering Solutions

Having understood our existing resilience profile, and the shocks and stresses we need to prepare for, we were able to focus on the types of solutions that will help us to build our resilience for the future. These solutions fall into four main groups, which reflect the pillars of our resilience strategy.

Resilience and urbanization

Today more than half of the world's population lives in cities, a trend that is expected to continue and could reach 75% by 2050. This implies not only a quantitative change in the number of people living in cities, but also a qualitative change in the way we live in urban environments. Cities are social and cultural centers, and engines for economic growth, but while urban development has many advantages, it can also accentuate the challenges cities face. In Vejle we are experiencing increasing urbanization, though not at the rate of some parts of the world. Nevertheless, we must prepare for it. So we ask ourselves, how should we go about it and plan for the future?

From safeguarding society, to innovating for long-term benefit

Vejle has a strong track-record in risk management and safeguarding the city against sudden disasters, thanks to a cooperative

approach between professionals and citizens. This helps prevent crises and facilitates planning in the event of problems. By continually adapting and optimizing the city's physical infrastructure, we are able to protect and regulate our society. We are also experienced at reacting to our current shocks and stresses. At the same time, we have a well functioning welfare society, which is the basis of our prosperity and growth. We support vulnerable citizens through close cooperation between government, civil society, private institutions and industry.

Together we are capable of withstanding stresses, optimizing our capacity to solve new challenges and ensuring the needs of our citizens are met. In Vejle, we will enhance the city's organizational, managerial and societal preparedness to guide us towards a future in which we are able to respond proactively to stresses and shocks, preventing them from escalating or recurring, and transforming them into drivers of development for the city.

Resilience through co-creation

In Vejle, we will work together to solve the challenges of tomorrow - locally, regionally, nationally and internationally. We share the risk, so we must co-create the solutions. Co-creation through democracy and consensus are an essential part of creating a more resilient future.



Photo: Simon Jeppesen.

Vejele's collaborative approach to resilience is about looking beyond the political, social and economic differences and using the strong tradition of collaboration to create realistic long term solutions. The work on resilience is integrated with a comprehensive strategy for co-creation across all sectors and departments, for the development and implementation of methods, values and organizational principles.

Economic resilience through value-adding prevention

Facing new stresses and shocks can mean new costs, but it doesn't have to be this way. By focusing on resilience, wherever possible we will create multiple co-benefits via new solutions to new challenges. Through innovative and progressive funding models we are seeking to increase the investment potential of the city and its districts while reducing the risks - for example of flooding - for the benefit of investors, homeowners and all those who live, work and visit the city. Multifunctional recreational spaces which also protect the city against storm surges are one such example of the co-benefits of this approach. Resilience is about daring to look ahead, anticipating the shocks and stresses coming, to adapt and invest before it happens.

We will use resilience thinking to consider risks such as climate change and demographic pressures in innovative new ways. And we will use resilience thinking to focus holistically on co-creation, innovation, urban communities and the economy.



Governance of the Strategy Development Process

Vejele's Chief Resilience Officer (CRO), Jonas Kroustrup, is the day-to-day lead for the resilience work, reporting to the Mayor and City Chief Executive. Under the leadership of the Political Steering Committee, and with assistance from Municipality employees and external partners, Jonas has led the strategy development process. International organizations and organizations such as ICLEI and Arup have also assisted as strategic partners in the process.

We have engaged and worked closely with our stakeholders including the communities, NGOs, businesses and cities from the 100RC network to inform our diagnostic activities and identification of resilience building opportunities.

The development of Vejele's resilience strategy has been guided by a Steering Committee, which brings together the core groups of decision makers and stakeholders. These include the City Council, the Financial Committee and the Executive Board. In addition, the Municipality's Innovation Committee also had an essential role as an Advisory Board.

The strategy has also been cemented through existing partnerships with the Educational Council, the Business Relations Committee and the Housing Strategic Steering Group. At the same time, Vejele has facilitated new knowledge, dialogue and cooperation through the Resilience Forum. Here researchers and interest groups have contributed to the development and understanding of resilience in Vejele.

Vejele has chosen this management model to build a strong internal and external engagement system for optimum leadership, co-creation, knowledge, and long-term partnerships.

This opens up the resilience strategy to the municipality's key partners in education, business, housing and local associations. This has created the optimal platform for co-creation, knowledge sharing, feedback and long-term partnerships.



Vejle and 100 RC

1. Vejle selected from 600 cities around the world

In December 2013, Vejle was selected as one of the first 32 cities to join the 100 Resilient Cities (100RC) network. Our application to the 100RC initiative was initiated by Vejle's Research Centre for Integration (VIFIN), emphasizing our experience in community building in vulnerable residential areas. The launch of the strategy process was marked by a press conference by The Rockefeller Foundation in New York.

Photo: The press conference in New York was attended by the Deputy Mayor and Chairman of the Science & Environment Committee in Vejle, Søren Peschardt and the Project Manager in VIFIN, Vejle Kommune, Elizabeth Gregersen. In the middle President of The Rockefeller Foundation, Dr Judith Rodin.

2. Mayors' Convention – Bellagio, 1 – 4 Oct 2015

In October 2015 The Rockefeller Foundation invited mayors from the 100RC member cities to the Mayors' Convention in Bellagio, Italy. It was a unique opportunity to share knowledge about current challenges; the challenge of managing refugees was one of the topics discussed.

Photo: At the Mayors' Convention all the Mayors got together for a group photo. Vejle's Mayor Arne Sigtenbjerggaard is in the front row sixth from the left.

3. Agenda Setting Workshop, 2014

In the spring of 2014, we organized the strategy launch event and the agenda setting workshop, with attendees from 100RC and participants from other cities in the 100RC network. The event was held in The Spinning Mill and was attended by the city's key stakeholders. During the event, the attendees participated in a number of activities aimed at mapping Vejle's strengths and weaknesses.

Photo: Agenda Setting Workshop with Michael Berkowitz (left) handing Mayor Arne Sigtenbjerggaard a certificate confirming Vejle's selection to join 100RC.

4. First Chief Resilience Officers' Summit, 2014

The world's first Chief Resilience Officers' Summit, the CRO Summit, was held in November 2014 in New Orleans. The aim was to bring together the CROs from around the world, and connect them with experts, practitioners from the public and private sector, and NGOs to share knowledge, best practice and experience about resilience.

Photo: Group picture at the conference; Vejle's CRO Jonas Kroustrup in the back row to the left. In the front, second and third from the right are President for 100RC Michael Berkowitz and President for The Rockefeller Foundation Dr Judith Rodin.

5. Chief Resilience Officers' Summit, 2015

The second CRO Summit was held in 2015 in Mexico City. Representatives from over 40 cities in the 100RC network participated. The aim of the summit was to improve the CROs' ability to lead the resilience building agenda in their cities.

Photo: Group picture from the conference in Mexico City.

6. High School Students visit 100RC

A High School class from Vejle Technical College had a study trip planned to New York and got a unique chance to visit 100RC's headquarters. This opportunity arose as the Technical College is part of the collaboration around Resilient Vejle.

Photo: Associate Director Vikram Singh, 100RC's Relationship Manager for Vejle, welcomes the students from Vejle.

7. Rotterdam Water Exchange, 2015

In the Autumn of 2015, representatives from nine 100RC cities (including Vejle) participated in a workshop focusing on complex water related shocks and stresses, including climate change. This was a unique opportunity to share knowledge and experiences.

Photo: Chief Resilience Officers from several cities gather at the Bentheplein Square in Rotterdam. This is the world's first 'water square' that can safely flood to prevent uncontrolled flooding.

8. URBACT

Vejle is part of an URBACT partnership – Resilient Europe – which is an EU project created through the 100RC network. Besides Vejle, the cities of Rotterdam, Burgos, Glasgow and Thessaloniki are in the partnership. The goal is to increase the cities' resilience and contribute to turning Europe into an intelligent, sustainable and inclusive society.

Photo: October 2015 at the Resilient Europe meeting in Rotterdam. Coordinators for the Discovery Area Social Resilience, Ulla Varneskov is representing Vejle. She is in the back row second from the right.



IMPLEMENTATION AND DELIVERY



4



"WE WILL FOCUS ON STRENGTHENING SOCIAL COHESION, ESPECIALLY IN SCHOOLS."
From Vejle's Municipality's City Council team meeting on resilience, 9 December 2015

Photo: Nils Rosenvold

Implementation and Delivery (2016-2020)

We have defined a number of ambitions that we would like to fulfil in the period between 2016 and 2020. Our ambitions are to:

- **Create a resilient city and strong local communities**
- **Enable Vejle's businesses to create value from the resilience strategy**
- **Enable Vejle to become an innovation laboratory for resilience – a national and international pioneer that inspires other cities**
- **Pioneer a progressive, co-creating and invigorating city management**
- **Demonstrate how small 'provincial cities' can become the new pioneers in city innovation**

To meet our ambitions and ensure ongoing delivery of the strategy's goals and actions, we will:

- **Implement the resilience actions and maximize the resilience value for Vejle.**

Over the coming years, Vejle will work to implement the actions in the resilience strategy taking into consideration the relevant political processes. We will make the resilience strategy central to the Municipality Plan, and aim to incorporate resilience into selected municipal policies and strategies.

- **Establish partnerships for resilience within Vejle.**

We will establish a number of partnerships, such as 'Resilient Vejle' and the Resilience Lab, to address shocks and stresses and collaboratively deliver resilience solutions and actions. This will ensure coordination and integration between housing associations, businesses, educational and research institutions and the municipality.

- **Facilitate dialogue and engagement on the resilience agenda.**

Vejle will establish an open 'Resilience Forum', and an annual Resilience Festival comprising forums for discussing and sharing knowledge around resilience. We also want to be transparent and therefore we will share our resilience experiences with other municipalities, businesses and interested organizations in both Denmark and Scandinavia.

- **Engage with 100RC and Platform Partners to identify effective mechanisms for implementation of our resilience actions.**

Vejle will continue to engage and cooperate with cities in the 100RC network, and the Platform Partners, as well as exchange knowledge and experiences through the CRO network. This will help Vejle to continue learning from best practices around the world while also promoting our own best practices for others. This cross-cultural exchange will yield value for Vejle's citizens and decision makers.

- **Institutionalization of Vejle's resilience strategy.**

Going forward, Vejle will work to institutionalize the resilience strategy by developing a new organizational structure in the municipality, including the CRO position alongside other supporting roles. The specific objectives and structure is still to be identified.



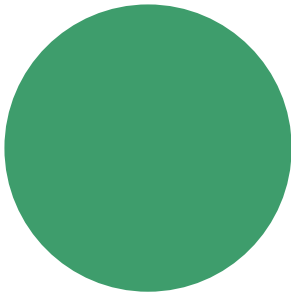
Photo: VejleMuseerne

ACTIONS CATALOGUE



5

The resilience strategy consists of 100 actions that Vejle will further develop, initiate or facilitate between 2016 and 2020. These actions focus on resilience through co-creation and will contribute to the development of a Resilient Vejle. The selected projects in the catalogue describe a range of new initiatives as well as some actions and activity already underway. By delivering these actions with a specific focus and consideration for resilience, i.e. through the resilience lens, they will build capacity and strengthen the resilience of Vejle. The projects and initiatives described are primarily owned by The Municipality of Vejle, and will be delivered by Specialist Committees and Departments.



A Co-creating City

We will create tomorrow's resilient city through productive partnerships across public and private sectors



Owner: The Municipality of Vejle

Vejle 2050 - Integrate resilience into the development of vision 'Vejle 2050' and into the municipal development plans

Through the City Council's vision 'Vejle - We Make it Happen' ambitious goals have been set for Vejle. The concept of Vejle 2050 will be the driving force for developing the city. We will include researchers, citizens, educational institutions and businesses, to create an image what Vejle will look like in the future. This will contribute to creativity and growth across the city.

Goal: 1.1 + 1.2 + 1.3



Owner: The Municipality of Vejle

Establish a Resilient Vejle Committee

The Municipality of Vejle will partner with housing, business and educational organizations to establish a 'Resilient Vejle' committee responsible for monitoring the implementation of the strategy, coordinating the actions across the different stakeholders, and raising any new challenges.

Goal: 1.1 + 1.2 + 1.3



Owner: The Municipality of Vejle

Integrate resilience into the municipality plan

We will work to integrate the Resilience strategy into the new municipal plan. The focus will be on the benefits of the resilience work undertaken to date and how to best integrate it into future plans and strategies for the city.

Goal: 1.1



Owner: The Municipality of Vejle

Develop a pioneering and inclusive new strategy with the Education Council

In 2016, Municipality of Vejle will collaborate with the Board of Education to develop a plan that positions Vejle as an education hub. The municipality and the city's educational institution will collaborate on developing strong educational offers that are widely and inclusively available, and benefit the most vulnerable groups as well as the most talented.

Goal: 1.1 + 1.2 + 1.3



Owner: The Municipality of Vejle

Establish regional and national cooperation to improve Vejle's resilience

We will collaborate with the region and the municipalities in the Triangle Region on the topics of mobility and business development, and will share the knowledge acquired during the 100RC process.

Goal: 1.1

Strategic Goals

- 1.1 We will make resilience central to the city's vision and plans
- 1.2 We will use co-creation to build resilience capacity
- 1.3 We will develop innovative resilient city solutions and scale up best practices



Owner: The Municipality of Vejle
Co-creation strategy: Deliver an action plan for co-creation between citizens, businesses, unions and institutions.

We will develop and implement a co-creation strategy in Vejle. We want to be a resilient and co-creative municipality that, together with its citizens and civil stakeholders, create communal and better welfare solutions for our citizens. Through co-creation we will increase our resilience capacity and facilitate engaged citizen groups.

Goal: 1.2



Owner: The Municipality of Vejle

Update our employee policy

Our employee policy focuses on how "robust communities" can cherish our common and individual resilience and robustness. We will work on updating the policy to meet future challenges.

Goal: 1.2



Owner: The Municipality of Vejle, Disability Department

The Welfare Laboratory

The Welfare Laboratory is targeted at people experiencing severe physical disability, mostly living in assisted living facilities. A selected panel of experts from the city will collaborate to identify holistic solutions to improve welfare standards and to build their resilience to potential shocks or stresses. Co-creation is a significant element of the Welfare Laboratory ethos.

Goal: 1.2 + 3.2

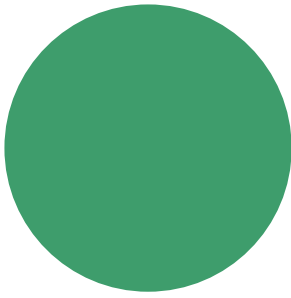


Owner: The Municipality of Vejle Culture and Leisure Department

Resilient Art Festival

We will develop and implement a co-creation strategy in Vejle. We want to be a resilient and co-creative municipality that, together with its citizens and civil stakeholders, create communal and better welfare solutions for our citizens. Through co-creation we will increase our resilience capacity and facilitate engaged citizen groups.

Goal: 1.2 + 1.3



A Co-creating City

We will create tomorrow's resilient city through productive partnerships across public and private sectors



Owner: The Municipality of Vejle Culture and Leisure Department

Future of communal sports halls – review of halls and active citizenship

We want to develop a plan to retrofit the communal halls into flexible meeting places that respond to our community's needs. The plan will be developed with representatives of sports facilities, local sports organizations, associations, councils and the municipality management. A working group is currently designing a sustainable replicable model to roll out across the city.

Goal: 1.2



Owner: The Municipality of Vejle, Technical and Environment Department

Hold a resilience exhibition in Bylaboratoriet and 'Økolariet'

We will hold an exhibition for schools and investors to showcase the resilience work undertaken as part of the 100RC process. This will initiate dialogue on the actions, and identify additional resilience building ideas that could be implemented in Rosborg.

Goal: 1.3



Owner: The Municipality of Vejle

Explore Digital platforms to help with city development

We will work with 100RC's platform partners and experts, to explore the use of digital platforms to help with the city's development. Our aim is for Vejle to be an 'example city' and inspiration for others.

Goal: 1.3



Owner: The Municipality of Vejle

Annual Resilience Festival

We will organize and host an annual conference, showcasing the broad range of work undertaken on resilience in Vejle and other 100RC cities. This includes sharing knowledge, case studies and latest research on topics such as urban development, and welfare. We aim to make Vejle a hub for resilience in northern Europe.

Goal: 1.3



Owner: The Municipality of Vejle

Incorporate resilience into the annual innovation summer school

Municipality of Vejle will add a module on resilience to its yearly innovation summer school to teach the students the theoretical concept of resilience and its application to inspire and guide them in their chosen careers in the future.

Goal: 1.3

Strategic Goals

- 1.1 We will make resilience central to the city’s vision and plans
- 1.2 We will use co-creation to build resilience capacity
- 1.3 We will develop innovative resilient city solutions and scale up best practices



Owner: Vejle Kommune
Rosborg: Use Rosborg as a laboratory to address the challenges and opportunities that Vejle will face in 2050
 The Rosborg area of the city is expected to be developed towards 2040-50 with a view to accomodating Vejle’s growth with attractive residential areas. The area can be developed into a green city area with housing, recreational areas and good links to both the city and the nature in the Valley. The new city area will be a laboratory for social resilience, smart city and sustainability.
 Goal: 1.3



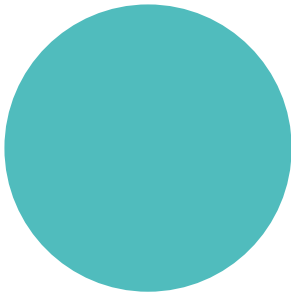
Owner: Vejle Kommune
Promote economic growth in Vejle Valley and Fjord
 We will work to develop Vejle valley to make it attractive for primary occupations, new housing and leisure activities. The project will look to give all of Vejle’s citizens a new space for coming together and will attract people from within and outside of the city boundary.
 Goal: 1.3



Owner: The Municipality of Vejle Culture & Leisure
Include resilience in this year’s Spotlight Camp
 Spotlight is a summer camp created for and with the children and youth of Vejle, to challenge their creativity. This year’s camp will include a workshop entitled ”being resilient”, using Spotlights mission to use resilience ‘to challenge the youth creatively’.
 Goal: 1.3



Owner: The Municipality of Vejle, Culture & Leisure Department and City Publishers
‘The Book of Vejle’
 The ‘City Publishers’ will, together with the Culture & Leisure Department, launch a writing crowdsourcing campaign to publish Denmark’s first book on Vejle created by its citizens. The ‘City Publishers’ will facilitate the process, which extends over one year and includes training, workshops and various literary forms for inspiration.
 Goal: 1.3



A Climate Resilient City

We will use water and climate change as drivers for the development of the city



Owner: The Municipality of Vejle
Fjordbyen: Use 'Fjordbyen' as a laboratory for climate change adaptation and flood control

Vejle is threatened by flooding so we must focus on protecting the city's assets and citizens, in particular our vulnerable citizens. Vejle's fjord area is particularly vulnerable to climate change. By focusing on this area of the city we will increase the collaboration around common challenges and solutions to flooding.

Goal: 2.1 + 1.3 + 3.2



Owner: The Municipality of Vejle Technical & Environment Department

Feasibility study on flood protection

We will work on a feasibility study to understand the economic aspect of flood protection. The cost of the damages caused by flooding is potentially much greater than the preventative investments. Flood protection schemes should add value to the daily lives of citizens, for example by providing citizens with new opportunities for leisure activities.

Goal: 2.1



Owner: The Municipality of Vejle Technical & Environment Department

Permeable paving

We will install permeable paving to improve our water management system during extreme rainfall. This will be more cost effective than upgrading the existing sewerage system. This challenge will only be solved through involvement of a wide range of stakeholders, experts and citizens.

Goal: 2.1



Owner: Vejle Wastewater A/S, Housing Association Østerbo, Technical & Environment

Østerbo LAR

The eastern part of the city is at risk of flooding from rain and cloudbursts. The water should be managed in a way that creates spaces for communities to come together and provides an environment where people feel safe and are proud to live.

Goal: 2.1

Strategic Goals

- 2.1 We will protect Vejle and turn our water into an asset for urban and social capital
- 2.2 We will establish public-private partnerships for resilient utilities
- 2.3 We will secure growth by using sustainable resources, renewable energy and green transport



Owner: The Municipality of Vejle, Vejle Wastewater A/S, DHI, AAU

Smart Water Vejle

We want to design and install a sluice and water distribution system, to minimize the risk of flooding in parts of the center of Vejle. We will install a sluice system along the Grejs River to control the water level and minimize the risk of flooding.

Goal: 2.1



Owner: The Municipality of Vejle, Culture & Leisure Department

Host a Vild med Vand 'Into the Water' 2.0 event

Vild med Vand is an annual water-themed event organized in collaboration with citizens, associations, and cultural institutions facilitating community engagement in the new town of Vejle Fjord. The town is transformed into a series of activities available to everyone in the city, including water sports, fashion shows, music, art, and architecture.

Goal: 2.1 + 1.2 + 3.2



Owner: The Municipality of Vejle Technical & Environment Department

Buildings with reinforced concrete foundations

A number of new buildings in Vejle are built on stilts – such as 'The Wave', 'The Five Sisters' and the entire new town at the harbor. In areas of soft and marshy ground conditions, it is necessary to use reinforced concrete pile, to ensure a solid foundation. We will facilitate the implementation of design codes to make new construction more resilient.

Goal: 2.1

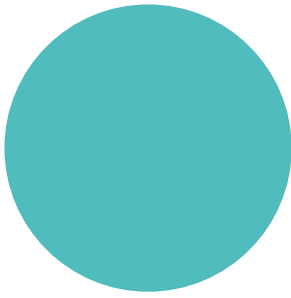


Owner: The Municipality of Vejle Technical & Environment Department, Vejle Wastewater A/S,

Develop a holistic strategic wastewater plan for Vejle

The Municipality of Vejle is one of few municipalities developing a holistic wastewater strategy that addresses the challenges of climate change, water supply, existing municipal water plans, and water quality. We want to pioneer this integrated approach and set a benchmark for other municipalities to develop the most efficient and sustainable solutions. The plan will provide the municipality with an important overview of the current systems and identify where further investment is needed to secure a fit-for-purpose and resilient wastewater system for Vejle.

Goal: 2.2



A Climate Resilient City

We will use water and climate change as drivers for the development of the city



Owner: The Municipality of Vejle Technical & Environment Department

Collaboration between citizens and companies around flooding

Citizens living in higher altitude areas of the valley, fjord and harbor must take action around storm water management on their own land. This will benefit people and businesses located lower down in the city center, reducing their risk of flooding the sewerage system. We will facilitate this collaboration.

Goal: 2.2 + 1.2 + 3.2



Owner: Green Tech Center

Resilience Lab Denmark: Set up public private partnerships to generate simulations of the potential energy water and data challenges in Vejle in 2050, and leverage existing knowledge to identify solutions

With a focus on security of supply, we want to develop the public-private partnership between Green Tech Centre, VIA, The Municipality of Vejle, Vejle Wastewater and TREFOR. The goal is to strengthen coordination and innovation projects within energy, water and data resources to be more resilient.

Goal: 2.2 + 1.3 + 4.1



Owner: The Municipality of Vejle

Create the Vejle Resilience House

Our resilience work with 100RC has inspired the Green Tech Center to develop a new 'Resilience House'. The aim of the house is to attract organizations working on urban resilience topics (climate change, water, urban developments) to work together to address our resilience challenges, identify solutions and apply them in Vejle.

Goal: 2.2 + 1.3



Owner: The Municipality of Vejle Technical & Environment Department

Mobility: Reduce traffic congestion by planning a 'cycle super-highway' through central Vejle

This project creates the framework for increased mobility between Vejle's resilient areas - Fjordbyen, Vestbyen and in time Rosborg.

We want to develop a 'cycle super-highway' to facilitate a more active lifestyle and secure a better 'flow' through the city using green transport. Improved cycle parking, shared bikes, and permeable paving are also under consideration as part of this framework.

Goal: 2.3 + 3.2 + 4.1

Strategic Goals

- 2.1 We will protect Vejle and turn our water into an asset for urban and social capital
- 2.2 We will establish public-private partnerships for resilient utilities
- 2.3 We will secure growth by using sustainable resources, renewable energy and green transport



Owner: The Municipality of Vejle Technical & Environment Department

Shared bicycle scheme

The feasibility of a shared bicycle scheme is being explored, which will offer mobility options to the educational institutions and business areas from the railway station. The aim is to promote alternative modes of transport that support the revised mobility framework of Vejle and act as a catalyst for behavioral change.

Goal: 2.3 + 4.1



Owner: The Municipality of Vejle Technical & Environment Department

Bicycle parking facilities

We will provide bicycle parking facilities to encourage more cycling within the city to improve the health and wellbeing of our citizens, support an active lifestyle, and reduce traffic congestion.

Goal: 2.3



Owner: The Municipality of Vejle

Explore the use of autonomous vehicles

We want to explore opportunities and technologies for autonomous vehicles by leveraging the knowledge and innovation within Vejle and Denmark. The aim is to ease traffic congestion, reduce energy consumption and decrease emissions in the city.

Goal: 2.3 + 1.3 + 4.1



Owner: The Municipality of Vejle Technical & Environment Department

Achieve energy neutral waste collection trucks

We will invest in converting waste to biofuels to run our waste collection trucks, reducing carbon emissions and energy consumption within Vejle, and moving towards the use of more green energy. If successful, we also aim to convert our bus fleet to biofuels.

Goal: 2.3 + 1.3 + 4.1

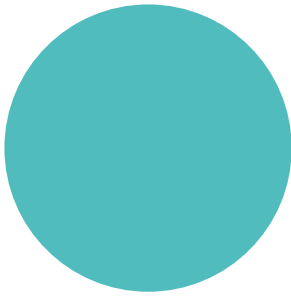


Owner: The Municipality of Vejle

Energy optimization of municipal properties

We are continuously investing in energy improvements such as building retrofits, demand management and improved energy sources, across all municipal properties. This includes a wide range of intelligent approaches such as the ESCO project for reducing electricity, water and heat consumption. In the long run this could free up resources for core welfare.

Goal: 2.3



A Climate Resilient City

We will use water and climate change as drivers for the development of the city



Owner: The Municipality of Vejle, Green Forum

Improve waste collection in housing estates

We want to improve awareness of waste segregation with citizens by providing them with information and separate waste bins. The project builds on the experience from the pilot project undertaken by the Green Forum in 2013 at the Housing Association in Nørreparken. This will encourage citizens to be more aware of sustainability and create greater social responsibility.

Goal: 2.3



Owner: The Municipality of Vejle, Technical & Environment Department

Societal risk evaluation

We want to develop and apply a dynamic tool and model to assess the effects a future urban development might have for high risk companies or sensitive assets. The method allows for an improved balance between the growth in urban development and risk assessment.

Goal: 2.3



Owner: The Municipality of Vejle, WasteReuse Vejle

Renewal of waste arrangements

We will improve our waste management with a focus on recycling, starting from 2016. Vejle has been front runners in recycling and want to keep this national position to support our long term plan for a more sustainable society.

Goal: 2.3

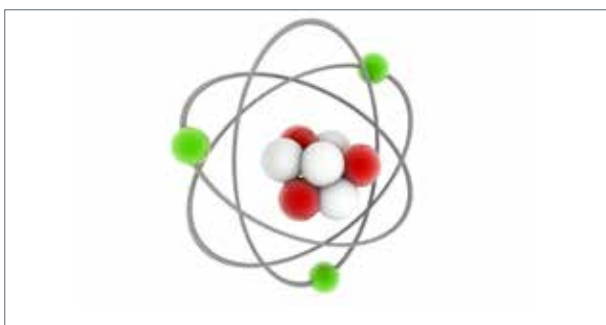


Owner: TVIS

TVIS district heating collaboration, to retrofit for biomass

TVIS is a unique biofuel district heating collaboration between Kolding, Middelfart, Fredericia and Vejle municipalities. It was established in 1983 and uses the waste heat from the Shell refinery, DONG Energy power plant Skærbækværket and the waste incinerator Energist in Kolding as a resource providing citizens in the Triangle region with an eco-friendly district heating network with some of the cheapest prices in the country..

Goal: 2.3



Owner: The Municipality of Vejle Education and Learning Department

Facilitate the Natural Science Marathon course

We will facilitate a 10-week educational course, where students from year 5 and 6 (11 and 12 years old) find solutions to scientific problems. This will encourage students to think about renewable energy, recycling and alternative use of resources.

Goal: 2.3

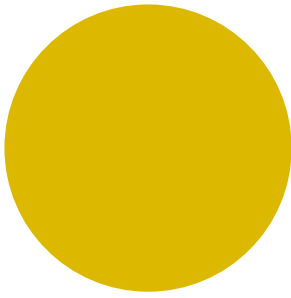
Strategic Goals

2.1 We will protect Vejle and turn our water into an asset for urban and social capital

2.2 We will establish public-private partnerships for resilient utilities

2.3 We will secure growth by using sustainable resources, renewable energy and green transport

	<p>Owner: The Municipality of Vejle, VIFIN</p> <p>LADDER (Local Authorities as Drivers for Development Education and Raising Awareness)</p> <p>The objective of the EU project is to support initiatives to increase awareness and promote education among local authorities and civil society organizations in Europe. The project will enhance European citizens' awareness and critical understanding of the interdependence of the world and their role, responsibilities and lifestyle as citizens of the globalized society. http://www.ladder-project.eu/</p> <p>Goal: 2.3 + 1.3</p>
	<p>Owner: The Municipality of Vejle, Green Forum</p> <p>Integration of biodiversity and community</p> <p>Use biodiversity and community gardening as a way of bringing communities together. The initiative includes a working group of volunteers from the housing association Vindinggaard involved in a 3 year project in which they come together to do gardening, set up an insect hotel, share knowledge, host planting days, host apple juice events and information events.</p> <p>Goal: 2.3</p>
	<p>Owner: The Municipality of Vejle</p> <p>Smart Natura</p> <p>This is an ongoing initiative to protect fauna and flora that is identified as both endangered and characteristic of EU countries. The initiative will develop new co-creation relations between landowners, agricultural advisers and the municipality. The increased level of co-creation will help to promote the implementation of the Natura 2000 action plans.</p> <p>Goal: 2.3</p>
	<p>Owner: The Municipality of Vejle, Technical & Environment Department</p> <p>Innovative mapping and planning of an overall 'leisure and nature' network.</p> <p>We want to ensure our green networks provide the community with access to outdoor activities whilst sensitively supporting our housing demand objectives.</p> <p>Goal: 2.3</p>



A Socially Resilient City

We will increase social and economic cohesion and create the best conditions for future generations



Owner: Welfare Department, Children and Youth Department, Labor market, health

Social Resilience Policy: We will increase social and economic cohesion and create the best conditions for future generations

The goal for a social resilience policy is to develop a common set of values and integrated welfare solutions across municipal departments. The leading principle across all departments must be a resource based approach as opposed to a compensation one to ensure that citizens, are able to manage and control their own lives.

Goal: 3.1



Owner: Welfare Department, Children and Youth Department, Labor market, health

"Next Practice" Catalogue

We will gather best practice methodologies from our work on social resilience and include it in the 'next practice' catalogue. The catalogue will hopefully become an inspiration for other cities and help spread the 'next practice' approach.

Goal: 3.1 + 1.2



Owner: SSP, Children & Youth Department

'Who controls the orchestra?' pilot project in Vejle

'Who Controls the orchestra' is an interdisciplinary educational pilot project in collaboration with the police, addressed at primary school teachers, SSP employees, nurses, workers, young consultants, and professional social counselors in Vejle. The aim is to establish a common methodology for early crime prevention and identification of suspicious behaviors.

Goal: 3.2



Owner: The Municipality of Vejle Disability Department

The 'Master of one's life' program

An existing program that allows citizens and public employees to find new approaches to helping people with disabilities. This includes ways to: 1) better achieve their own goals 2) champion a greater share of their own life without the need to depend on others, and 3) help them become active citizens contributing to the development of society.

Goal: 3.2 + 1.2



Owner: The Municipality of Vejle Disability Department

Ruben's World

Ruben's World is a project with the aim to improve the quality of life of mentally and physically challenged people through the use of technology to make them less dependent on the help of others.

Goal: 3.2 + 1.2

Strategic Goals

- 3.1 We will strengthen social resilience across the municipality together with our citizens and businesses
- 3.2 We will make urban spaces and social housing central to community cohesion
- 3.3 We will invest in Vejle's youth



Owner: The Municipality of Vejle
The Flexible Treatment
 The flexible treatment program is organized with a focus on individual youth / family needs, skills and potentials. The program delivers a holistic approach focusing on school, the youth and their family.
 Goal: 3.2



Owner: The Municipality of Vejle, Vejle Libraries
Set up discussion groups for refugees and immigrants
 Vejle libraries will set up discussion groups for refugees and migrants on current topics. Discussions will be supported by volunteers and sponsored by the libraries. The target groups are refugees and migrants who can or soon will speak enough Danish to engage in dialogue. At least 10 groups have already been set up with 6-8 participants and 25 volunteers. The experience will be disseminated through a theme day in the library in November 2016 with participants from across the country.
 Goal: 3.2



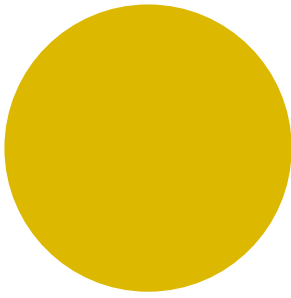
Owner: The Municipality of Vejle
Strengthen Cohesion: Create new platforms for communities
 Strengthening cohesion is an important factor in achieving a resilient and sustainable society. This project will create new spaces for communities and engage citizens in building an integrated and cohesive society.
 Goal: 3.2+ 1.2



Owner: The Municipality of Vejle
West City: Use the West city as a laboratory for social cohesion
 Vestbyen will be developed as a 'Resilience Laboratory' becoming a central point for partnerships and communities with a focus on social cohesion, green areas, allotments, water and flooding.
 Goal: 3.2 + 1.2 + 1.3 + 2.1



Owner: Grow Vejle
Grow Vejle association
 Grow Vejle is a community driven association established in 2013 to promote awareness of the value of healthy and fresh food whilst minimizing damage to the environment. Grow Vejle provides mobile urban gardens for citizens who do not have the opportunity or time to own a garden and locates them in vacant land and parking lots. Food growing becomes a catalyst to bring citizens together.
 Strategiske målsætninger: 3.2 + 1.2



A Socially Resilient City

We will increase social and economic cohesion and create the best conditions for future generations



Owner: The Municipality of Vejle Children & Youth, and Technical & Environment Departments

Establish the URBACT Resilient Europe initiative

URBACT Resilient Europe stems from the work with 100RC and is a collaborative project between a network of cities across Europe, including Vejle, Glasgow, Rotterdam, Burgas and Thessaloniki. The cities work together to learn and share experiences from one another to build resilience. Three topics have been identified: Resilient People, Resilient Places and Resilient Institutions.

Goal: 3.2 + 1.2



Owner: The Social Housing Plans

The Stairway Ambassadors initiative

Stairway Ambassadors is an initiative where residents of two neighborhoods in Vejle welcome new residents and help them settle in their new homes to build inclusive communities. The initiative is part of the social housing masterplan.

Goal: 3.2



Owner: Welfare Department

Investigate Vestergade as a facility for vulnerable citizens

In collaboration with the KFUM's (YMCA) social workspace The Parasol, we have designated Vestergade, a street in Vejle, as a space for people with drug addictions to gather. This focuses on the welfare of the addicts and functions in an open and transparent way so that the local community of shops and residents are engaged and can offer support to the addicts in a safe way.

Goal: 3.2



Owner: The Municipality of Vejle Disability Department

Establish The Embassy Café

The Embassy Café is located in one of the city's popular parks. It offers an opportunity for people with learning difficulties to operate the cafe and the adjacent ice rink. The café demonstrates that everyone in Vejle is able to contribute to the operation of the city.

Goal: 3.2



Owner: The Municipality of Vejle Education & Learning

The Growth House

The Growth House is an idea for the establishment of an overall framework on three sub-initiatives: Højens Garden, FoodLab and Eat City. The focus is on promoting social cohesion in the city, through communal dinners and cooking.

Goal: 3.2

Strategic Goals

- 3.1 We will strengthen social resilience across the municipality together with our citizens and businesses
- 3.2 We will make urban spaces and social housing central to community cohesion
- 3.3 We will invest in Vejle's youth



Owner: The Municipality of Vejle Housing Associations
Social Housing Master Plans: Develop social housing estates 'Løget' and 'Nørremarken' with possible investments from the Municipality and external financing bodies

The social housing plan contributes considerably to the city's cohesion, strengthening local identity and actively engaging the local community creating a resilient city. The vision for 'Løget' and 'Nørremarken' is to be resilient, robust and attractive areas that use the local resources to create citizenship, security, well-being and space.

Goal: 3.2 + 1.2



Owner: Østerbo, Tirsbæk Bakker A/S
Tirsbæk Hills

A new housing area is being built next to the very wealthy area of Bredballe. This new area will include privately owned single-family homes along with rented accommodation, to ensure a varied mix of residents. The public housing association Østerbo are developing the project in cooperation with the private developer to ensure a greater breadth of housing supply than usually seen in similar areas.

Goal: 3.2 + 1.2



Owner: The Municipality of Vejle
Disabilities Sports Council

Set up a Council to improve the sports provision for people with disabilities and promote inclusivity across all sports.

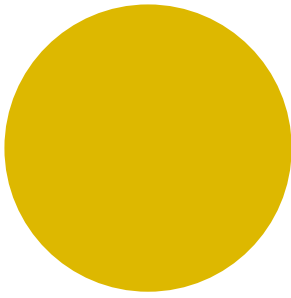
Goal: 3.3 + 1.3



Owner: The Municipality of Vejle
Facilitate group reading sessions for relatives of people with mental health vulnerabilities

This initiative creates group reading sessions to bring together the relatives of mentally vulnerable people to reflect on the text, own life experiences and start a dialogue. The initiative will also help to establish wider and cohesive social networks.

Goal: 3.3 + 1.2



A Socially Resilient City

We will increase social and economic cohesion and create the best conditions for future generations



Owner: The Municipality of Vejle

Youth Life: Develop initiatives to help the vulnerable youth groups in the city

We are experiencing an increasing youth population who struggle to stand on their own two feet and are not positively integrated into society e.g. the educational system, the labor force, and clubs/ leisure activities. This project will focus on vulnerable youth and work towards getting more young people to complete their education. At the same time it will focus on preventing radicalization.

Goal: 3.3



Owner: The Municipality of Vejle

Continue to maintain the 'Through Fire and Water' initiative

The initiative started in 2007 is aimed at giving firefighter training courses to vulnerable young people from the city's schools aged between 13 and 16 years. The training takes place in Vejle fire station and the lessons include first aid, basic firefighting and smoke diving. The objective is to build their self-esteem, confidence and instil a sense of community spirit.

Goal: 3.3



Owner: The Municipality of Vejle Family and Prevention Department; Dagtilbud

Enhance the cooperation between daycare facilities and family counselling

We will facilitate stronger cooperation between the childcare centers Grønnedalens and Løget Center, with publically supported family counselling. The program will allow individual families and children to network with other parents, through communal dinners and access to advice and guidance.

Goal: 3.3



Owner: The Municipality of Vejle Center for Addicts

Early intervention for families with alcohol problems

The action aims to use early intervention as a preventive measure in families with alcohol problems. We will focus on assisting the parents and improving the child's environment by reducing stress factors.

Goal: 3.3



Owner: The Municipality of Vejle: The Youth Club

Project Grandfather - resourceful mentor for the youth

The initiative focuses on marginalized youth who are paired with a volunteer 'grandfather' who acts as a personal mentor and guide to support the youth in getting started with education and employment. The project counts about 80 young participants to date.

Goal: 3.3

Strategic Goals

- 3.1 We will strengthen social resilience across the municipality together with our citizens and businesses
- 3.2 We will make urban spaces and social housing central to community cohesion
- 3.3 We will invest in Vejle's youth



Owner: The Municipality of Vejle, Save the Children and The Bridge Vejle

Active Sports & Leisure

The initiative ensures that youth in the city, including the vulnerable, have equal opportunities in sports and leisure. The initiative provides guidance and financial support for the youth aged 6 to 18 years in addition to volunteering opportunities entitled 'support friends'.

Goal: 3.3



Owner: The Municipality of Vejle Culture & Leisure Department, the youth school and Værket

Youth House Værket - bringing together the youth of Vejle

This initiative brings together young girls from different ethnic backgrounds to meet and participate in a series of activities including creative workshops and cooking classes. Benefits include learning languages and facilitating social integration of various ethnicities within the youth society. A similar initiative was started by Red Cross volunteers for young boys.

Goal: 3.3



Owner: The Municipality of Vejle, The Production School Datariet

Datariet course offering

The production school Datariet offers individual courses that contribute to the development of students' personal, social and professional skills. They also help to develop the students' interest in and ability to participate actively in a democratic society. Datariet is also part of the national project 'young people and mental health'.

Goal: 3.3

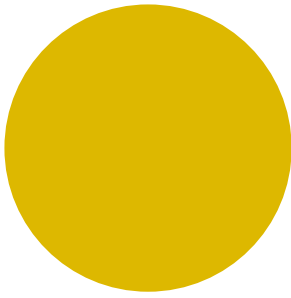


Owner: The Municipality of Vejle: Culture & Leisure Department, Vejle Libraries,

Book-start

We want to improve the literacy of children in vulnerable neighborhoods by handing out book gifts to children and their parents, and offering the services of a librarian specialized in children's books visit.

Goal: 3.3



A Socially Resilient City

We will increase social and economic cohesion and create the best conditions for future generations



Owner: The Municipality of Vejle

Strategic Preventive Investments

Research shows that early intervention, such as ‘good investments’ result in direct benefits to vulnerable citizens and families. We will designate an area as a social laboratory where initiatives on strategic prevention and investment models can be tested. This could include an increased focus on parenting and family relationships or investigating the relation between resilient communities and public health. We want to ensure that our vulnerable citizens are not worse off.

Goal: 3.3



Owner: The Municipality of Vejle, Family & Prevention

The AFKOS initiative

AFKOS (Outpatient Parenting Competencies Observations and Support) is an initiative that helps parents to develop parenting skills. The initiative is targeted at parents evaluated by social services as needing additional support to ensure the wellbeing and development of the child.

Goal: 3.3



Owner: The Municipality of Vejle: Prevention and Healthcare Committee

The SPOR 18 initiative

Our youth’s mental health is under pressure. SPOR 18 is an initiative that offers advice to young people to help them address problems such as loneliness, sadness, anxiety, sexuality, stress and others. SPOR 18 is run by counselors and professionals trained in mental health. (SPOR = Track)

Goal: 3.3



Owner: The Municipality of Vejle Prevention and Healthcare Committee

Health Agents program

The Health Agents program is aimed at volunteers who would like to acquire training in health to help others lead a healthier lifestyle. After the training, volunteers will be given the opportunity to participate in creating health driven activities in Løget, Nørremarken and other neighborhoods in Vejle.

Goal: 3.3

Strategic Goals

- 3.1 We will strengthen social resilience across the municipality together with our citizens and businesses
- 3.2 We will make urban spaces and social housing central to community cohesion
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Owner: The Municipality of Vejle Labor Market Department
Jobcarving

Jobcenter Vejle is implementing a three-year project where selected companies collaborate with a target group of vulnerable citizens to include them in the labor market. This will strengthen corporate social responsibility amongst local businesses and create a local labor market that is cohesive and inclusive.

Goal: 3.3



Owner: The Municipality of Vejle Psychiatry and Addiction
Better connected to the labor market

A large proportion of the citizens in contact with the municipality's Social and Psychiatry Department receive public benefits. We will integrate marginalized people with mental illnesses into the city's workforce to develop holistic and tailored support in collaboration with other organizations.

Goal: 3.3



Owner: The Municipality of Vejle Labor Market Department
Self-supported immigrants in employment

Jobcenter Vejle has received funds from the Immigration, Integration and Housing Ministry to support immigrants who have been self-supported in employment, through new internships and employment opportunities for spouses.

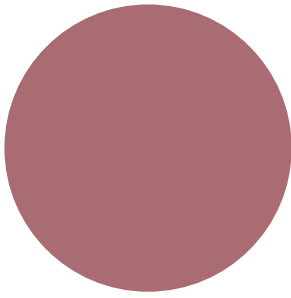
Goal: 3.3



Owner: The Municipality of Vejle Labor Market Department
The inclusive business of the year

We will continue to support the Local Employment Council and job center in Vejle to award the annual prize for the most inclusive business. The prize is open to companies and individuals who make a difference to integrate citizens in the labor market, especially for people with one or more personal, physical or health barriers. The citizens of Vejle nominate and vote for the candidates.

Goal: 3.3



A Smart City

We will embrace new technologies and improve co-creation, efficiency, outreach and inclusivity



Owner: The Municipality of Vejle

Advanced Smart Lighting: Using the streetlights to integrate smart technologies

Smart LED projects is an energy optimization project focused on the opportunities from LED and digital technology in street lighting. The project will evolve into a city wide project, which will create a more energy efficient and improved lighting system in the city, and support mobility and safety.

Goal: 4.1 + 1.3



Owner: The Municipality of Vejle

Investigate a smart digital parking strategy for Vejle

The Municipality of Vejle will develop a digital smart parking strategy, which will include the development of an application ('app') with features such as pay by phone, and identification of the location of nearest available parking spot.

Goal: 4.1



Owner: The Municipality of Vejle

Investigate an Intelligent traffic management for Vejle

A lot of time is being wasted at traffic lights in Vejle, costing hundreds of millions of Danish krone yearly. We want to address this by undertaking a feasibility study for an intelligent traffic system to understand its contribution to a greener, better managed urban environment.

Goal: 4.1 + 1.3



Owner: The Municipality of Vejle, and others

Establish the Vejle Open Data initiative

We will make data freely available in Vejle to support the economic growth of the city, and ensure transparency in the public administration. Opening up the data will allow businesses and entrepreneurs to develop new business services and business models.

Goal: 4.1 + 1.3

Strategic Goals

- 4.1 We will use Smart technologies to create an efficient society
- 4.2 We will support youths' education in digital technologies
- 4.3 We will facilitate public access to open data to create a digital society



Owner: The Municipality of Vejle
Crowdsourcing data to facilitate the municipality's operations
 Municipality of Vejle will launch a crowdsourcing campaign to collect data. The aim is to give an overview of the city's performance and facilitate response and operations. The crowdsourcing is being undertaken via an app allowing citizens to provide information such as faults in utilities on a map of Vejle.
 Goal: 4.1



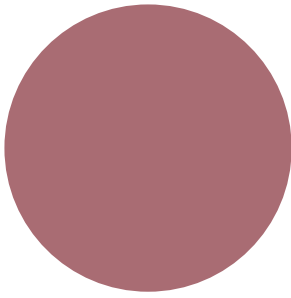
Owner: The Municipality of Vejle Children & Youth Department
Investigate a crime prevention map
 The initiative addresses the need to work comprehensively with crime prevention, by integrating data. We want to develop a data map as a communication tool with the country's local municipalities to provide a solid base for local crime prevention by identifying local risks and taking appropriate preventative measures.
 Goal: 4.1



Owner: The Municipality of Vejle, and others
National collaboration part of Smart City Five Pack
 Vejle is part of a network of leading Danish smart cities, called Smart City Five Pack that includes Copenhagen, Aarhus, Aalborg and Odense, Vejle. The network helps set the agenda for smart cities in Denmark demonstrating that cities can take the initiative and boost the development of solutions that are based on the needs of their citizens.
 Goal: 4.1

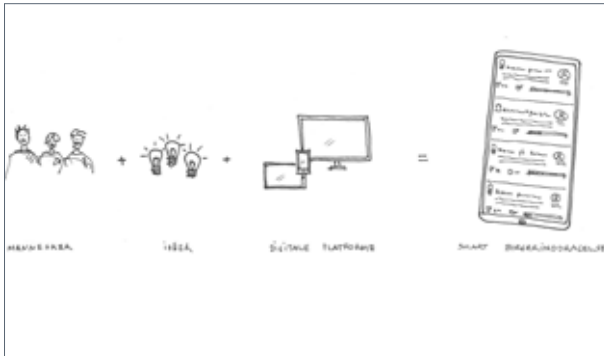


Owner: The Municipality of Vejle and Fablab@school.dk
Digital Inclusion: Provide citizens, youth and elderly people, with the necessary support to keep up to date with digital technologies
 With the project 'digital inclusion' we will focus on developing solutions to make the citizens of Vejle 'smart citizens' and part of the digital society. This includes elderly people, vulnerable people, immigrants, small businesses and young people, who struggle with the mandatory self-service on public services.
 Goal: 4.2 + 1.2



A Smart City

We will embrace new technologies and improve co-creation, efficiency, outreach and inclusivity



Owner: The Municipality of Vejle and Fablab@school.dk
Develop a digital communication platform for active citizens in municipal communities

With the project 'digital inclusion' we will focus on developing solutions to make the citizens of Vejle 'smart citizens' and part of the digital society. This includes elderly people, vulnerable people, immigrants, small businesses and young people, who struggle with the mandatory self-service on public services.

Goal: 4.2



Owner: The Municipality of Vejle, VIFIN

Digital Resilience: Develop a set of standards to be shared across the council to increase digital resilience and cybersecurity

Smart U Vejle provides access to a range of university activities, including masters' modules, training, and research. Smart U Vejle is a collaboration between Education and Learning, Vejle Libraries, VIFIN and a number of international universities.

Goal: 4.2



Owner: Southern Denmark Technical College

Support the Robot Laboratory at Southern Denmark Technical College

Southern Denmark Technical College has established a new CNC technology center in cooperation with the Municipality of Vejle. The center will include a CNC technology zone, and a robot machining center for teaching and/or training. School students can visit the center to get training on technology education through concept development, programming and use of small industrial robots to inspire them for the future. The center aims to ensure that there is the necessary skilled workforce for the jobs of the future.

Goal: 4.2



Owner: Vejle Technical College and University of Southern Denmark

Develop energy pilot schemes

Develop and evaluate opportunities to provide and/or support interest in science, energy and technology among children on the 8th, 9th and 10th grade in secondary school.

Goal: 4.2

Strategic Goals

- 4.1 We will use Smart technologies to create an efficient society
- 4.2 We will support youths' education in digital technologies
- 4.3 We will facilitate public access to open data to create a digital society



Owner: The Municipality of Vejle
FabLab
We have set up a workspace and laboratory where companies can experiment with prototypes and get inspiration for their product ideas. The workspace invites potential young users, teachers, artists who are fascinated with technology and, researchers in children as co-creators. This allows the companies to test their ideas and develop their products with the potential users and experts. Moreover, the companies also have access to technologies for prototyping such as laser cutters, 3D scanners and 3D printers.
Goal: 4.2



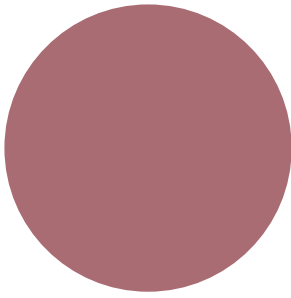
Owner: The Municipality of Vejle with Aarhus municipality, Silkeborg municipality, Stanford University, and Aarhus university
The FABlab@schoolsdk initiative
This initiative is giving students the opportunity to examine, test and design new digital technologies. Students can see themselves as designers and problem solvers and not just users. Through this exposure, we aim to prepare them and give them an insight on the jobs of the future.
Goal: 4.2



Owner: The Municipality of Vejle Children & Youth Department
The great journey of discovery for the little ones
We want to investigate how the curiosity of young children (aged 1 - 2.5 years) can be a driving force of their interaction with digital media. Many children are already introduced to digital media from an early age, we to investigate what skills are the most important so the kids are able to succeed in the future, and when we should start to teach them.
Goal: 4.2



Owner: The Municipality of Vejle Children & Youth Department
The sinking city
Sinking city is a digital learning tool for primary schools based on storytelling. The game incorporates social challenges that students are required to resolve.
Goal: 4.2



A Smart City

We will embrace new technologies and improve co-creation, efficiency, outreach and inclusivity



Owner: The Municipality of Vejle Children & Youth Department
Digital – It’s for kids

We want to support and promote digital kids underpinning the resilience development.

- That all children are ensured digital skills and are prepared to be active citizens in the future Vejle
- That the children develop a level of ‘digital articulation’
- That the digital development does not cause social imbalance
- That we use digital media to enhance children’s development and place in the community, for example in the form of increased language skills

Goal: 4.2



Owner: The Municipality of Vejle

Digital Resilience: Develop a set of standards to be shared across the Municipality to increase digital resilience and cybersecurity

The goal for the project ‘digital resilience’ is to secure the intelligent city becomes a resilient smart city where the technical solutions are well functioning and well protected, in particular in the event of flooding or a cyber-attack. We recognize that new technologies can create new threats and challenge our resilience capacity if we do not think systematically about security standards.

Goal: 4.3

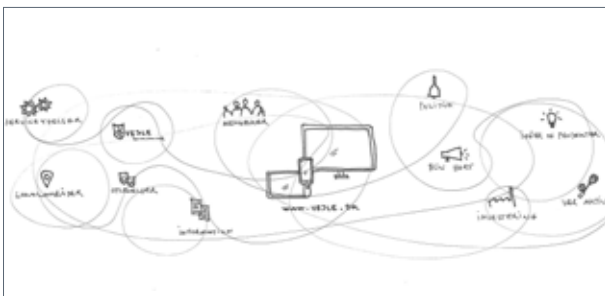


Owner: VIFIN, The Municipality of Vejle

Participation in the Smart Mature Resilience project

Smart Mature Resilience (SMR) is an EU project developing guidelines on resilience assessment and implementation to increase Europe’s resilience to shocks and stresses. SMR will develop and validate the guidelines using three pilot projects covering security sectors, climate change and social dynamics.

Goal: 2.2+1.3+4.1



Owner: The Municipality of Vejle

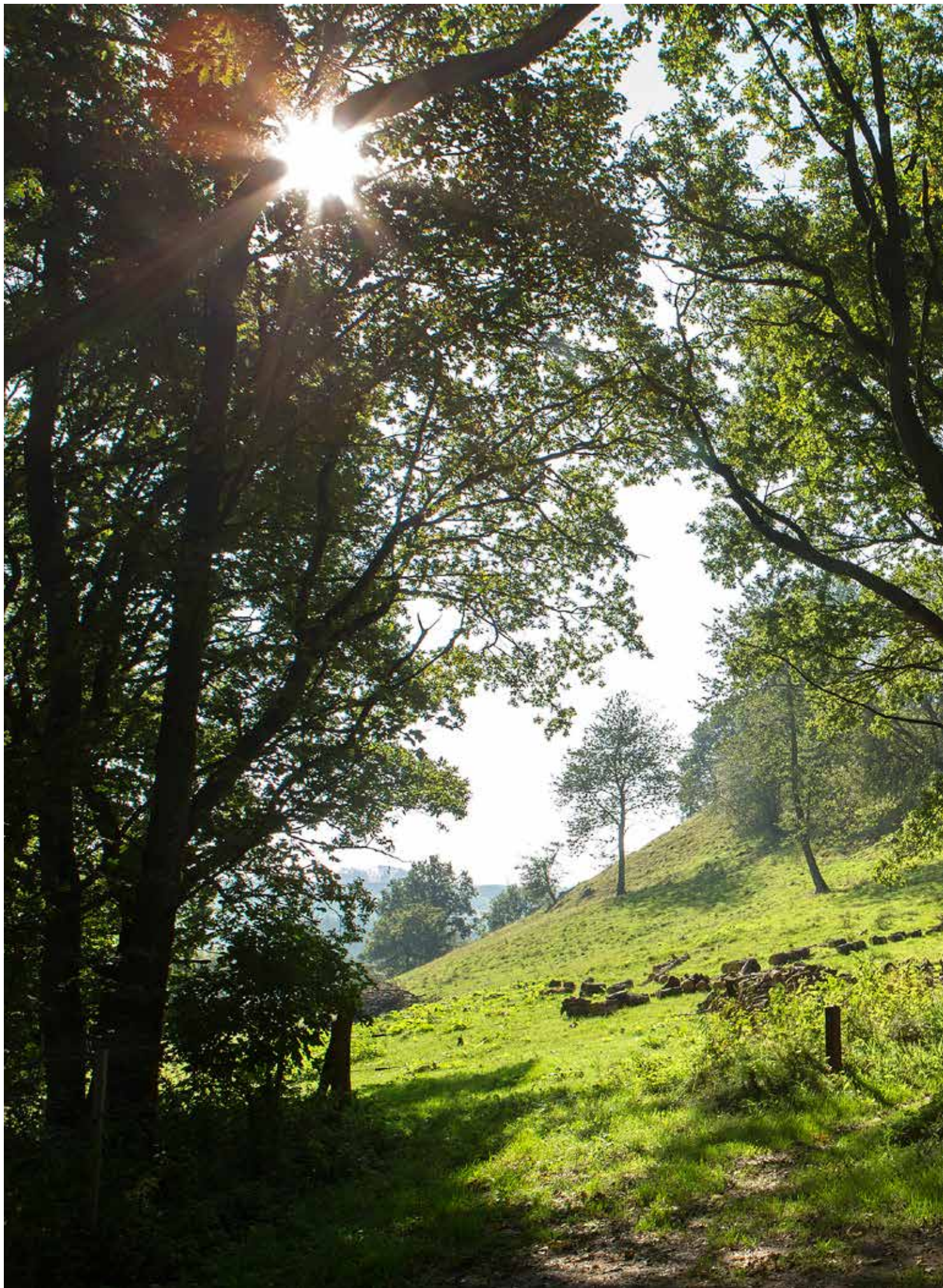
Update the existing emergency information website

We want to update the existing emergency information website to be more user-friendly with a focus on improving the interaction between the municipality and citizens. The site will also be used to communicate advice and support to citizens during any shock events.

Goal: 4.3 + 3.2



Foto: Finn Byrum



REFERENCES



References and Acknowledgements

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Photo: Charlotte Holm Andersen.



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Photo: Jesper Lilleris.



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City Resilience Framework

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Elizabeth
Gregersen

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ROCKEFELLER FOUNDATION

100 RESILIENT CITIES

Resilience on a global scale

Vejle is part of the global network 100 Resilient Cities. In this network, cities all over the world have collectively committed to develop and share new solutions to the great societal challenges of the 21st century. The social and economic composition of the cities varies, but it is in fact the diversity of the cities and the different challenges, which create the strength of the network.

In Rotterdam in the Netherlands the focus is directed at climate adaptation, and the challenge is used as an opportunity for recreating the architecture, harbor and coastal areas of the city. In Porto Alegre in Brasil, the resilience work is rooted in the democratic involvement of citizens, which for example is seen throughout several decades of effort in participatory budgeting.

With the resilience strategy of Vejle, we have four focal points of development for our modern welfare society: The Co-creating City, Climate Resilience, Social Resilience and Smart City.



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