



Central Denmark RegionRegional Council



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Central Denmark Region

On the way towards
 a sustainable future



PREFACE

"Our way of creating health must not limit our possibilities to live a healthy life in the future"

Climate changes, limited resources and a general pressure on our planet demand action. As a major public institution, Central Denmark Region must be a part of the solution. We do this by working strategically with sustainability – both internally in our own organisation and externally across Central Denmark Region. Our regional development strategy is based on the 17 UN Sustainable Development Goals. With this strategy for sustainability, we take an important step to meet the goal of the Danish government to reduce emission of CO2 by 70% by 2030.

Central Denmark Region employs more than 30,000 people and we have a huge consumption of resources – particularly at our hospitals. We thus have a social responsibility and the possibility to be in front in the green transition. Our way of creating health must not limit our possibilities to live a healthy life in the future. We can and we will use resources smarter and reduce our carbon footprint.

Sustainability and the Sustainable Development Goals are not only about climate, environment and financial priorities; it is also about people. To Central Denmark Region, a sustainable workplace acts socially responsible and has a good work environment.

Including sustainability in daily operations requires behavioural changes and collaboration. Many are eager to contribute to make a difference and many employees in Central Denmark Region are busy collecting experiences and sharing knowledge.

This strategy must contribute to integrating sustainability to a larger extent in the core of our services. It is important to promote sustainability in daily life and to change our behaviour.

With this strategy, we make specific and highly ambitious goals for sustainability in our own organisation. We are not familiar with setting such high goals without being able to foresee the solutions and without knowing if we can meet the goals. In Central Denmark Region we dare to be bold and to have the courage to set the bar high for a sustainable transition.

We will have ongoing discussions on how we meet the goals in the best possible way. In 2025, we will take a closer look again at our strategy and maybe revise some of our goals. Time will show.

Implementation of the strategy will be dynamic and some things can be changed relatively easy without major costs. But we must focus on the financial implications. Investments are needed in green transition and we must pursue initiatives with the highest effect – at a pace where we never compromise on the delivery of our core services.

We must help each other find new solutions locally and at each workplace – in a collaboration with our many external partners. Many employees are already collecting experiences and sharing knowledge and we feel there is a dedicated wish to make a difference.

We are on our way – and we will take many more steps towards a sustainable future for all of us.



Anders Kühnau, Chairman of Regional Council, Central Denmark Region and Pernille Blach Hansen, Region Chief Executive



GOALS AND HOW TO REACH THEM

Central Denmark Region must be an attractive sustainable region for this and future generations providing citizens with possibilities to create the good life. This ambition is based on the 17 UN Sustainable Development Goals.

VISION

In 2030, we intend to be a circular region with sustainable procurement, reuse, recycling, renewable energy and minimal consumption. In 2050, we intend to be CO2 neutral.

MISSION

We integrate sustainability in the core of Central Denmark Region investments, services and daily operations. The green transition creates value and becomes a significant driver of the development of our region to the benefit of citizens and employees.



SUSTAINABILITY AND THE UN SUSTAINABLE DEVELOPMENT GOALS

The UN Sustainable Development Goals are the steppingstones for improved sustainability in Central Denmark Region. The goals will ensure that local, national and international development will benefit the planet and populations all over the world.

The UN Sustainable Development Goals were adopted by world government leaders at a UN summit in 2015.

The UN Sustainable Development Goals consist of 17 goals and 169 subsidiary goals setting the direction for a more sustainable future for the entire world population towards 2030.

See overview of the UN Sustainable Development Goals, pages 42-43

CIRCULAR ECONOMY – A CIRCULAR REGION

Circular economy means that products are designed so they can be repaired or used as a resource in new products.

To be a circular region means that the Region at all hospitals, institutions etc. will ensure that the things we buy, use, and discard are produced in a way that allow reuse of the product or the material.

Read more about circular economy at pages 16-20



Every Dane emits approximately 19 tons of CO2 annually – ten times higher than a citizen in India. Our carbon footprint comes from transport, heating, electricity and production of the goods and services we buy.

Source: Concito (green think tank), 2017 and Norwegian University of Science and Technology, 2016.





DID YOU KNOW THAT...

In 2018, Central Denmark Region had a carbon footprint of 578,000 tons of CO2 equivalent to the carbon footprint of 30,400 people.

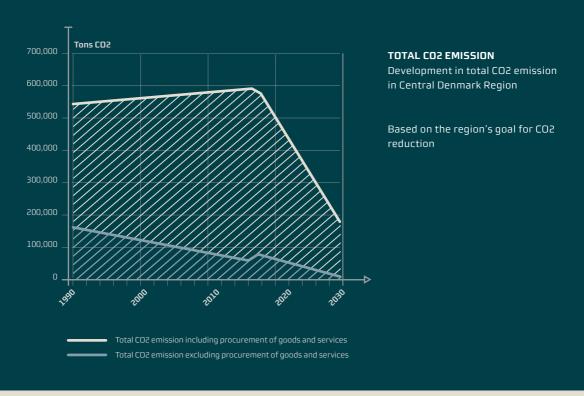
Source: Central Denmark Region and Concito (green think tank), 2017.

Goals

More actions and new solutions are needed on a global scale; In Central Denmark Region we must make our contribution.

OVERALL REGIONAL CLIMATE GOALS

- CO2 neutral operations within energy and transport by 2030
- 67% reduction of the total carbon footprint from 2018 to 2030 (including goods and services)
- 96% reduction of the total carbon footprint from 1990 to 2030 (excluding goods and services)
- CO2 neutral circular region by 2050.



Figur 1 Intended development in total CO2 emission in Central Denmark Region. Source: Danish Energy Agency, the National Accounts, Central Denmark Region green accounts (2018), Niras (advisory engineering company), Cowi (advisory engineering company) and the World Bank.

The UN Intergovernmental Panel on Climate Change (IPCC) 2019 report concludes that the climate changes occur more rapidly than previously thought. The fulfilment of UN Sustainable Development Goal number 12 on transition to a sustainable consumption and production has come to a standstill.

The UN points to fossil fuels and growing amounts of waste as some of the primary global challenges (Global Sustainable Development Report 2019 – The Future is now).

In Denmark, we are well on the way to meeting the UN Sustainable Development Goals but we also face challenges concerning goal number 12 on sustainable consumption and production due to large amounts of waste, low degree of reuse and a high climate footprint from imported goods (Sustainable Development Report 2019 – Transformations to achieve the Sustainable Development Goals).

We are conscious of our responsibility as a large public workplace to take the lead by inspiring others and influencing politics and legislation to promoting a sustainable development of society.

Sustainability is about more than climate

When we in Central Denmark Region work with sustainability, we consider both social, financial and environmental aspects (the triple bottom line).

The climate is negatively impacted by emission of greenhouse gases including CO2. The concentration of CO2 in the atmosphere causes the temperature to go up. Thus, it is obvious to set goals for CO2 reductions to limit climate changes.

In Central Denmark Region, the strategy is focused on reducing CO2 within three overall focus areas: circular economy, energy and transport.

CLIMATE GOALS

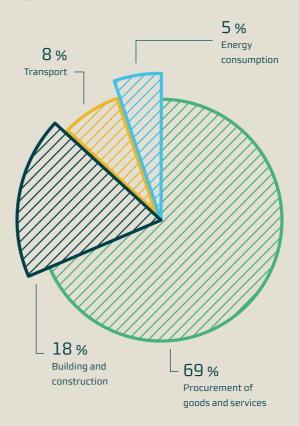
The climate goals of Central Denmark Region are based on the national goal to reduce the total carbon footprint by 70% within energy and transport by 2030. Moreover, the region intends to reduce the climate footprint on consumption of goods and services using circular thinking. The goal is a total reduction of 67% between 2018 and 2030.

Read more about methods of calculation at pages 40-41.

TOTAL CLIMATE FOOTPRINT OF CENTRAL DENMARK REGION

Distribution of total climate footprint (2018) of Central Denmark Region in percentages.

Figur 2



GOALS



CIRCULAR ECONOMY

We demand from our suppliers that they act and think in a sustainable way and we collaborate with them to reach the UN global goals. We want to reduce the consumption and climate footprint of the products we use. We will create less waste and increase recycling of resources (goals are based on 2018 data).

- 30% reduction in use of resources by 2030 in procurement and daily operations (measured as CO2 footprint of reduced consumption of resources from goods and services)
- 30% reduction in waste by 2030 (measured in tons of waste)
- 70% recycling of waste by 2030



ELECTRICITY, WATER AND HEATING

By 2030, we will only use renewable energy in our hospitals, institutions etc. as well as support the transition to no use of fossil fuels. We will continue to focus on effective and sustainable running of our buildings (goals are based on 2018 data).

- 100% renewable energy by 2030
- Completion of energy-conserving projects towards 2030, leading to a total energy conservation of 48 GWh, equivalent to 20% of the consumption of electricity and heating
- Reduction in the consumption of water of 105,000 m3 towards 2030, equivalent to 20% of the consumption.



LOGISTICS, TRANSPORT AND MOBILITY

We will reduce the climate footprint of transport of goods, patients and employees by minimising number of kilometres driven and by transition to green fuels such as biogas, biodiesel, hydrogen and electricity.

- 30% reduction in business travels no later than in 2030 (measured in kilometres)
- From no later than 2025, all new tenders/ purchases of cars and vans (internal transport and parts of patient transport) will prioritise 100% green fuels
- 100% green fuels in transport of patients by 2030
- CO2 neutral buses in public transport no later than in 2030.



SOCIAL RESPONSIBILITY

We will be an attractive and socially responsible workplace with a sustainable work environment and diversity in staff composition.

- Accidents at work among new employees will be reduced by 50% before 2030
- We fully comply with political agreements concerning internship for pupils and students at relevant educational programmes in Central Denmark Region
- 6% of the full-time equivalents used to comply with building and construction contracts must be translated into apprenticeships and internships
- At least 2% of staff are employed on special conditions (flex jobs, wage subsidy jobs and similar)
- The number of immigrants and descendants of immigrants in our staff reflects the number of the total workforce in Central Denmark Region
- Together with relevant educational institutions, we will strive to have at least 10% men/women in the staff groups with the most unequal gender distribution by 2030.

Read more about the goals for social responsibility at page 34.

On the way towards a sustainable region

The hospitals in Central Denmark Region have an annual carbon footprint equivalent to the consumption of 30,400 citizens. The hospitals produce 7,000 tons of waste annually but only 19% are recycled. So, we are still far away from "zero waste hospitals". We have to do better and we have to think smart. We must prioritise, simplify and focus the transition, which will now be accelerated.

In the future, we will prioritise circular economy as procurement and consumption of goods and services clearly leave the largest carbon footprint in Central Denmark Region (69% in 2018).

We will have continued focus on reducing our energy consumption by transition to green energy. Only 5% (2018) of the total carbon footprint in our region comes from energy consumption, which is the result of a long-term dedicated effort to minimise our carbon footprint through energy renovation and energy saving initiatives.

Transport only amounts to 8% (2018) of our total carbon footprint and we strive to change business travel patterns and further increase our focus on resource-effective logistics. With the knowledge we already have in our organisation and the technological development, we expect to further reduce our carbon footprint in relation to transport.









FUNDING FOR DEVELOPMENT

Central Denmark Region has established a fund for development of sustainable hospitals to promote initiatives contributing to make the hospitals in the region more sustainable.

The aim is to upscale and copy successful projects.

ORGANISATION AND MANAGEMENT ARE NECESSARY FOR ACTION

Green transition is achieved by joint efforts. The Regional Council in Central Denmark Region will closely follow the results of the sustainability strategy and make two-year politically approved action plans. The first action plan focuses on circular economy initiatives, which have the largest potential for a CO2 reduction. Follow-up will measure the effects of regional efforts on climate, environment and resources as well as technological developments and derived organisational and financial consequences.

A strong and persistent political focus and committed leadership are prerequisites for implementation of the sustainability strategy. The prioritisation of sustainability must be balanced with demands for quality and economy with focus on achieving the largest reduction in our carbon footprint.



Circular economy

Today, we use many of the planet's resources to produce the many products we use on a daily basis in the region – particularly at our hospitals. It is absolutely necessary to promote circular thinking and acting.

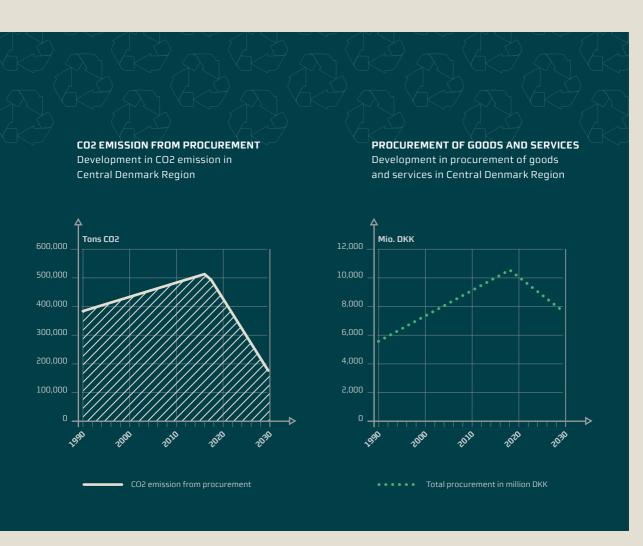


Figure 3: Intended development in procurement of goods and services including building and construction and emission of CO2.

Source: The National Accounts, Central Denmark Region green accounts (2018), Niras (advisory engineering company), Cowi (advisory engineering company) and the World Bank.



LINEAR production and consumption system **Figure 4**

Extraction of raw materials	Production	Distribution	Consumption	Waste for burning

CIRCULARproduction and consumption system **Figure 5**



Large amounts of waste are a strain on our climate and environment in linear consumption where waste is burned (Figure 4).

We must demand that suppliers deliver products containing no dangerous substances, that products that can be repaired, last longer and be used in the production of new products. At the same time, we must minimise waste, recycle and reuse as much of the waste as possible.

To achieve this, we need circular thinking (Figure 5). This means to consider the entire value chain regardless of the nature of the product or material. Our consumption is part of a larger value chain with many actors. It is important to form partnerships both internally and externally and with public, private, national and international partners.

In Central Denmark Region, we must incorporate circular thinking in core areas such as procurement, building and construction, logistics, daily operations, maintenance and service. Our first action plan will have special focus on procurement, tenders and building and construction.



PROCUREMENT AND SUPPLY

In our region, we wish to buy healthy products with a low use of resources and a low carbon footprint. Unavoidable waste must be highly recyclable. To achieve this, we need to change the way we work with procurement and supply.

BUILDING AND CONSTRUCTION

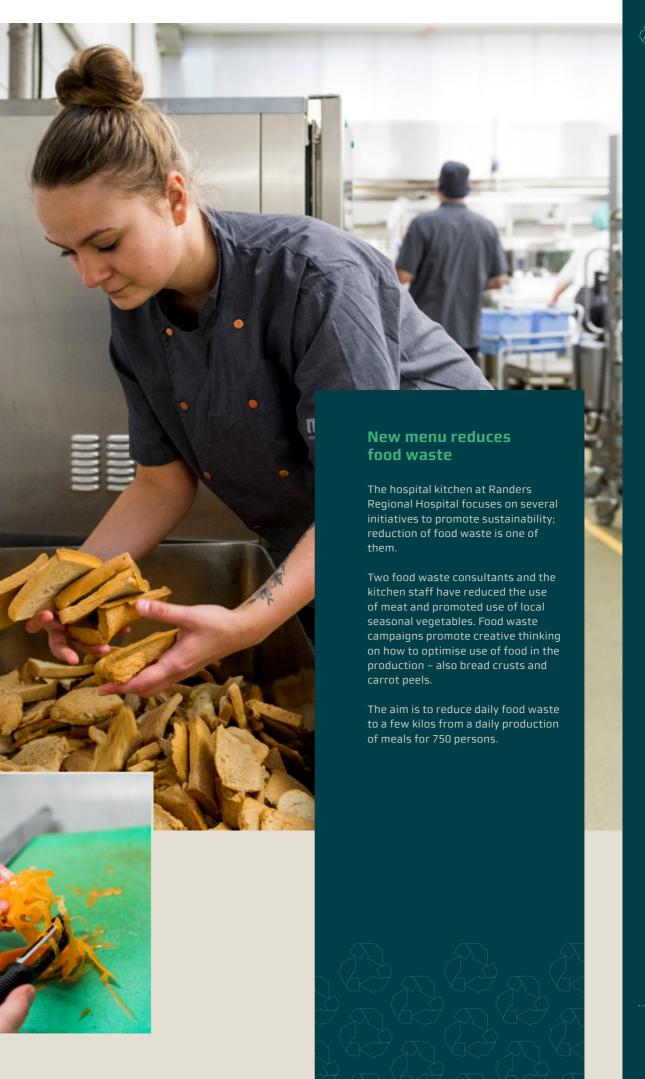
Sustainability is a part of our strategy in building and construction. The buildings in Central Denmark Region are continuously expanded, renovated or their functions are changed. We aim for our buildings to be "material banks", where building materials can be recycled to reduce our carbon footprint.

GOALS

We demand that our suppliers collaborate as well as think and act in a sustainable way. We wish to reduce our carbon footprint, create less waste and increase reuse of resources.

- 30 % reduction in consumption of resources by 2030 in procurement and daily operations
- 30% reduction in waste by 2030 (tons of waste)
- 70% reuse of waste by 2030

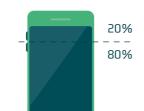






- Less consumption and less waste
- Minimise waste by making demands concerning reuse and packaging in our procurement and tenders
- Correct sorting of our waste to optimise recycling
- Sorted waste prepared for recycling must be recycled as intended
- Demands to sustainability in building tenders and in running and maintenance of the regional buildings
- Avoid harmful chemicals and materials
- Improved sustainability in hospital kitchens





DID YOU KNOW THAT...

80% of the carbon footprint from your mobile phone come from extraction of raw materials, processing and transport.

Source: The Independent, 2018





Electricity, water and heating

In recent years, we have systematically worked with energy improvements in our buildings in Central Denmark Region. We must continue this work with focus on digital solutions and increased use of renewable energy and we must focus on limiting emission of harmful substances.

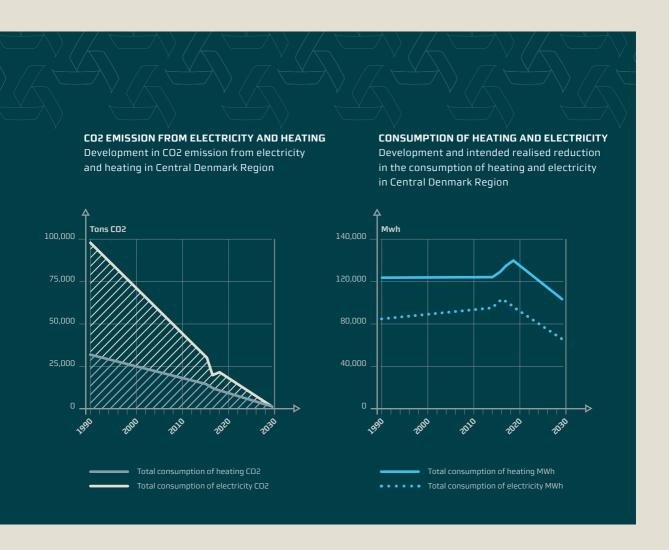
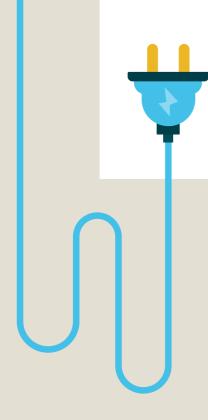


Figure 6. Intended development in consumption of heating and electricity as well as emission of CO2. *Source:* Danish Energy Agency and Central Denmark Region green accounts (2018)





DID YOU KNOW...

66% of the consumption of electricity in Central Denmark Region in 2018 came from renewable energy sources (wind, sun, biomass). In 2028, we expect the total consumption of electricity to be covered by renewable energy sources.

The energy consumption must be adjusted in the daily operations of the region as well as in construction and maintenance work. Moreover, we must use circular thinking also when we buy products. While our hospitals have made efforts to reduce their energy consumption and use renewable energy sources, there is also an increased need for electricity due to digitisation and operation of equipment used for cooling and ventilation.

We must continue to have a sustainable mindset and focus on how to achieve the highest return or CO2 reduction on our investments. We must use the value of energy, all types of water, heating and cooling, which have traditionally been by-products or waste. Surplus heating from cooling equipment can e.g. be collected and used effectively.

To meet our goals in the field of energy will require considerable investments and depend on the development of society and the utility sector. Two-year action plans will be made to implement the initiatives in the sustainability strategy.



Aarhus University Hospital discharged approximately 150,000 m3 wastewater in 2018. This is equivalent to 1,000 households.



GOALS

We place demands on and collaborate with our suppliers to think and act in a sustainable way. We will reduce the consumption and climate footprint of the products we use. We will produce less waste and increase reuse of resources (based on 2018 data).

- 100% of our energy consumption will come from renewable sources by 2030
- Completion of energy conserving projects towards 2030 leading to a reduction in energy of 48 GWh or 20% of the consumption of electricity and heating
- Reduction of the consumption of water of 105,000 m3 towards 2030 equivalent to 20% of the consumption.









Bacteria eat pharmaceutical residues in wastewater

The pharmaceutical residues in human waste contaminate the wastewater. A total of 96% of the pharmaceutical residues are excreted in private homes and the remaining in hospitals. In a society perspective, it thus plays a minor role to clean the wastewater locally at hospitals.

Aarhus University Hospital and Regional Hospital West Jutland collaborate with a number of private and public institutions on a ground-breaking project at Herning Water Utility Company as well as Herning Municipality, Hillerød Municipality, Aarhus University Hospital, Krüger Veolia, Technical University of Denmark, Danish Technological Institute.

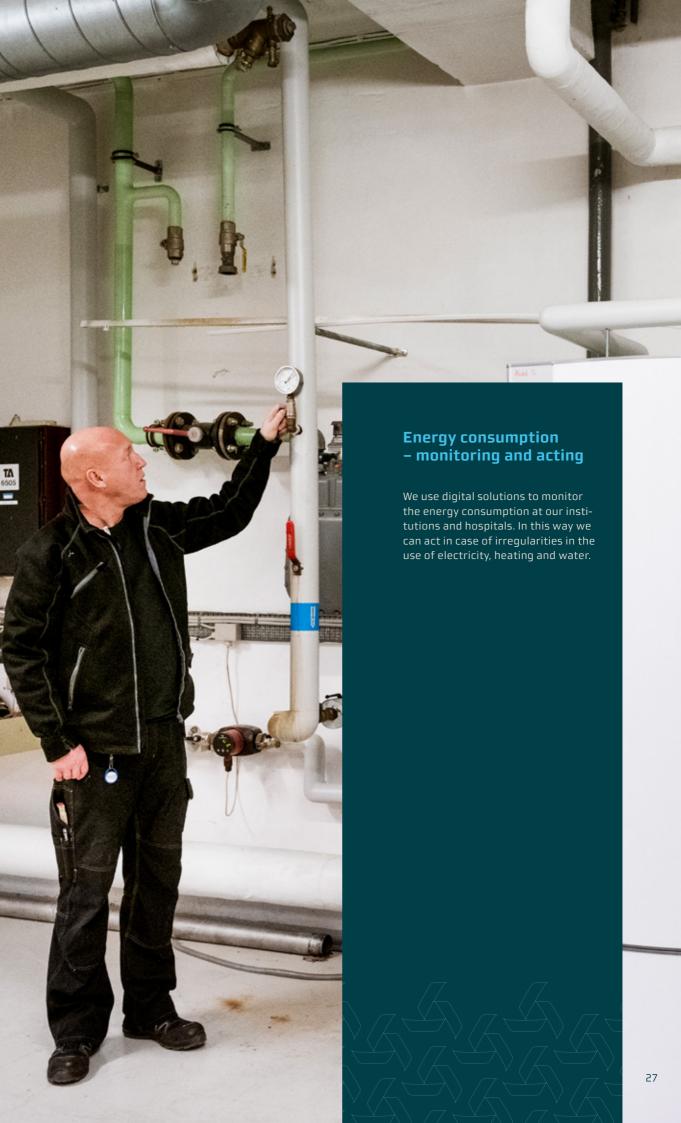
The utility company applies a technology where pharmaceutical residues are degraded using natural biological processes. The method is both cost-effective and sustainable. It is expected that pharmaceutical compounds can be removed from household wastewater for less than DKK 50 annually per household.



ELECTRICITY, HEATING AND WATER

- Reduce the total energy consumption in the Central Denmark Region organisation
- Increase the proportion of the energy consumption from renewable energy sources
- Strengthen and professionalise energy management, optimisation and renovation
- Optimise use of surplus from cooling and heating
- Invest in and support transition to renewable energy sources
- Intensify the effort to limit the emission of environmentally harmful substances
- Ensure neutralisation of the environmentally harming substances emitted
- Ensure clean drinking water
- Develop and implement a solution to remove pharmaceutical residues and multiresistant bacteria from wastewater by 2030
- Make climate adaptations of buildings and surroundings.







Logistics, transport and mobility

Logistics, transport and mobility ensure that we are connected across the region. In this field we must think of new technologies, change work procedures and behaviour to contribute to the green transition.

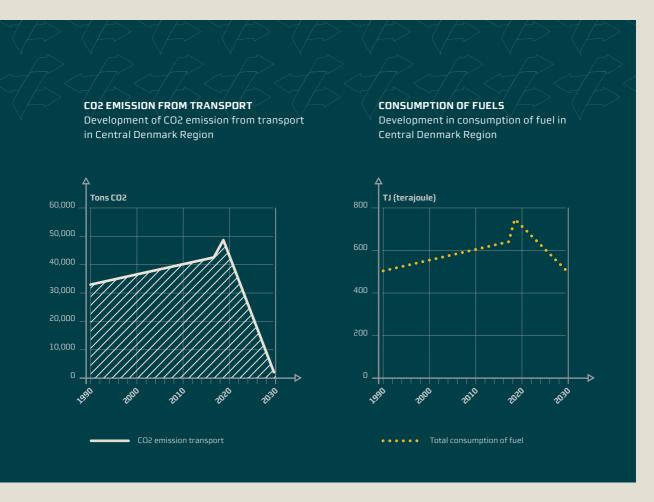


Figure 7. Intended development in consumption of fuel and emission of CO2. *Source*: Danish Energy Agency, Central Denmark Region green accounts (2018) and Niras (advisory engineering company)



Central Denmark Region has many internal logistics and transport tasks such as transport of blood samples and clinical risk waste between the hospitals, general practitioners, social institutions and regional buildings.

The region also transports patients to and from hospitals and other treatment facilities. Moreover, the region is a big workplace and staff account for a substantial number of business travels.

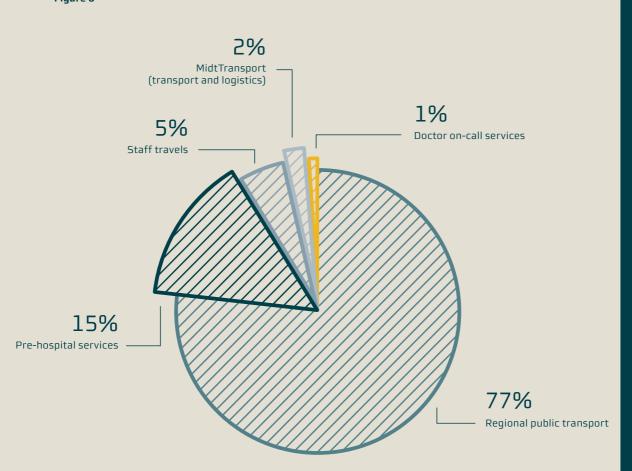
Staff commuting and patients' own transport to and from hospitals are not included in the regional carbon footprint calculations. During this strategy period, we will focus on reducing the regional transport without imposing an extra climate footprint on patients or others.

Central Denmark Region is responsible for regional public bus and railway transport and will support an effective and sustainable mobility across the region.

CLIMATE FOOTPRINT FROM TRANSPORT

Central Denmark Region CO2 footprint transport.

Figure 8









In Denmark, green transition in the transport area has been shown to be rather challenging. Central Denmark Region we will focus on reducing the number of kilometres driven and increase use of sustainable fuels.

To succeed, we rely on the constant technological development, new habits and large investments in green transition. We constantly follow the developments in technology and more sustainable solutions in the area of transport, in particular in relation to heavy transport with e.g. lorries and buses.

The technological development and infrastructure will develop very fast in the years to come. Central Denmark Region wants to be part of the dynamic development of new transport solutions in close collaboration with citizens, suppliers and partners.

GDALS.

We will reduce the climate footprint from transport of goods, patients and staff by reducing the number of kilometres driven and by transition into green fuels such as biogas, biodiesel, hydrogen and electricity.

- 30% reduction in staff travels no later than in 2030 (in kilometres)
- From no later than 2025, all new tenders/ purchases of cars and vans for internal transport and part of the patient transport will prioritise 100% green fuels
- No later than in 2030, 100% green fuels will be used for patient transports
- CO2 neutral public bus operations by no later than 2030.



LOGISTICS, TRANSPORT AND MOBILITY

- Optimise logistics to avoid driving with empty cars and buses
- Optimise regional logistics with new central storage facilities
- Transition to a more environmentally friendly fleet of cars running on green fuels
- Reduce fuel consumption of the region's fleet of own and leased cars
- Reduce staff travels by car pooling and increased use of digital solutions
- Collaborate with the municipalities and other partners in the region on a strategy for green transition in public transport
- Include demands to sustainable transport/logistics in tenders and procurement; also in areas where political decisions have an indirect effect on transportation such as in the area of raw materials
- Ensure adequate access to chargers at regional properties.





DID YOU KNOW....

The percentage of vans running on electricity or hydrogen amounted to 0.2% in Denmark in 2019. The percentage of buses was 0.05%.

Source: Danmarks Statistik





Social responsibility

Central Denmark Region is a big and diverse workplace. Sustainability is important to develop a meaningful work life and a healthy and safe working environment.

We wish to be an attractive and socially responsible workplace with a sustainable working environment and diversity in our workforce.

Making a difference promotes meaningfulness and job satisfaction.

Sustainability thinking is an integrated part of everything we do in Central Denmark Region. We will play an active role in promoting physical and mental health as well as good collaborations.



DID YOU KNOW...

In 2019, Central Denmark Region adopted its first eco-labelling policy. The purpose is to increase the proportion of eco-labelled products in the region.

GOALS

We want to be an attractive and socially responsible workplace with a sustainable working environment and diversity in our workforce

- Accidents at work among newly appointed staff will be reduced by 50% before 2030 (accidents at work causing absenteeism)
- We fully comply with political agreements on internships for students at relevant education programmes in Central Denmark Region
- 6% of the full-time equivalents used to comply with building and construction contracts will be earmarked for internships (this goal is part of all tenders)
- At least 2% are employed on special conditions (flex jobs, wage subsidy jobs and similar). Total goal attainment is calculated annually
- The number of immigrants and descendants of immigrants in our workforce must reflect the percentage of the regional workforce (9.2% in 2019)
- In collaboration with relevant educational institutions, the region will strive for employing at least 10% men/women in professions where the gender distribution is pronounced.



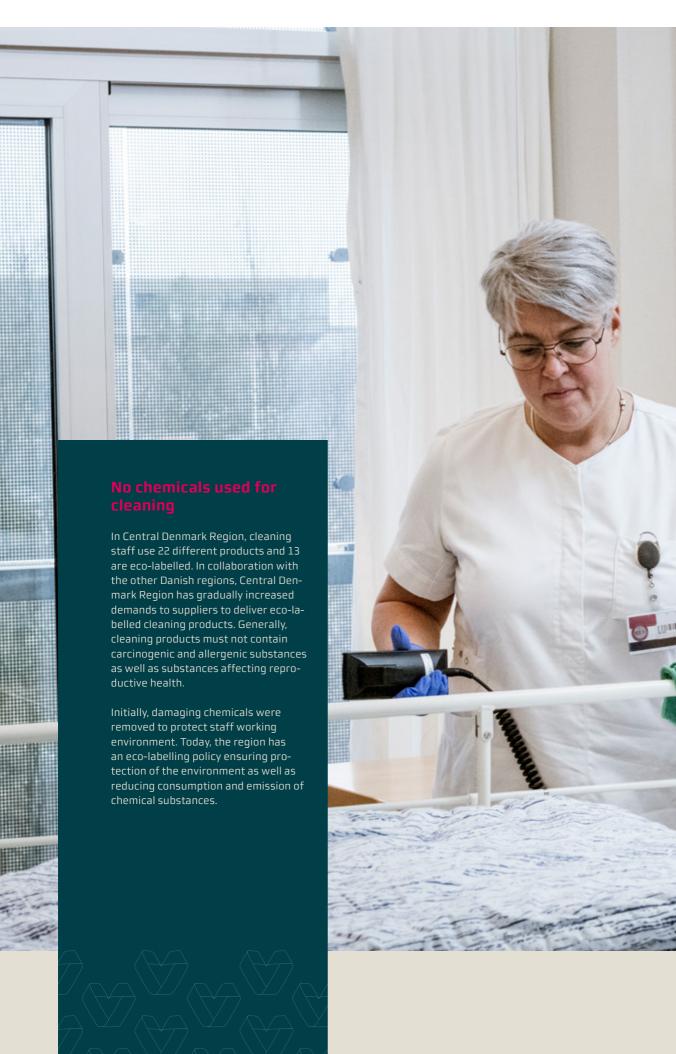


SOCIAL RESPONSIBILITY

A good and sustainable working environment

We want to have a healthy, safe and stimulating working environment where employees can manage to work full-fime during a long working life.

- We ensure possibilities for each individual to develop throughout life, to have influence on and mutual flexibility related to planning of the work
- We strive to ensure that the highest possible number of people both wish and have the possibility to work full-time. We make individual considerations to ensure a balanced working life
- We prevent accidents at work, physical and mental burnout and we avoid exposing each other to dangerous substances
- We collaborate with our suppliers and demand sustainable solutions and orderly conditions concerning salaries, wages and employment from our suppliers both concerning procurement and tenders.







DID YOU KNOW...

In 2019, the Hospital Laundry Services received the Nordic Swan Ecolabel.

In 2020, cleaning at Randers Regional Hospital received the Nordic Swan Ecolabel.

EDUCATION AND COMPETENCE DEVELOPMENT

We want to be an attractive workplace concerning education. We need to create learning and we need qualified staff. Engagement in education and competence development provides a unique opportunity to support recruitment, job satisfaction and sustainability.

- We prioritise ongoing and focused development of management and staff competencies to ensure that we have staff with the right competencies and that we are an attractive workplace
- We ensure a good framework for student internships
- We spend as few resources as possible to organise the best possible competence development
- We make agreements to offer internships in connection with building and construction tenders.



TOLERANT AND SOCIALLY RESPONSIBLE WORKPLACE

We help employees at risk of losing their job due to illness or reduced ability to work.

- We prioritise early preventive measures promoting the possibility to continue to solve the tasks at hand
- To the widest extent possible, we offer employment on special terms and we help employees to be redeployed at their own request or if necessary
- We strive to offer employment to persons in need of employment on special terms or unemployed persons. We encourage our suppliers to take on similar responsibilities.

DIVERSITY IS A STRENGTH

We wish to have staff diversity and equal career opportunities.

- We pay attention to ensure equal career opportunities when we recruit staff and we follow the development in the composition of our staff
- We collaborate with educational institutions to promote a balanced gender distribution
- We ensure that people with functional disabilities are not discriminated against
- We collaborate with volunteers and voluntary organisations in areas where it makes sense and gives value for citizens and staff.





E-learning is a growth area. At the end of 2015, Central Denmark Region had approximately 59 active online courses; at the end of 2019, this number had increased to 128.

A one-day course with physical attendance can often be converted into a one-hour e-learning course. This saves resources – not only time but also transport and thus consumption of CO2

METHOD

FOUNDATION FOR CALCULATIONS

Figure 1. Development of total CO2 emission in Central Denmark Region

CALCULATION METHOD

The calculations of the CO2 emission in Central Denmark Region are based on the organisation's own green accounts, while the national accounts of CO2 emission are based on a national geographical calculation. These two methods are difficult to compare.

The green accounts in Central Denmark Region is a climate statement measuring CO2 emission of the total consumption. When procurement of goods and services is included, CO2 emission from extraction of raw materials, production, transport and consumption is also included regardless of where in the world the activity has taken place.

The national accounts of CO2 emission are based on a calculation of the energy consumption and production in Denmark. Only the consumption of electricity and heating in Denmark is included. Import of raw materials and end products is thus not included in the national accounts. Calculations of CO2 emission are based on the production and not the consumption.

Outsourcing of energy-heavy production will result in no CO2 emission in the national accounts although the Danish consumption of the outsourced production will remain unchanged. In the regional accounts, the CO2 emission of a product during the entire product life cycle will be unchanged because the CO2 emission is included in the accounts regardless of where in the world the production and CO2 emission have taken place.

Figure 3. Development of procurement of goods and services including building and construction as well as CO2 emission.

METHOD

The estimated consumption from 1990-2017:

The consumption from 1990 to 2017 is estimated on the basis of the development in the gross value added in health and social services in Denmark in the same time period. CO2 emission is the estimated consumption adjusted for development in the CO2 emission in relation to the global gross domestic product.

Goals for 2030: The region will reduce consumption of goods and services including building and construction by 30% towards 2030. The recycling rate will be increased to 70% in 2030.

Moreover, the max. 2 degrees goal in the Paris agreement will be met and the global economic growth will remain at the 2000-2017 level.

Figure 6. Development of heating and electricity consumption and CO2 emission

METHOD - HEATING

The estimated consumption from 1990-2014.

The estimated consumption from 1990 to 2014 is based on the development of the total heating consumption in "public services" in Denmark in the same time period. CO2 emission is the estimated consumption adjusted for development of CO2 emission per kWh heat during the period.

The actual consumption from 2014 to 2018: Is reported by each hospital and retrieved from the social institutions and regional buildings. Adjustments are made for number of degree days. CO2 emission is calculated on the basis of information on CO2 emission per kWh from each district heating company as well as CO2 emission from heating by natural gas and oil etc.

Goals for 2030: The region will reduce consumption of heating by 20% towards 2030. It is assumed that renewable energy sources used for district heating will be 100% in 2030.

METHOD - ELECTRICITY

The estimated consumption from 1990-2014: The estimated consumption from 1990 to 2014 is based on the development of the total electricity consumption in "public services" in Denmark in the same time period. CO2 emission is the estimated consumption adjusted for development of CO2 emission per kWh during the period.

The actual consumption from 2014-2018: Is reported by each hospital and retrieved from the social institutions and regional buildings. Both consumption of electricity and own production of electricity from solar cells. CO2 emission is calculated on the basis of information on CO2 for average electricity (electricity from different sources) in Denmark.

Goals for 2030: The region will reduce electricity consumption by 20% towards 2030. It is assumed that the Danish Energy Agency "frozen policy" projections will stand, stating that the proportion of renewable energy for electricity will be 100% in 2030.

Figure 7. Development of the consumption of fuels and emission of CO2

METHOD

Estimated consumption from 1990-2017: The estimated consumption is based on the development of the total road transport in Denmark in the same time period. CO2 emission is the estimated consumption adjusted for development of CO2 emission per litre diesel in the time period.

The actual consumption from 2017-2018: The carbon footprint of the regional public transport company Midttrafik is estimated on the basis of timetable hours with buses and direct electricity consumption of the Aarhus Light Rail and the diesel consumption of the local railway Lemvigbanen.

CO2 emission for the region's logistics services MidtTransport is based on litres of diesel and petrol used by own and leased cars.

Estimates for the Pre-hospital Services are based on kilometres driven by ambulances, patient transport and social emergency services as well as fuel used by acute medical helicopter services. Staff business travels are calculated on the basis of economy data.

CO2 emission is calculated on the basis of the average emission of diesel, petrol, electricity and fuel.

Goals for 2030:

The region will reduce transport by 30% in 2030. It is assumed that the vehicles using fossil fuels will be 31% more energy effective in 2030 in accordance with EU requirements and that the average product life is 15.7 years. Moreover, it is assumed that MidtTransport will only purchase CO2 neutral fuels by 2025. Concerning the Pre-hospital Services, it is assumed that they only use CO2 neutral fuels by 2030. The local railway Lemvigbanen will be battery-run. Patients' own transport to and from treatment and staff transport to and from work are not part of the current calculations.

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NO POVERTY

Global poverty rates have been more than halved since 1990, but too many still fight to fulfil basic human needs such as access to adequate amounts of food, clean drinking water and sanitation. Elimination of poverty will take a targeted effort in vulnerable groups, increased access to basic resources and services as well as support to societies affected by conflicts and climate-related disasters.



ZERO HUNGER

Rapid economic growth and increased agricultural production have nearly reduced the number of malnourished people by 50%. Unfortunately, hunger is still a huge barrier to development in many countries. Elimination of hunger requires international collaboration to ensure investments in infrastructure and technology, which may improve agricultural productivity.



GOOD HEALTH & WELL-BEING

Despite incredible progress, more than six million children die before the age of five. Hundreds of women die in connection with childbirth and AIDS is the most common cause of death among young people in Sub-Saharan Africa. These deaths could be avoided through improvements in prevention and treatment, education, immunization campaigns as well as sexual and reproductive health



QUALITY EDUCATION

Education is one of the most powerful and tested methods to obtain sustainable development. The goal is to ensure that all children will complete a primary and secondary education, free of charge, before 2030. Moreover, gender-related and economic inequality will be abolished to obtain universal access to high-quality further education.



GENDER EQUALITY

More equality and a strengthening of female rights and possibilities are necessary to promote a sustainable development. Elimination of all types of discrimination against women and girls is not only a fundamental human right, but it also has a multiplier effect across all other development areas.





CLEAN WATER & SANITATION

Shortage of water affects more than 40% of the global population. This is alarming and is expected to increase with increasing global temperatures caused by climate changes. Universal access to safe and cheap drinking water for all before 2030 demands i.e. that we protect and restore water-related ecosystems and invest in infrastructure.



AFFORDABLE & CLEAN ENERGY

Every fifth person still has no access to electricity. Because of the increasing demand, there is a need for an increase in the production of renewable energy globally. Universal access to electricity at an affordable price before 2030 requires investments in clean energy sources such as sun, wind and thermic energy.



DECENT WORK & ECONOMIC GROWTH

The goal is to promote constant economic growth by creating higher productivity and technological breakthroughs. Focus on politics beneficial for an entrepreneurial culture and creation of jobs will be the key to this. At the same time, it is important to eradicate forced labour, slavery and human trafficking.





INDUSTRY, INNOVATION & INFRASTRUCTURE

Constant investment in infrastructure and innovation is decisive for economic growth and development. As more than half of the world's population live in cities, transportation and renewable energy will be increasingly important similar to growth of new industries and information and communication technologies.

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The frame of the Central Denmark Region Development Strategy 2019-2030 is the UN Sustainable Development Goals. In particular track 3 in the development strategy " Taking care of climate, environment and resources to ensure a sustainable development" is related to this sustainability strategy. The Development Goals attached to this strategy track are goals 3, 6, 7, 9, 11, 12, 13, 14, 15 and 17. These Development Goals are marked with ★ in the overview below.

Read more about the Central Denmark Region Development Strategy 2019-2030 at: www.sdg.rm.dk



More than half of the world's population now live in cities. Sustainable development can only be obtained if we change the way we build and control our cities. Making cities safer and more sustainable means to quarantee access to safe and chean accommodation as well as improvements of housing in slum areas. This also requires investments in infrastructure and green public places.



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REDUCED INEQUALITIES

The growing inequality requires action and adoption of sensible politics strengthening the lowest income groups and promoting more economic involvement from all groups in society regardless of gender, race or ethnicity. Inequality is a global problem requiring global solutions. This means e.g. improvements in the regulation and monitoring of financial markets and institutions.

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Economic growth and sustainable development mean that we must reduce our environmental footprint and change the way we produce and consume our goods and resources. If we should meet the goal, we must efficiently control our natural resources, the way we dispose of toxic waste and polluted substances. That is why it is important to encourage companies and consumers to recycle and reduce the amount of waste.



LIFE ON LAND

Our life depends on the earth concerning nutrition and livelihood. As an example, plants supply 80% of our diet and farming is an important economic resource and means for development. In addition, the goal is important to alleviate the consequences of climate changes.





CLIMATE

All countries in the world experience the dramatic consequences of the climate changes. Moreover, global warming causes long-term changes to our climate system. If the political will is there and combined with a broad range of technical measures, it is possible to curb the climate changes. This requires an immediate collective effort.

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PEACE, JUSTICE & STRONG INSTITUTIONS

The goal is to ensure that all types of violence are reduced and that long-lasting solutions to conflicts and insecurities are found in collaboration with governments and local communities. Strengthening of constitutional rights and promotion of human rights are central to this process.

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LIFE BELOW

The world's oceans - their temperature, chemistry, current and life - drive global systems that make the earth habitable for human kind. Management of this vital resource is decisive for humans but also for alleviating the consequences of climate changes. Overfishing and ocean pollution are among the challenges.

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PARTNERSHIPS FOR THE GOALS

Effective partnerships are needed to meet the sustainable development goals. This applies to all kinds of partnerships – public, public-private and partnerships with the civil society. The world is more closely connected than ever and there is a need for global engagement and collaboration to realise the goals.



Central Denmark Region

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