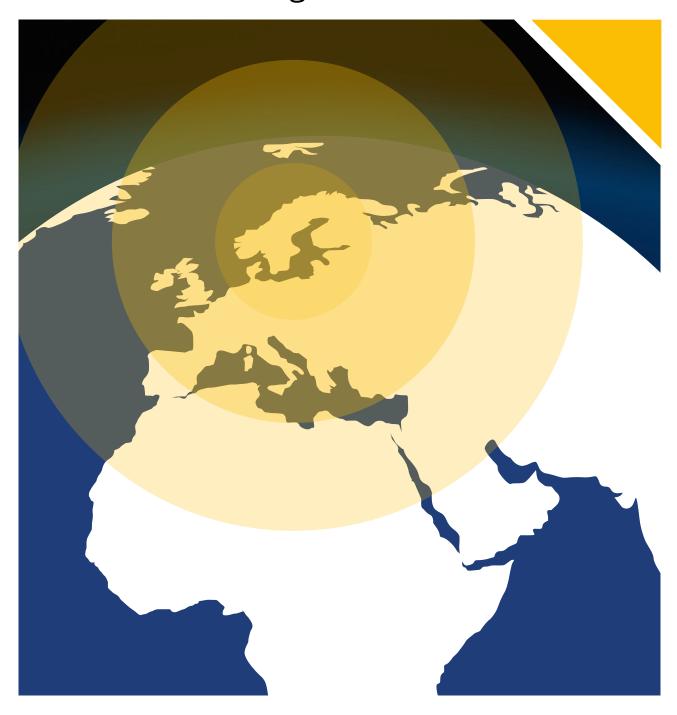




# **Climate Leadership**

from Baltic Sea Region Cities





"The Baltic Sea Region has been a forerunner region in sustainable development during the last 25 years – we wish to be so also in the future. Our cooperation with CDP aims on supporting our UBC member cities with more information and contacts on the global arena, important for an efficient transaction into becoming carbon free, smarter and more attractive cities."

## Björn Grönholm | Head of UBC SCC



"Over 50% the world's population live in cities and it's here that the transition to a sustainable future will be won or lost. But we are already seeing unprecedented engagement and action on climate change in our cities and Baltic cities are no exception. We are proud to be partnering with UBC and to jointly help cities learn from each other by showcasing their climate leadership in the region and beyond."

**Kyra Appleby** | Head of CDP's cities program

## **Profile of CDP and UBC**

**CDP** provides the world's only global natural capital disclosure system. Currently over 571 cities, 101 states and regions, and more than 6000 companies – representing 81% of the global 500 and over 50% of the market capitalization of the world's largest 30 stock exchanges – use the system to report, share and take action on climate change every year. CDP analyses the data provided by the companies, governments and cities to create knowledge and provide reports on the findings. The insights this brings enables investors, companies, cities and governments to understand and act on the business case for reducing impacts on the environment and natural resources. Over 800 institutional investors representing over a third of the worlds invested capital rely on the CDP system. CDP is a global not-for-profit organization, founded in 2000 and headquartered in London.

www.cdp.net/en

Union of the Baltic Cities (UBC) is the leading network of cities in the Baltic Sea Region (BSR). UBC mobilizes the shared potential of its member cities for democratic, economic, social, cultural and environmentally sustainable development of the Baltic Sea Region. UBC works for the attainment of its vision of the Baltic Sea Region as a dynamic, innovative and attractive global growth center, where success is based on smart, green, resource-efficient and sustainable economic and social development. UBC wants to see the Baltic Sea Region cities becoming increasingly recognized as global forerunners in Climate-smart development creating a high quality living environment for their inhabitants. UBC was founded in 1991 in Gdansk, Poland and it has around a hundred member cities from all 10 countries from the Baltic Sea Region - Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Norway, Poland, Russia and Sweden.

www.ubc-sustainable.net

CDP is the leading global organisation for voluntary climate reporting, providing a unified system for disclosing and managing environmental data. Working through a process of measure – disclose – manage, the data provided is analysed by CDP in order to create knowledge and understanding that enables companies, cities, local and national governments, and investors to better tackle the challenges and seize opportunities provided by climate change. Using the tools provided by CDP, all stakeholders can identify potential actions for e.g. increased energy efficiency, resulting in a more sustainable and economical organization. Formed in 2000, over 6000 companies, 571 cities, and 101 states and regions now report to CDP, with the numbers constantly increasing.

# Introduction

### Co-operation between CDP and UBC: In order to manage, one must measure.

Seeing as a key focus of the Union of the Baltic Cities (UBC) work is helping to turn the Baltic cities into climate-smart global leaders, a Memorandum of Understanding was signed between CDP and UBC in November 2016. UBC Sustainable Cities Commission has been co-ordinating the cooperation with CDP.

CDP is interested in the climate leadership that is found in the Baltic region, wishes to gain new insights, and to expand the coverage of their reporting system. The UBC, on the other hand, has an extensive network of cities looking to take action against climate change and wishes to use the state-of-the-art reporting tool provided by the CDP to gain more qualitative and comparable data for use as the basis of its work. As a result of their co-operation, both organisations, therefore, stand to gain, making it possible to achieve results that they could not achieve on their own.





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#### Important notice:

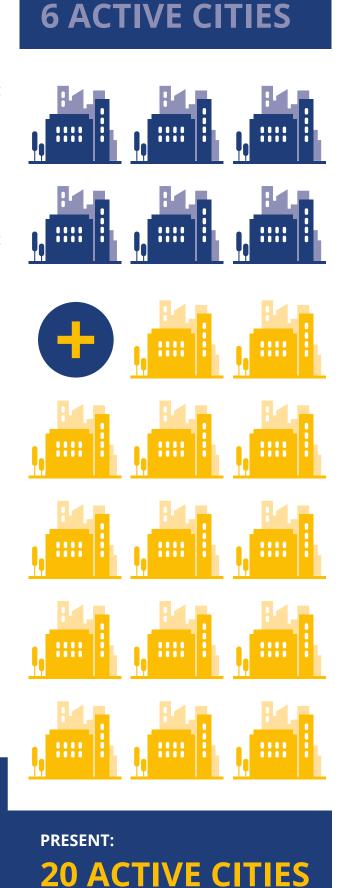
The UBC has prepared the analysis in this report based on responses to the CDP 2017 cities information request that was the basis of the UBC and CDP MOU. All information and views expressed herein by UBC are based on its judgment at the time of this report and are subject to change without notice due to economic, political, industry and city-specific factors.

## Who reported?

More than 570 cities reported publicly to the CDP in 2017. 128 of these cities are situated in Europe, with 57 from Northern Europe (UBC countries). In 2017, a total of 20 UBC cities, from all UBC countries, reported through the CDP reporting tool. Aarhus from Denmark. Hiiu Johvi, Pärnu, Tartu from Estonia. Espoo, Helsinki, Lahti, Turku from Finland. Greifswald from Germany. Jelgava, Riga from Latvia. Siauliai from Lithuania. Arendal, Kristiansand from Norway. Gdansk, Gdynia from Poland. Malmö, Umeå, Visby from Sweden.

In terms of their basic descriptors, the reporting UBC cities vary a lot in terms of profiles (size, geography etc.). The smallest city with a population around 9500 and the largest city with a population around 640 000. Among the cities there are both coastal and non-coastal cities and cities with different circumstances as it comes to closeness to water higher-altitude (126m) and lower (3m).

Looking at the region in a wider perspective, outside the UBC members, there were cities reporting from all countries in the Baltic Sea Region. A number of European capitals reported, including **Hamburg**, **London**, **Paris**, **Istanbul**, **Zürich** (and many others), as well as all Baltic Sea region capitals **Stockholm**, **Moscow**, **Helsinki** and **Copenhagen**.



**BEFORE 2017:** 

# Who reported?

## **Example cities**

CITY	POPULATION	COASTAL?
CAPE TOWN	400 000	YES
HELSINKI	600 000	YES
VANCOUVER	600 000	YES
PARIS	2 500 000	NO
MOSCOW	12 000 000	NO





On average, member cities of the Union of the Baltic Cities are considerably more ambitious in setting carbon neutrality targets than the global average. Measured by the target year set in 2016 for achieving carbon neutrality, six cities in the global top-11 are from the Baltic Sea region (BSR) of which two from UBC.

Whereas the most common global, non-UBC, target date is 2050, four out of five UBC cities have stricter timetables.

#### The UBC's year of action 2017 and future steps

In 2017, we have seen the number of UBC members reporting to CDP more than triple – from 6 to 20 cities – and this trend is likely to continue, with the goal being for all UBC cities to report within the coming two to three years.

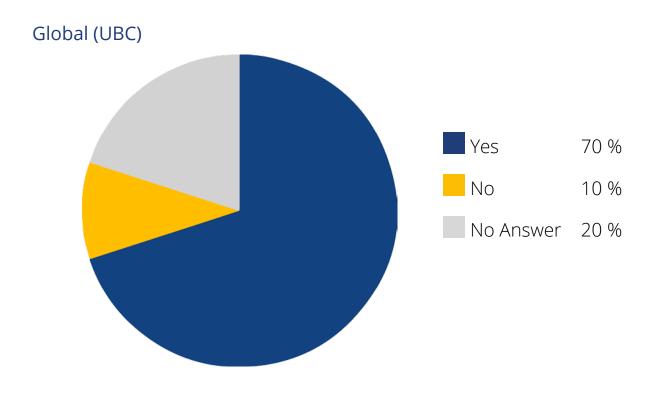
The data provided to CDP significantly helps the UBC co-ordinate and assist the City-to-City sharing of solutions to the many common problems caused by climate change. Multiple member cities

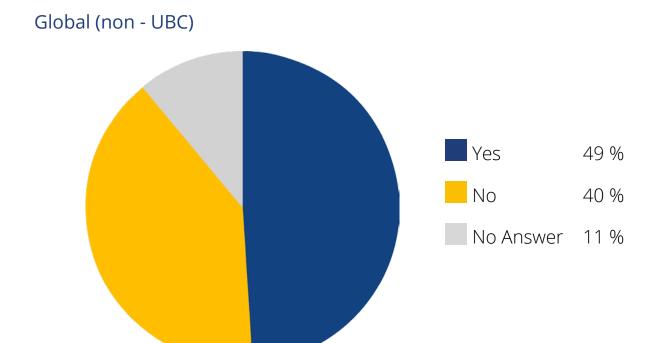
already have targets pertaining to climate change: through the pooling together of comparable data and ideas these targets can better be reached. This first report on the data provided will give us a good basis for further discussion and promotion of climate change related work among the UBC member cities. This greater degree of ambition is evident also in climate change action plans for reducing greenhouse gas emissions – just under half of cities globally (non-UBC) reported to having one, where 70% of reporting UBC cities do.

Following the Paris Agreement, many more cities globally have already set or are preparing to set ambitious climate goals.

Melbourne, AU Ringkøbing-Skjern, DK Byron Shire, AU	2020 2020 2025	Cities with ambitious long-term targets for carbon neutrality (CO <sub>2</sub> neutral by year)
Adelaide, AU	2025	
Sonderborg, DK	2029	Six BS (CDP o
Aarhus, DK	2030	R Citic
Fredrikshavn, DK	2030	BSR Cities in Global Top-10 P data and UBC-CDP surve
Park City UT, USA	2032	3C-CD
Groningen, NL	2035	al Top-10 DP survey 2017)
Turku, FIN	2040	10 vey 20
The Hague, NL	2040	<u> </u>

# Does your city have a climate change action plan for reducing GHG emissions?







# **Variation of Targets and Powers**

The reporting cities may apply different baseline years and have different interim targets and timelines. Added to this, the carbon sinks located within city boundaries are taken into account differently. Many cities have also split their targets into multiple smaller targets, striving to reach a certain reduction by a certain year, and further reductions after that.

Whether or not the cities themselves are the driving force behind the set targets, or if the targets come from above, through legislation or targets set on the national level, varies as well. Some countries have clearly defined national-level targets and timelines that the reporting cities strive to reach, or even outdo (e.g., but not limited to, Norway – climate neutral by 2030; Finland – carbon neutral by 2050).

The cities in different countries have also varying levels of autonomies in questions pertaining to reducing GHG emissions: in some countries cities have ample room for manoeuvre both in terms of their own emissions and that of their communities', while others feel restrained and unable to act before the national government does. A third group is situated somewhere in-between, striving for reductions in their own operations but being unable to influence the community's actions much. This, to a large extent, correlates with the varied level of power and autonomy vested in the city/ municipal level in different national contexts.

#### **Actions aim at Green Energy and Mobility**

Majority of UBC cities (70 %) reported having a separate climate change action plan with regard to reducing GHG emissions in the community. The concrete steps taken to achieve these reductions were numerous, innovative, and concerned almost all sectors.

Cities have targets for renewable energy, for instance with regard to electricity consumed, and investments in wind or solar power. Municipal buildings were widely being modernised, with focus on sustainability and energy efficiency (where possible, many municipalities had also introduced more stringent standards for all buildings on publicly owned land or within the city limits).

City vehicle fleets were being upgraded in multiple cities; petrol or diesel cars being replaced by electric ones to the extent possible, trucks and heavy-duty vehicles being required to conform to emissions standards, and more environmentally friendly fuels were being sourced. Public transport fleets were also widely being upgraded – either directly, or through requirements set in the procurement process.

Good data, benchmarks, and clear targets were seen as key ("what is measured is managed!"), and environmental requirements in procurement processes as an effective way for the city itself to achieve these targets in all sectors.

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## **Preparing for the Climate risks**

#### **BSR Cities are less Prepared for Adaptation**

In some aspects UBC cities however seem to lag behind their global counterparts. UBC cities have weaker political commitment and planning for climate change adaptation and see fewer economic opportunities than the other reporting cities.

Why this is would require further study, but one possible reason could be that UBC cities consider themselves significantly less at risk from climate change than is the case globally (84% globally, versus 45% UBC). This is the case also in terms of social risks brought on by climate change: globally, 77% of reporting cities identify such, whereas only 30% of reporting UBC cities do. Other potential explanatory factors worthy of study could be city populations, location and climate.

#### **Preparing for the Climate risks**

Almost half of UBC cities did report climate change to present a significant risk to their city. Specific hazards often mentioned included **flooding**, **rainstorms**, **heat waves**, **extreme wind**, and **snow** – most with the potential to significantly impact a multitude of sectors, from energy, transport, residential, water supply, to health and emergency services, etc.

All reporting cities considered every mentioned risk likely to increase both in frequency and intensity over time. Those currently least concerned with potential risks cited good infrastructure, a stable climate, and high general preparedness as reasons. A majority of the reporting cities either have or are carrying out a climate change risk/vulnerability assessment.

Knowing the potential risks, further steps taken to reduce said risks include, among other, improving warning and evacuation systems, laser mapping vulnerable areas, moving overhead electricity wires underground, and raising or moving vulnerable infrastructure.

#### Most significant risks are related to water

The most widely cited risks were related to water, concerning flooding as well as the impact this could have on the local water supply. Six cities foresaw substantive risks to their water supply (seven did not, seven did not answer). An oft-repeated worry was that of heavy rainfall leading to overflowing mixed sewers, followed by wastewater impregnation of the ground and contaminated drinking water. In one case, even the local wastewater treatment plant was considered at risk of being flooded. Among the other potential consequences – not related to drinking water – were basement flooding and general damage to housing and urban infrastructure brought on by excessive amounts of water, be it caused by rainfall, flooded rivers or coastal floods.



Aware of these risks, some of the cities were actively working to pre-emptively stop them from happening. Examples of countermeasures taken were increased investment in water and wastewater networks, upgrading to new technologies, increased monitoring, adopting new standards and action plans, investing in flood protection, keeping old waterworks operational in

reserve and separating old mixed sewer networks into ones for wastewater and ones for surface runoff.

A more long-term way of preventing floods mentioned was the protection of green/unpaved areas, in order to increase the ability of the ground to absorb excessive water.



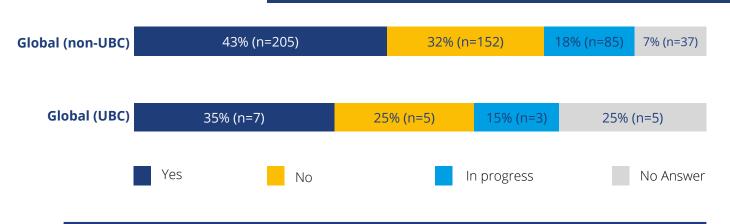
Climate change is generally considered to also provide economic opportunities. Twelve cities considered this to be the case, while only two disagreed (six did not answer).

By far the most common opportunity identified was developing new climate-related clean-tech businesses within the city. Examples were many, but common themes often repeated included smarter, more efficient buildings, energy conservation, more environmentally friendly energy production, transport, as well as various environment-related projects not directly tied to emissions (e.g., recycling, water treatment).

Technology and innovation were often central pillars mentioned, and various schemes of cooperation between local industry, universities, and the cities themselves, at times also including the state and regional levels, were either already underway, or being planned, to improve the potential for such innovations to come about.

Some of the reporting cities could, to a large extent, already be considered decoupled, achieving economic growth and development while reducing their GHG emissions and other negative environmental impacts.

# Does your local government have a plan that addresses climate change adaptation?





## The CDP The UBC

### The UBC Sustainable Cities Commission

UBC Sustainable Cities Commission (UBS SCC) is one of the 7 commissions of the Union of the Baltic Cities and it is hosted by the City of Turku, Finland. The UBC SCC is responsible for the Union's work on sustainability issues, coordinating the Union's entire UBC Sustainability Action Programme and managing numerous projects in the field of urban sustainability. The UBC SCC is coordinated by three co-chairpersons in close cooperation with the Head of the UBC Secretariat of Sustainable Cities Commission and the Advisory Board. Read more

### The UBC Strategic Framework

The UBC's work with sustainability goes back to the establishment of the city network in 1991, one year before the UNs Conference on Environment and Development in Rio de Janeiro. Today UBC's sustainability work is guided by a many global conventions, European laws, macro-regional conventions and national regulations. The work is strongly linked to United Nations Sustainable Development Goals that links the work also to Council of the Baltic Sea State's Baltic 2030 Group, the Helsinki Convention on Protection of the Marine Environment of the Baltic Sea Area (HELCOM) and the cross sectoral EU strategy for the Baltic Sea region, that is also a macro regional strategy.

## The UBC Sustainability Action Programme 2016–2021

The purpose of the Union of the Baltic Cities Sustainability Action Programme 2016-2021 is to guide the whole network of the UBC towards development of a smart and sustainable Baltic Sea Region. The programme gives strategic direction to the realisation of UBC's vision in the future - creating a smart, safe and sustainable Baltic Sea Region. The Action Programme was adopted as an annex to the UBC Strategy 2016-2021 by the XIII UBC General Conference in October 2015 in Gdynia, Poland, and it was guided and produced by the UBC Sustainable Cities Commission (UBC SCC) in collaboration with other UBC member cities. Sustainability Action Programme brings inspiration to all UBC cities to become the sustainability leaders in Baltic Sea Region and beyond! Read more

## Memorandum of Understanding Between UBC and CDP

CDP and UBC agreed on a two-year MOU in to involve more cities in the development and reporting of target-oriented climate actions (Oct 2016). The co-operation includes involving more BSR cities to report for CDP and then by utilizing the analytical tools of CDP registry for studying the strategic leadership and key actions of these cities. The report "Climate Leadership from Baltic Sea Region Cities" is being completed for the UBC General Conference 2017 and it includes various climate data and several case examples from the cities. Read more











