

Action Plan by the
Free and Hanseatic City of Hamburg

within the Interreg Europe project

“Sustainability of the land-sea system for eco-tourism strategies” (Land-Sea)

I. Policy context

In the Interreg Europe project Land-Sea, PP3 Hamburg addresses the **Hamburg Climate Plan of 2015** as its policy instrument. The Free and Hanseatic City of Hamburg is a so-called City State, that is, it is not only a city but – like Berlin as well – one of the sixteen German states (“Bundesland”) and – on the European level – a NUTS 1 & 2 region. The Hamburg Climate Plan is thus a regional development policy.

Said climate plan is the most comprehensive document within Hamburg outlining the transition to sustainability. The city has a long history in climate planning, reaching back until the 1990s. That said, the Hamburg Climate Plan of 2015 is the first one integrating both mitigation and adaptation. Climate planning in Hamburg follows an adaptive management approach: Linear planning and forecasting methods asking questions under constant (environmental and societal) conditions seem highly inadequate vis-à-vis climate change. Rather, climate planning in Hamburg follows the circular logic: develop, implement, monitor, adjust, ... Based on this methodological understanding of climate planning, the Climate Coordination Office at the Hamburg Ministry for the Environment recently presented an update to the Hamburg government who adopted said update beginning of December, 2019. The updated version of the climate plan already integrates actions developed within Land-Sea. In the following pages, the author of this text will thus differentiate between the Hamburg Climate Plan of 2015 and its updated version of 2019.

In climate planning the land-sea interface is high on the agenda. Even though the city is built 100km inland, the port is #1 in Germany and #3 in Europe. The river Elbe as well as the adjacent rivers are still heavily influenced by tidal dynamics. And in the past, Hamburg suffered from heavy storm surges. Most of the city is built onto the river lowlands, thus potentially being at risk of flooding. Hence, the City of Hamburg is particularly aware about and vulnerable to sea level rise. Against this background it is not surprising that the Hamburg Climate Plan of 2015 strongly emphasises the necessity of reinforcing flood protection.

Hamburg’s coast along the river Elbe and its branches are mostly protected by dykes and, less often, by flood walls. In total, the City of Hamburg hosts more than 100km of dykes on its territory. In the Hamburg Climate Plan of 2015, coastal adaptation to climate change is thus understood in terms of flood protection. It says: “an effective flood risk management programme for Hamburg is extremely important” (p. 79). The climate plan goes on differentiating between public and private, city and harbour as well as inland flood protection. It is thus very detailed when it comes to this topic. This focus on different aspects of flood protection contrasts with the relative silence on other issues related to coastal zone management like e.g. a climate-resilient coastal ecosystem and human access to the cooling quality of coastal waters. And on tourism, the Hamburg Climate Plan of 2015 even states: “Due to climate change the city now has more hours of sunshine than even a few decades ago. Thanks to this and other reasons the city is a very popular holiday destination. This gives the tourism sector all the more opportunity to boost its image with environmentally friendly tourism” (p.76). In sum, as it was argued in the Land-Sea application, “[T]here is a lack in strategies and developments in overlapping sectors like tourism and environment” (p.12). With Land-Sea, PP3 Hamburg has thus addressed this gap – as is detailed below.

II. Action: Integrating sustainable coastal zone management into the Hamburg Climate Plan

The background

Hamburg's coast might differ from our partners' coasts in some regards. First, Hamburg is built within a valley of an internal river delta. Even though the open North Sea is more than 100km far away, the Hamburg part of the river Elbe is still heavily influenced by tidal dynamics (medium tidal range of 3,66m). That also leads to the second difference. Hamburg's coastal zone is a rather urban coast; that is, a coast more often than not shaped by harbour infrastructure and flood protection. Only at the city's periphery, the shore of the Elbe river has a more natural shape in form of dyke foreland and natural beaches. Thus, PP3 Hamburg has to answer the question on what sustainable use of the coast might mean in an urban context.



Regarding this question, it was particularly insightful to learn about the Barcelona Climate Plan 2018-2030. Within this plan, the City of Barcelona defines the most important lines to action for complying with the Paris Agreement of 2015. One of these lines of action is entitled “Conserving the seafront”, arguing a.o. that the shoreline “provides some key environmental services” like leisure activities. It goes on saying that “beaches and coastal parks [...] could be a place to shelter during heat waves, given they have the lowest daytime temperature” (p. 108). It thus links the coast to human adaptation in times of climate change.

Additionally, PP3 Hamburg was also very much interested in a restoration project we visited during our partner meeting in Barcelona. At the Pletera wetland restoration site, the respective authorities removed touristic infrastructure and restored the local coastal ecosystem such as to being able to recover from this human impact. Hamburg might benefit from this example as we are discussing coastal restoration measures here as well. In the case of Hamburg, restoration is often linked to an increasing tidal range. By removing infrastructure and restoring rather natural habitats, the tidal range would decrease again. It is against this background that a first restoration project called “Kreetsand” was realized. As a “side effect”, restoring some of the natural coastal ecosystems also increases the health of the coastal ecosystem and enhances the recreational value of Hamburg's coast.

Action 1: The Hamburg Climate Plan

Adapting these best practices to our own context might mean that an urban coast shall also function as a healthy part of a larger ecosystem, provide shelter during heat waves and offer natural values to its inhabitants. In turn, implementing such broader understanding of the coastline would also entail new eco-tourism opportunities. This broader understanding of a sustainable and climate-adapted coast is rather different from the sole focus on flood protection as outlined above. This is not to say that flood protection should not be an important rationality governing the land-sea interface. It rather argues for a more integrated view.

In the updated version of the Hamburg Climate Plan, published at the beginning of December 2019, the seafront is understood in broader terms. In the chapter on adaptation, it says: “Climate change is an existential challenge for Hamburg. Flood protection needs to be based on the newest scientific findings”. Yet, adaption cannot only be limited to sea-level rise. The plan goes on: “The increased risk of heat waves and droughts as well as extreme rainfall necessitates a sensitive access to inner-city water bodies” (p.48; translation by author). As such measure, the climate plan demands the conducting of (pilot) projects regarding “water sensitive urban planning”, which also includes the development of flood prone areas like “Kleiner Grasbrook” and the “Hafen City”. The integrative approach to coastal management as such takes hold in Hamburg’s climate planning and can also be related to talks during Land-Sea’s phase one.

In Land-Sea phase two, we thus aim at implementing the measure described in the updated climate document. In our first action we aspire acquiring funding for a pilot project on “water sensitive urban planning”, which, in turn, will advance such broader understanding of coastal zone management that also addresses recreational values of water bodies. Based on our experience with EU-funded projects (e.g. H2020 Clever Cities, H2020 RECONNECT, H2020 FORCE, H2020 MySmartLife), a city like Hamburg can immensely benefit from such projects esp. in new fields which are not yet fully established. “Water sensitive urban planning” is such a new field in which processes are not yet fully standardized. H2020 RECONNECT, for example, addresses this field with regard to changing risks of floods and droughts. In the pilot area located in the southeastern part of the city (District of Bergedorf), a complex river system is prone to both floods and droughts affecting settlement areas, agriculture, water extraction, biodiversity as well as shipping. The main focus of the pilot action is to reactivate the storage capacities of the river system (Bille, Dove and Gose Elbe) with the aim of creating more retention volume during flooding as well as stable water levels during droughts. As RECONNECT integrates many stakeholders within the city (a.o. the Ministry of Energy and the Environment; the Agency for Roads, Bridges and Waterways as well as the Hamburg University of Technology), new procedures can be established. Analogously, we aspire of developing a project that addresses the recreational values of water bodies. The change we aspire is thus implementing new projects.

Actors involved

- Senate Chancellery / Department for European Affairs
- Ministry of the Environment
- other institutions related to the Free and Hanseatic City of Hamburg

Funding & timeframe

In the Department for European Affairs at Hamburg’s Senate Chancellery, we coordinate and develop EU-funded projects for the Free and Hanseatic City of Hamburg. Depending on the issuing of calls, our team will aspire for integrating this aspect into project development. In light of the contingencies in such project development, eventual costs and timeframe cannot be specified.

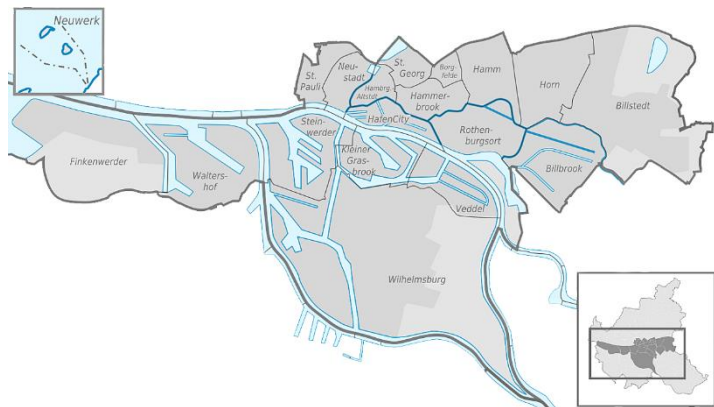
Action 2: A climate friendly seafront in the Central District

The Hamburg Climate Plan of 2015 also authorized the city’s districts to become active in climate planning. So it says:

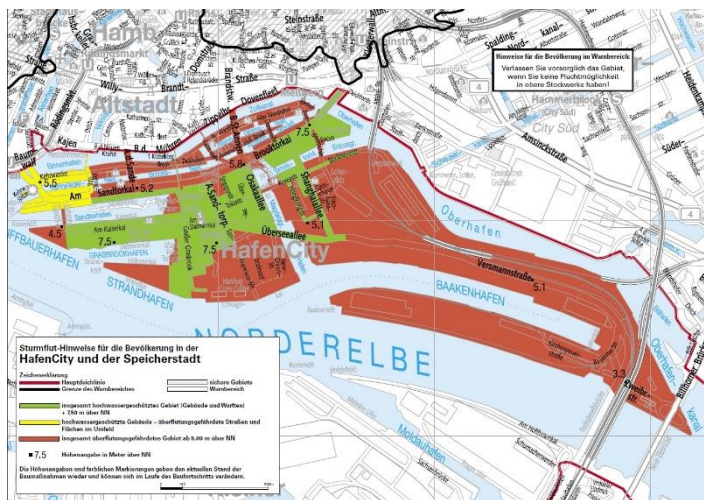
“Besides the city-wide targets for urban development, climate friendly development must be promoted especially at the neighbourhood level, because neighbourhoods play a central role in the climate friendly transformation of cities. At the neighbourhood level the key elements of governance, participation and climate friendly transformation are linked at the actual implementation level.” (p.29)

The Free and Hanseatic City of Hamburg, a city of nearly two million people and, hence, the second largest city in Germany, is one of the sixteen German states. In this political system, Hamburg’s districts function like municipalities.

Recently, many of these district administrations began the process of climate planning – so did the Central District (“Bezirk Mitte”). As the map clearly shows, the river Elbe with its many arms runs through the Central District. Questions of coastal zone management and climate adaptation are thus crucial from the point of view of said district.



The Central District became interested in the Interreg Europe project Land-Sea, learning about a broader understanding of coastal zone management – as outlined above. The Central District hosts two large urban development projects that are close to the shoreline, namely the “Hafen City” as well as the “Kleiner Grasbrook”. In the early 2000s the City of Hamburg began developing an area of 157 hectares of port and industrial brownfields – the emerging “Harbour City”. The area lies beyond the dyke which in turn meant that urban planners had to develop innovative flood protection concepts for said area: Based on the northern German tradition of building dwelling molds, the emerging buildings were elevated and had to install private flood protection measures. At the same time, by doing without the building of a new dyke, the emerging “Hafen City” became a place where living by and with the water became possible. The planning of the “Hafen City” can thus be considered as the beginning of a new, multi-purpose understanding of urban coastal zone management that not only emphasizes flood protection but also living and recreational values. These experiences are now replicated with regard to another brownfield called “Kleiner Grasbrook” on the southern shore of the “Norderelbe” (that is, the northern branch of the Elbe).



That said, these two prestige urban development projects only cover a smaller part of Central District’s shoreline. It is thus important that these experiences – combined with the lessons learnt within the LandSea INTERREG Europe project – are integrated into the district’s climate plan in order to ensure future, district-wide replication. As a second action, PP3 Hamburg thus aims at integrating this broader

understanding of the coast into the emerging climate protection plan by the Central District. The change that is aspired is thus structural, changing the focus of a (sub-) policy instrument.

The process of climate planning is still at a very early stage. The district council requested the district's administration in March 2018 to initiate the process of climate planning (Drucksache 21-4061). Almost one year later, in February 2019, the district council asked the administration to apply for funding with the National Climate Initiative for developing a climate protection plan specifically for the district (Drucksache 21-4061.2). Hereupon, the administration submitted an application in autumn 2019 (further details, see below).

Players involved

- District Central: both administration and district council
- Ministry for the Environment and Energy
- State Agency for Roads, Bridges and Water Constructions
- Hamburg Port Authority

Funding & timeframe

The Central District applied for funding at the National Climate Initiative, sponsored by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety. The National Climate Initiative promotes climate action at the local level with a focus on municipalities aiming at becoming active on that matter (see: <https://www.klimaschutz.de/en>). The funding notification is still pending. Depending on the notification, the timeframe for funding such endeavors is generally one year.