

# **Best Practice Low-Carbon Initiatives in five German Municipalities**

**Final Report** 

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## **1** Introduction

#### **1.1 Scope of the report**

This report brings together five case studies from German cities that reflect on the respective local efforts towards a low carbon economy. It constitutes the German contribution to a project for the Polish Ecological Club (Mazovian Branch).

To foster the dialogue between German and Polish cities, the project team looked for good practices particularly in the German partner cities of the Polish case study cities, including Gdansk, Gliwice, Siedlce and Wrocław. For an overview of these cities' ambitions, see the study of Adriana Skajewska.

The German cities included in this report are: Bremen (Gdansk), Bottrop (Gliwice), Schwabmünchen (located in the District of Augsburg, neighboring Dasing, the partner city of Siedlce), Wiesbaden (Wrocław), and Rostock.

The case studies give an overview on individual projects on the local level that were identified by the local authorities as an advanced good practice example. The contacts within the local authorities were approached with a coherent table with requested information (see the Annex for the template). At the end, a brief summary highlights specific achievements and challenges that were drawn from the case studies.

# 1.2 Background: The role of municipal climate action in Germany, its links to local stakeholders and to the low carbon economy

When looking closer at the case studies in this report, the project team focused on two aspects in particular: The participation of local stakeholders in the project and its links to the local economy.

To explain the reason behind these areas of focus, this section shall help setting the scene for the projects and embed them in a narrative of municipal climate change action in Germany.

#### 1.2.1 Municipal climate action in Germany

Within the German federal system and its complicated division of competences and responsibilities, municipalities constitute the third layer below the federal level and the state (Bundesland) level. However, the importance of municipal competences is recognized by the German constitution (Grundgesetz, Basic Law): Put in a simple way, the constitution grants the municipalities the rights to take care of local affairs.

While there is no exclusive competence for climate change (law or actions) on the federal level, the municipalities' local competence can be interpreted to include climate actions on the local level. Since the main focus of climate action is still put on the mitigation of greenhouse gases, actions are always tied to human activities, habits or behaviors, or products.

On the local level, this is particularly reflected in the sectors of (local) energy production, housing (public buildings usually to a lesser extent), local transport, and business or industrial development in the municipal vicinity. These sectors usually constitute the main share of greenhouse gas emitting activities. (In some municipalities, however, agriculture can also contribute a relevant share of greenhouse gases.)

#### **1.2.2** Support for climate action from the federal level

The federal level has fairly limited opportunities to conduct actions on the local level itself (the federal state territory is only the sum of all municipal – and one level above: state – territories). Its main possibilities to set incentives for climate action consists of setting up a welcoming regulatory framework and providing the necessary funding support for actions by states, municipalities, and individuals (incl. businesses of the private sector).

While first individual local climate actions by municipalities reach back as far as the 1980s, the first broad support for greenhouse gas mitigation plans and actions on the local level (provided by the German federal level) was introduced in 2008 by the Federal Ministry for the Environment, Nature Protection and Nuclear Safety in 2008 with a funding scheme specifically for municipalities and local actors (Kommunalrichtlinie). This scheme, *inter alia*, provided funding for climate action plans until 2020 on the municipal level and the necessary staff (Klimaschutzmanager, climate action managers) to connect the relevant thematic areas within the local authorities, to include stakeholders, and to implement actions. Starting 2012, extra funding was provided for a small circle of municipalities to start even more ambitious planning for 2050 ("masterplan municipalities"), and additional candidates were selected in 2016.

#### 1.2.3 Limits of municipal competences and inclusion of local stakeholders

Municipalities are not coherent structures: They range in size, structure and location – from large cities to small towns, urban interconnected areas to rural areas, located at the shores of Nordic and Baltic Seas or close to the Alps. Naturally, depending on the local circumstances of the municipality, different sectors have different impacts to the greenhouse gas production. In some municipalities that require daily connectivity to the surrounding cities, transport and mobility can contribute the highest share of greenhouse gases while in other regions, industry and businesses take that place. However, while a single sector can contribute higher potential for "greening" the local economy, it is a mix of activities that is needed across sectors to transform local economies (and their role in local communities).

This transformation requires the inclusion of local stakeholders and cooperation between the sectors: Municipalities – even with their legal competences for planning on the local level and in their role of providing support to local actors – often face financial and personnel limitations in covering all sectors. For instance, the expensive transformation of the private housing sector to more energy efficient buildings requires financial means that go far beyond the municipal funds. With a view to greening the local business landscape, municipalities are dependent on an active role of local businesses that provide the expertise and funding, but also serve as multiplicators within the region.

As a consequence, different angles and narratives are necessary for municipalities to include all relevant stakeholders. While the reduction of greenhouse gases remains the underlying target of climate action, other benefits that are linked to mitigation or adaptation actions can be highlighted in the communication. This includes an increase of air quality – for instance, if more efficient production facilities are implemented –, the increase of living standards within a municipality with less (and/or more efficient) individual traffic, the increase of green spaces and reduction of noise.

# 1.3 Approaches of the case study municipalities and contribution of this report to bilateral exchange

The selected projects in the case study municipalities offer different perspectives on how to include stakeholders and businesses in their activities and also show different benefits of the climate action that they experienced. In particular, the case studies offer insights on how different sectors can (and have to) be involved to be part of a successful transformation of the local economies.

Bremen's project "Sustainable Urban Mobility Planning", for instance, linked sustainable transportation to urban planning by consciously designing a neighborhood with little use of cars. Another approach can be observed in "InnovationCity Ruhr" (City of Bottrop): This project combines climate protection and modernization of buildings with economic boost through innovation. The Energy Caravan in Schwabmünchen (District of Augsburg) sets an incentive for house owners to invest in energyrelated modernization, thereby also stimulating the local and regional economy. ÖKOPROFIT Wiesbaden aims at energy efficiency by training business and enhancing environmental law compliance through legal advice. On the European and national level, many networking approaches already exist for municipalities, some more some less formal: In Europe, the Covenant of Mayors,<sup>1</sup> the Climate Alliance Network,<sup>2</sup> ICLEI,<sup>3</sup> and others have established networks. Within Germany, the growing networks of "masterplan municipalities" and 100%-renewable-energy regions,<sup>4</sup> add an additional layer of knowledge and best-practice exchange. These networks are (or were initially – in the case of "100%-renewable-energy regions") supported by the federal level. They enable the responsible climate action managers in the respective administrations of the municipalities to have a low-key exchange on *inter alia* their progress in the planning, methods of proceeding within the administration, inclusion of local stakeholders, outreach and communication, implementation and finding the necessary funding for it.

This short report aims to show links of sectors and similarities between approaches by German municipalities. Being one of two background reports to this project, it enables a brief yet insightful overview for discussions and best-practice exchange with the Polish partner cities.

<sup>&</sup>lt;sup>1</sup> http://www.covenantofmayors.eu/index\_en.html.

<sup>&</sup>lt;sup>2</sup> See online at http://www.climatealliance.org/home.html and http://www.climate-alliance-germany.de/.

<sup>&</sup>lt;sup>3</sup> See online at http://www.iclei.org/.

<sup>&</sup>lt;sup>4</sup> See online at http://www.klimaschutz.de/de/zielgruppen/kommunen/foerderung/masterplan-richtlinie for the "Masterplan Municipalities" and http://www.100-ee.de/ for the 100%-renewable energy regions. The latter also have ties to the wider European network of "100% RES Communities", see http://www.100-rescommunities.eu/.

# 2 German case studies

### 2.1 Overview on the case study cities on urban low-carbon initiatives

The following table provides a very brief overview on the following case studies on a single page. It enables the reader to find quickly the case studies that put a stronger focus on the participation angle or on the business angle. In one case, both aspects are highlighted within the case study.

The respective focus is taken from the administration's aim: If it highlights public participation specifically in the process of the project (or the project aims itself specifically for an increased participation), the case study is marked with a "yes" for the "focus on participation". Accordingly, the case studies that included businesses in the development of the project – and also aimed to benefit local businesses – are marked with a "yes" for the "focus on businesses". Finally, the column with interesting aspects allows the reader to look specifically for highlights in the case studies. More details can then be found in the actual case study description, enriched by further website-links, and in one case (Bremen) even a declaration which was added as Annex I at the end of this study. Contact details in the case studies allow reaching out to the responsible authority to establish contact and find further information.

No.	Municipality	Focus on participation	Focus on businesses	Interesting Aspects
1	Free Hanseat- ic City of Bremen	Yes	No	Increasing independence from cars; "healthy" traffic (traffic that is benefits citi- zens' health, e.g. cycling); high-acceptance of car-sharing; online process and gamification elements <sup>5</sup>
2	City of Bottrop	Yes	Yes	Technical and process innovation; strong support of the goals of the InnovationCity by the administration (mayor to special departments)
3	Schwab- münchen (District of Augsburg)	Yes	No	Offering free consultations on energy- efficiency measures at individual homes; focus on one district at a time; leveraging private investments
4	Wiesbaden	No	Yes	ÖKÖPROFIT is based on voluntary coop- eration (municipality & businesses); flexibil- ity to adapt to new legal circumstances, enhancing the attractiveness of participa- tion for businesses
5	Rostock	Yes	No	Recurring annual event on the ecological footprint and climate action; in particular using local space that is usually reserved for traffic to showcase alternative forms of its usage; highly scalable

<sup>&</sup>lt;sup>5</sup> Gamification is the application of game design and principles to a non-game scenario, increasing public involvement.

## 2.2 Selected case studies

#### 2.2.1 Case study 1: Free Hanseatic City of Bremen

Name and brief description of the case study		
City	Free Hanseatic City of Bremen Senator for the Environment, Construction, and Transportation Inhabitants: 557.464 <sup>6</sup> Characteristics: city, the smallest state in Germany, well-connected: harbor, airport	
Name of project	Sustainable Urban Mobility Planning / new mobility culture	
Project timeframe	SUMP 2012-2015 (strategic planning) - ongoing process of implementation	
Sector (e.g. transport, energy, build- ings)	Transport	
Short description of the problem addressed What problem or challenge was the project aimed at solv- ing?	Transport is a major emitter of greenhouse gases. In EU 27, transport is the only sector where the CO2 emission is clearly above the 1990 level. The Bremen Climate Protection Concept (KEP 2020) – adopted in December 2009 - addresses the issue. The new Sustainable Urban Mobility Plan (Verkehrsentwicklungsplan 2025, VEP2025) sets the framework for the transport development of the next decade – in con- junction with the Urban Development Concept.	
	Bremen shows a high share of the carbon-neutral active modes of mo- bility of walking (20% of Bremen's citizens) and cycling (25% of Bre- men's citizens). <sup>7</sup> The SUMP wants to further improve the conditions (e.g. by a network of cycle priority streets). Priority setting for Public Transport is a further aspect. In order not only to deliver alternatives to the use of cars – but to ownership, Bremen promotes Car-Sharing. The about 12.000 Bremen Car-Sharers use a fleet of about 300 cars lo- cated at about 80 locations. The Bremen Car-Sharers took off more than 4.000 cars from the streets, which contributes to improving the conditions for walking and cycling in a holistic concept.	
Project initiation Who initiated the project? Project management Who manages (managed) the project within the administra- tion?	City of Bremen, Senate Dpt for Environment, Construction and Trans- port (Der Senator für Umwelt, Bau und Verkehr) City of Bremen, Senate Dpt for Environment, Construction and Transport (Der Senator für Umwelt, Bau und Verkehr) – Department for Transport (Verkehrsabteilung)	
Short description of what was done This can include e.g. initiative, outline/plan, decision-making	The decision for the development of the Sustainable Urban Mobility Plan was taken in 2012. There was a phase of investigation, review of measures, scenario development and a scenario poll. The decision for the Sustainable Urban Mobility Plan by the local State	

 <sup>&</sup>lt;sup>6</sup> See online at: http://www.statistik-bremen.de/tabellen/kleinraum/stadt\_ottab/1.htm.
 <sup>7</sup> Der Senator f
 ür Umwelt, Bau und Verkehr, Sustainable Urban Mobility Plan Bremen 2025, Freie Hansestadt Bremen, p. 20, available in English and German at:

http://www.bauumwelt.bremen.de/verkehr/verkehrsentwicklungsplan-5586.

Name and brief description of the case study				
processes, project start, mile- stone(s) and evaluation.	Parliament (Bremische Bürgerschaft – Bremen is a city state, consist- ing of two municipalities, Bremen and Bremerhaven) in September 2014 opens the way for the implementation of the measures contained in the plan. This process is ongoing. The plan provides the framework for implementation and is subject to ongoing refinements and evalua- tion.			
Estimate of project costs	No information was provided by the City of Bremen.			
If possible please distinguish between personnel costs and direct costs.				
<b>Results</b> Please provide a brief descrip- tion of the project results, in particular the project's impact on the residents of the affected area. This can include: CO2- reduction (if possible), partici- pation increase and possible health benefits.	Bremen intends to broaden the role of climate friendly and sustainable means of transportation. In Bremen, bikes are already used for 25% of the paths. Another 20% of the paths are walked by foot. Public transportation accounts for another 15%. This translates into a total of 60% of the transit being covered by climate-friendly means of transportation. The high bicycle share in transportation is also reflected in high efficiency of the total transportation system: The TomTom Traffic Index rated Bremen on rang 113 of 142 European cities, meaning that Bremen is relatively low in traffic jams – a fact that can be witnessed in several "biking cities". <sup>8</sup> Furthermore, cycling and walking by foot are the basics for a "healthy" traffic, i.e. traffic that additionally is beneficial to the health of citizens. Besides, the acceptance of car-sharing is very high: 12.000 people are using it, causing a decrease of 4000 private cars. This tendency is increasing. The goal is to increase these numbers. Until 2020, 20.000 car-shares are expected to substitute 6.000 cars.			
Stakeholder participation Please describe the forums of "influence" for stakeholders (e.g. businesses, citizens, utilities, banks, sports clubs and churches). To what extent and how were citizens involved in project planning and implementation?	The SUMP of Bremen had an intense process of stakeholder and citi- zen involvement. By using innovative techniques of participation, new target groups became involved. For instance, the online participation tools (geo-referenced feedback from citizens) brought a very transpar- ent debate. The developed scenarios were not only discussed in re- gional forums, but were also subject to interactive exhibitions in shop- ping centres on weekends. With such tools, the atmosphere of discuss- ing the politically sensitive subject of transport strategies changed to a much more transparent process. The Bremen SUMP had about 4.200 entries with proposals -and 9.500 comments on these entries. In total, more than 100.000 statements (I like it / I dislike it) – in addition to numerous meetings of committees plus regional forums and "on-street" debates during weekend-shopping at the exhibitions in shopping centres. Below: posts, comments, likes			
	4.241 9.567 66.971 39.084 Meldungen Kommentare Zustimmungen Ablehnungen			

<sup>&</sup>lt;sup>8</sup> TomTom Traffic Index measures traffic jams and their impact on travel times in several cities. It can be found on the following website: https://www.tomtom.com/de\_de/trafficindex/.

Name and brief description of the case study			
Innovative elements Please provide a brief descrip- tion of any aspects of the pro- ject that were particularly inno- vative or unique (e.g. concept, technology, financing methods, participation).	Both, the content and the process are innovative. The focus on an efficient city that is increasingly independent from cars is innovative. A new neighborhood is consciously planned as a low-car and low-carbon development (Hulsberg area). There will only be 4 parking spots for 10 flats, which will be balanced by a high offer of car- sharing, bike-sharing and similar transport options. The usage of an online process and a scenario game (gamification) are innovative elements of the stakeholder process. In this phase, partici- pants acted as urban planners and had to cope with a target scenario. They had limited budget and over 100 measures available to handle the situation. <sup>9</sup>		
Drivers of success What element(s) was most important to the success of the project (e.g. personnel/staff, long-time/short-time perspec- tive, (sustainable) financing and participation)?	The online tools added a new transparency level to the process, posi- tively influencing the political views on the SUMP. Broad stakeholder involvement led to a unanimous decision for the SUMP, although 5 different parties are represented in parliament. Representatives of the ministry worked during the weekend on plan- ning, for instance in stakeholder forums in malls. External consulting developed and oversaw the innovative online tools. By clearly supporting biking (inter alia with a network of bike-highways) and integrating car-sharing, Bremen's SUMP clearly transcends the planning of other cities. In 2015, Violeta Bulc, commissioner for transport of the European Commission, awarded Bremen the "European SUMP Award"		
Key recommendations and lessons learned From the experience with this project, what advice should be given to other cities or regions when pursuing a similar pro- ject?	See "Bremen Declaration" (Annex II)		
Contact person	Michael Glotz-Richter (Head of Division "Sustainable Mobility") michael.glotz-richter@umwelt.bremen.de Tel. +49 (421) 361 6703 Mobile: +49 173 6 123 178		

<sup>&</sup>lt;sup>9</sup> For more information, see Der Senator für Umwelt, Bau und Verkehr, Sustainable Urban Mobility Plan Bremen 2025, Freie Hansestadt Bremen, p. 13.

# 2.2.2 Case study 2: City of Bottrop

Name and brief description of the case study		
City	City of Bottrop Inhabitants: 116.442 <sup>10</sup> Characteristics: City, three highways, train connections, airport close- by	
Name of the project	InnovationCity Ruhr   Modellstadt Bottrop	
Project timeframe	2010-2020	
Sector (e.g. transport, energy, build- ings)	The fields of action of the InnovationCity Ruhr can be categorized into: living, working, mobility, energy and city. The cross-section field of activation can also be added. These fields should not be viewed independently but rather as frame that renders the respective subpro- jects possible.	
Short description of the problem addressed What problem or challenge was the project aimed at solv- ing?	<ul> <li>Main problems are a high energy demand (heat and electricity) and inefficient use of energy. These challenges need to be addressed by</li> <li>Increase of decentralised energy production and renewable energy use,</li> <li>Employment of smart energy management systems on building-and neighbourhood levels as connecting elements,</li> <li>Reduction of amount of travels and length of distances covered by people and goods,</li> <li>Promotion of a urban space that allows for a higher quality of living (in particular in terms of health, accessibility, and safety),</li> <li>Promotion of a usage of areas that bears in mind the consequences of its use for climate change (e.g. green spaces opposed to parking lots) as well as</li> <li>Adaptation to possible consequences of climate change by greening urban space and optimising water economy/supply.</li> </ul>	
Project initiation Who initiated the project? Project management Who manages (managed) the project within the administra- tion?	Blue skies, green city – this was the motto of the Ruhr initiative in spring 2010, a county-wide competition for the climate city of the future. The goal was to find "a typical Ruhr area" that can serve as a model city for a renovation of the entire Ruhr area. During the comprehensive energy-saving renovation of the selected city district all stakeholders (politicians, municipalities, industry and science) strive to closely cooperate and to reach these common goals in cooperation with civil society. Bottrop, the InnovationCity Management GmbH (on the regional level) and their partners from industry and science are currently working on approximately 200 independent/different projects. Depending on the organization and financing of each project, it can be supported financially or with personnel by the different partners. Cooperation is intense and trusting, generated by synergies resulting from respective competences of the involved actors. Partners from industry and science provide the projects with technical expertise and significant financial support. Bottrop and the InnovationCity Management GmbH manage the projects, include local partners and acquire necessary funds. Due to this approach, joint projects can succeed that otherwise would not be realizable.	

<sup>&</sup>lt;sup>10</sup> https://www.bottrop.de/daten-karten/statistik/einwohnerentwicklung.php

Name and brief description of the case study			
Short description of what was done This can include e.g. initiative, outline/plan, decision-making processes, project start, mile- stone(s) and evaluation.	Milestone masterplan climate-sensitive urban redevelopment Different technical, social and economic aspects need to be consid- ered for successful climate-sensitive urban redevelopment. Accord- ingly, the individual projects need to be integrated into a general framework, to achieve substantive/content-wise coordination and utilization of synergy effects. To this end, a working group under the umbrella of the AS&P – Albert Speer und Partner GmbH (Frankfurt) consisting of four engineering, planning and consulting offices worked on a overarching Masterplan until 2014, in cooperation with the city of Bottrop and on behalf of the InnovationCity GmbH. The Masterplan "Climate-sensitive Urban Redevelopment" for the InnovationCity Ruhr   model city Bottrop not only shows the way to the goal but also supports it with numerous concrete projects that will be realized in the upcoming years. As a consequence "Climate- sensitive Urban Redevelopment" also serves as a timetable/schedule, showing the possibilities to save CO2 emissions and to ameliorate living standards in different areas of the City of Bottrop. Furthermore, it provides information which measures and projects in the fields of work can achieve this.		
Estimate of project costs If possible please distinguish between personnel costs and direct costs.	One of the most important components of costs (here: personnel and implementation costs): Given the scarce financial situation of the city, the project InnovationCity offers new perspectives to Bottrop. These perspectives would not have existed otherwise. The InnovationCity area in the city of Bottrop was included into the federal-state program "Urban Redevelopment West" as the country's biggest regional aid. It provides the city of Bottrop with around EUR 20 million for urban renewal which significantly improve the quality of life in the urban space in the period from 2012 to approximately 2020. Furthermore, Bottrop city participates in a number of state-, federal-, and EU-wide funding projects. Regarding personnel, this is organized by Bottrop City, the enterprises comprised in the Ruhr initiative (Initiativkreis Ruhr), or by funding.		
<b>Results</b> <i>Please provide a brief descrip- tion of the project results, in</i> <i>particular the project's impact</i> <i>on the residents of the affect- ed area.</i> <i>This can include: CO2-</i> <i>reduction (if possible), partici-</i> <i>pation increase and possible</i> <i>health benefits.</i>	Completed or already initiated measures and projects, whose realisa- tion is secure, lead to CO2-reductions of 38 percent until 2020, i.e. of about 100.000 tons. To compare: This reduction equals the yearly CO2-absorption of a fully-grown forest of the size of the area of Bot- trop (100 km <sup>2</sup> ). Furthermore, there will be an investment of EUR 290 million in these projects in conjunction with modernization measures. EUR 183 million of this sum concerned already finished projects. Especially local companies benefit from this sort of investment: approximately EUR 110 million were benefitted to companies from Bottrop. Another EUR 26 million can be added to this result, including wholesales and con- sumption products production (Increasing regional production by in- creasing regional income, and hence consumption spending). The investments also influence the employment rate. An increase of 924 years of employment can be registered as direct result thereof for Bottrop during the entire period. 276 years can be considered an indirect result. On the whole, 1.200 years of employment were creat- ed.		

Name and brief description of the case study		
Statement on project out- come from the responsible agency	The Project InnovationCity Ruhr   model city Bottrop follows a holistic, sustainable and innovative approach to climate and environmental protection. The already initiated and partly finalized projects reveal that this approach is successful and promising. The climate sensitive urban redevelopment "Blue skies. Green City" serves as role model for other neighborhoods, cities and regions, even beyond the borders of the Ruhr area.	
Stakeholder participation Please describe the forums of "influence" for stakeholders (e.g. businesses, citizens, utilities, banks, sports clubs and churches). To what extent and how were citizens involved in project planning and implementation?	In both the application process and the subsequent implementation, stakeholders were and will be integrated in the InnovationCity Ruhr project. This not only affects stakeholders from industry, science, politics on regional, federal and EU-levels but also the citizens of Bottrop. Such a close cooperation during a project of this size is unique. The centre for information and consulting offers individual, cost-free consultations by energy experts to citizen of Bottrop. They can, for instance, learn about possible energy saving renovations of their buildings, the related costs and funding possibilities. To this date, appr. 1000 primary consultations have been conducted. In the subsequent implementation consultation, citizens can profit from free energy consultants from the network of partners. These energy experts can also oversee the implementation of the measures.	
Innovative elements Please provide a brief descrip- tion of any aspects of the pro- ject that were particularly in- novative or unique (e.g. con- cept, technology, financing methods, participation).	<ul> <li>"Innovation" according to InnovationCity Ruhr comprises the following two dimensions:</li> <li>Technical innovation: It is a goal of InnovationCity Ruhr to be an engine for the development and application of new techniques or products in the area of climate protection and energy efficiency</li> <li>Process innovation: InnovationCity Ruhr aims at following new ways to implement planned measures and projects. This includes new strategies to activate and involve local citizen and businesses, the development of new partnerships between stakeholders at local, regional, and national levels, and the development of new finance possibilities.</li> </ul>	
Drivers of success What element(s) was most important to the success of the project (e.g. personnel/staff, long-time/short-time perspec- tive, (sustainable) financing and participation)?	Key element management tip: The main factor of success is that the city's administration, from the head of administration (the Mayor) to the specific departments, sup- ports the goals of the InnovationCity and works across offices to- wards reaching them. Strategy of success: The innovative strategy leading to energy and CO2 savings can be described as an "energy transition from below". Individual buildings are energetically renovated and equipped with technologies to pro- duce electricity and heating. Through smart energy management systems, this energy can be forwarded to close-by buildings that can-	

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Name and brief description of the case study		
	not sustain themselves due to external circumstances. This network, sometimes connecting entire neighborhoods, enables energy to be locally produced and consumed. As a consequence, the individual energy consumption decreases and decentralized energy production increases.	
Key recommendations and lessons learned From the experience with this project, what advice should be given to other cities or regions when pursuing a similar pro- ject?	A central basic idea of InnovationCity Ruhr is its holistic approach. According to this approach, climate sensitive urban redevelopment can only succeed when technical, social and economic aspects are simultaneously considered. Hence, individual projects are to fit in a general framework for substantive cooperation and enable the use of synergy effects. To achieve this, the development of an overarching plan with concrete future steps to define the next project steps is nec- essary.	
Contact	Tilman Christian (Department of Environment and Green - Depart- ment of Environmental Planning - Subject climate justice) tilman.christian@bottrop.de +49 2041 70 3749	

### 2.2.3 Case study 3: City of Schwabmünchen (District of Augsburg)

The city of Schwabmünchen was selected as a case study due to its proximity to Dasing, the partner city of Siedlce, Poland. It is located in the district of Augsburg. The project "Energiekarawane" that is described here has been successfully implemented in a number of municipalities, also including cities in the district Aichach-Friedberg that Dasing belongs to. The high transferability of this project also makes it a good candidate for this report.

Name and brief descrip	tion of the case study
City	Schwabmünchen (District of Augsburg, Bavaria, Germany) Inhabitants: 13.230 (about 245.000 in the whole district) Characteristics: Small city, about 25km south of the city of Augsburg (about 285.000 inhabitants) that is a regional center in Bavaria.
Name of the project	Energiekarawane (Energy Caravan)
Project timeframe	March-April 2015, repeated in March-April 2016
<b>Sector</b> (e.g. transport, energy, buildings)	Energy consumption in private households
Short description of the problem ad- dressed	The heating consumption of private households cannot be upheld at current levels. To address this problem, the rate of energy-oriented modernization as well as its quality need to increase.
What problem or chal- lenge was the project aimed at solving?	The Energy Caravan project aims to increase awareness on the topic of energy efficiency, reduce prejudices and motivate private households to invest in an energy-oriented modernization. The Caravan establishes per- sonal contact to individual house owners, including citizens that are not familiar yet with the possibilities and benefits of energy efficiency gains. The project also aims to provide sound and unbiased information for citi- zens in their homes. This does not require an additional effort or application from the house owners' side but the Caravan is sent directly to the districts with a large share of old buildings with deficiencies in energy efficiency.
Project initiation Who initiated the pro- ject? Project management	The project's concept originates from the metropolitan area Rhein-Neckar. The regional energy agency of Augsburg (a company controlled by the re- gions of Augsburg and Aichach-Friedberg, as well as the city of Augsburg) licensed the rights for this project and adapted it to the economic area in the wider Augsburg region.
Who manages (man- aged) the project within the administration?	The Energy Caravan offers its services in cooperation with cities, markets and municipalities in the economic area of Augsburg for the citizens. For the implementation, the focus is put on the respective municipality in which the Energy Caravan is active; it provides the "face" of the campaign while the other actors contribute in the background. The Augsburg energy agency takes on an advisory role and supports the municipalities in the region with the organization, preparation, implementation and follow-up to the project.

Short description of	The process of an Energy Caravan can be described as following:
This can include e.g. initiative, outline/plan, decision-making pro- cesses, project start,	<ol> <li>In a first step, a suitable district with a large share of older buildings with a low energy efficiency rating is selected. In the wider Augs- burg region, usually buildings from the 1960s to 1980s were select- ed. These areas offered particularly high efficiency gains.</li> </ol>
milestone(s) and evalua- tion.	2. Secondly, every cititzen in the selected disctrict is addressed per- sonally by the mayor of the respective municipality. The invitation offers a free-of-charge and neutral consultation on energy efficiency in his/her home.
	3. Thirdly, a kick-off event marks the official start of the campaign.
	<ol><li>The event is accompagnied by press releases, and material such as posters and flyers.</li></ol>
	5. The Energy Caravan conducts its visits in the selected district within a time frame of 4-6 weeks. House owners are approached by the energy consultants individually and motivated to agree to the con- sultation. The consultation itself takes about one hour in the house. It includes a check from the cellar to the roof, reveals weaknesses in energy savings, provides tips for an energy-related modernisazion, and can answer specific questions on the outside of the building, as well as on the technology within the building, avail- able funding schemes and the use of renewable energies.
	6. One project cycle ends with the evaluation and analysis of successes: Every consultation is described in a brief protocol and the quota of consultations in the district is determined. One year after the tour of the Energy Caravan, a follow-up letter is sent to the house owners. This letter aims to determine – with the help of a questionnaire – the consultation's results and if any energy-related modernization measures were implemented.
Estimate of project costs If possible please distin- guish between person- nel costs and direct costs.	Per Energy Caravan (a tour of advisors in one district), the costs amount to about 5000 to 10000 Euros for the energy consultants, depending on the number of requested consultations, and about 2000 Euros for public relation (advertising) and catering costs (at the kickoff event).
Results	The Energy Caravan project achieved consultation rates in the selected districts in the Augsburg region between 25% and 50%.
description of the project results, in particular the	Following the consultations, 60% of the house owners invested in energy- related measures with an average of 15 000 Euros per measure.
project's impact on the residents of the affected area. This can include: CO2- reduction (if possible), participation increase and possible health	The project with its aim of an individual, active and intensive consultation resulted in a higher motivation for investments than other public relation efforts and information policies. In the region of Augsburg, the project provided benefits for local climate action, including long-term savings, of the house owners, as well as for the regional economy.

Stakeholder participa- tion Please describe the forums of "influence" for stakeholders (e.g. busi-	The Energy Caravan is a project of the Energy Agency in cooperation with cities, markets and municipalities (see also above "initiator"). Local businesses can get involved via sponsoring, as well as during presentations during the kickoff-event. The consultations themselves, however, are considered neutral.
nesses, utilities, banks, sports clubs and churches). To what extent and how were citizens involved in project planning and implementation?	Citizens are involved in their capacity as house owners and the main target group of this project. Following an Energy Caravan, further initiatives on the local level can be developed in the follow up. This could include further presentations on energy efficiency measures or a regular roundtable for questions on energy-related modernization.
<b>Innovative elements</b> <i>Please provide a brief</i> <i>description of any as-</i> <i>pects of the project that</i> <i>were particularly innova-</i> <i>tive or unique (e.g. con-</i> <i>cept, technology, financ-</i> <i>ing methods, participa-</i> <i>tion).</i>	Usually, energy consultations are offered at the municipal or regional ad- ministration or in council halls. This project aims instead at local house owners in their own homes. Offering the consultation free of charge and being provided by a neutral entity, it allows to approach also house owners that did not consider energy-related renovation before. The focus on one district at a time within the municipality also brings the topic of energy efficiency in a very concentrated way to communities in the
	district. Also, in this project Energy Agency, the respective municipality/city and local businesses (involved in the renovation efforts) join their forces towards a single goal. Finally, the step-by-step process in planning and establishing an Energy Caravan project allows an adoption to local circumstances to repeat and
	multiply the successes in other municipalities.
Drivers of success	Main drivers of success in Augsburg identified were:
Drivers of success What element(s) was most important to the	<ul><li>Main drivers of success in Augsburg identified were:</li><li>Active involvement and support of city administration and politics</li></ul>
Drivers of success What element(s) was most important to the success of the project (e.g. personnel/staff, long-time/short-time	<ul> <li>Main drivers of success in Augsburg identified were:</li> <li>Active involvement and support of city administration and politics</li> <li>Engaging consultancy at the individual homes by an motivated and qualified team of energy consultants</li> </ul>
Drivers of success What element(s) was most important to the success of the project (e.g. personnel/staff, long-time/short-time perspective, (sustaina- ble) financing and partic-	<ul> <li>Main drivers of success in Augsburg identified were:</li> <li>Active involvement and support of city administration and politics</li> <li>Engaging consultancy at the individual homes by an motivated and qualified team of energy consultants</li> <li>Selection of the district for the Energy Caravan</li> </ul>
Drivers of success What element(s) was most important to the success of the project (e.g. personnel/staff, long-time/short-time perspective, (sustaina- ble) financing and partic- ipation)?	<ul> <li>Main drivers of success in Augsburg identified were:</li> <li>Active involvement and support of city administration and politics</li> <li>Engaging consultancy at the individual homes by an motivated and qualified team of energy consultants</li> <li>Selection of the district for the Energy Caravan</li> <li>Right timing</li> </ul>
Drivers of success What element(s) was most important to the success of the project (e.g. personnel/staff, long-time/short-time perspective, (sustaina- ble) financing and partic- ipation)?	<ul> <li>Main drivers of success in Augsburg identified were:</li> <li>Active involvement and support of city administration and politics</li> <li>Engaging consultancy at the individual homes by an motivated and qualified team of energy consultants</li> <li>Selection of the district for the Energy Caravan</li> <li>Right timing</li> <li>Public relation efforts before and during the project, including a kick-off presentation/conference</li> </ul>
Drivers of success What element(s) was most important to the success of the project (e.g. personnel/staff, long-time/short-time perspective, (sustaina- ble) financing and partic- ipation)? Key recommendations and lessons learned	<ul> <li>Main drivers of success in Augsburg identified were:</li> <li>Active involvement and support of city administration and politics</li> <li>Engaging consultancy at the individual homes by an motivated and qualified team of energy consultants</li> <li>Selection of the district for the Energy Caravan</li> <li>Right timing</li> <li>Public relation efforts before and during the project, including a kick-off presentation/conference</li> </ul>

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Name and brief description of the case study	
City	Wiesbaden, State capital Inhabitants: 284.620 <sup>11</sup> Characteristics: Second biggest city in the state of Hessen, industrial real estate, good transport connection
Name of the project	ÖKOPROFIT Wiesbaden
Project timeframe	Seit 2000 bis heute (fortdauernd)
Sector (e.g. transport, energy, build- ings)	Operational Environmental Management, energy efficiency, resource conservation, and all areas of sustainable management
Short description of the problem addressed What problem or challenge was the project aimed at solv- ing?	ÖKOPROFIT Wiesbaden was initiated in 1999 in the city of Wiesba- den. As part of a then active Agenda-21-process, options were sought to involve the local economy in municipal sustainability strate- gies and active climate protection activities. ÖKOPROFIT was intro- duced as a low-threshold advisory and training program for compa- nies. The aim was to assist the participants in setting up an environ- mental management system. On the one hand, constructive coopera- tion between the municipality and businesses was sought to be strengthened. On the other hand, an active local area network for sustainable business was sought to be created in which the compa- nies could benefit from mutual exchange of experience.
Project initiation Who initiated the project? Project management Who manages (managed) the project within the administra- tion?	The municipal Environmental Office in conjunction with the Office of Economics and Properties initiated ÖKOPROFIT. From the start, project management by the governmental participants was led by the environmental agency of Wiesbaden (Umweltamt Wiesbaden). Cooperation partners are the Chamber of Commerce, the ESWE public utilities AG (ESWE VersorgungsAG) and climate protection agency Wiesbaden. External consultants are responsible for assisting businesses in workshops and ad hoc consultations.
Short description of what was done This can include e.g. initiative, outline/plan, decision-making processes, project start, mile- stone(s) and evaluation.	Active collection of information in 1998 by the city of Wiesbaden near the City of Munich, which at this time undertook the adaptation of the Austrian program to Germany. Introduction into the policy-making process through municipal com- mittees in 1999 and triggering the decision to introduce the resolution in Wiesbaden. Defining the project structure, tendering and allocating consultant services, attracting partners, and acquiring associate companies for the first round in 2000. In 2000, the first round was launched with 12 participants. Since the first round, an advanced module "ÖKOPROFIT club" is offered to new businesses in addition to the "beginners program". In the

## 2.2.4 Case study 4: City of Wiesbaden

<sup>&</sup>lt;sup>11</sup> http://www.wiesbaden.de/leben-in-wiesbaden/stadtportrait/wiesbaden-in-zahlen/content/statistik-bevoelkerung.php

Name and brief description of the case study	
	<ul> <li>ÖKOPROFIT club, qualified businesses can continue and deepen their environmental performance.</li> <li>Each ÖKOPROFIT round lasts 12-15 months and ends with a big award ceremony and the accounting of the results of the respective round. This represents an important milestone for each ÖKOPROFIT round.</li> <li>Today, over 100 companies were trained in Wiesbaden in 11 rounds.</li> </ul>
	mately 300 awards were assigned in Wiesbaden. The ÖKOPROFIT club has grown continuously, encompasses 27 members, and thus is the biggest one in Germany.
<b>Estimate of project costs</b> If possible please distinguish between personnel costs and direct costs.	For the implementation of the program, the use of the study materials and protected logos, the municipality is required to pay royalties to the cities Graz and Munich. These royalties are calculated according to the population of the municipality. More information can directly be obtained from the city of Munich.
	Furthermore, a full-time position in the state capital Wiesbaden is responsible for project implementation. The implementation of the program by external consultants is partially financed by the city and by the participating companies. Their amount differs depending on the number of the participating companies and their size.
	The city of Wiesbaden accounts for the costs of public relations.
Results Please provide a brief descrip- tion of the project results, in particular the project's impact on the residents of the affect- ed area. This can include: CO2- reduction (if possible), partici- pation increase and possible health benefits.	<ul> <li>The results of each round are accounted for at the end and published in an award brochure.</li> <li>With over 200 small and big measures, the ÖKOPROFIT-businesses overall saved in the year 2015/2016 <ul> <li>4 million kilowatt hours electricity</li> <li>1 million kilowatt hours heating</li> <li>900.000 liter fuel</li> <li>As a result of all measures in the 11<sup>th</sup> round, CO2-emissions were reduced for 8.100 tons per year. This equals the CO2-storage of 8 km<sup>2</sup> Central European mixed forest (or a forest area of more than 1.100 football fields).</li> <li>In addition to energy efficiency, significant savings were also achieved in relation to resource efficiency: the 4.3 millions sheets that were saved in the ÖKOPROFIT round 2015/2016 are equal to a paper stack of 433 meters.</li> </ul> </li> </ul>
Stakeholder participation Please describe the forums of "influence" for stakeholders (e.g. businesses, citizens, utilities, banks, sports clubs and churches). To what extent and how were citizens involved in project planning and implementation?	The OKOPROFIT program is based on uniform standards. Following instructions from the city of Munich in Germany, it was developed in Graz (Austria) and adapted federally. In a fixed number of joint workshops and individual on-site consultations, participants were (and will be) trained in all operationally environmental-relevant areas. According to set standards, they collect data and indicators. The environmental measures that participants develop in the framework of ÖKOPROFIT are company-specific and highly distinct, but often can be transferred to other participants. In return, the final commission examination uses federal standards after each round, qualifying participants as an "ÖKOPROFIT-Business".

Name and brief description of	the case study
	the content to the needs of the participants. Especially in the ad- vanced module, the ÖKOPROFIT club, participants have the possibil- ity to determine the training content themselves. One feature of the project is the early adaptation to the continuing changes in environ- mental law. This is one of the reasons for the project's attractiveness, as legal security is an important issue in any ÖKOPROFIT round.
	Cooperation with the local economy and the involvement of social, pedagogic, cultural or public institutions is ÖKOPROFIT's goal. Therefore, public participation is only factored into the project regarding public information and relation of project results.
Innovative elements	ÖKOPROFIT is fundamentally innovative. It is based on voluntary
Please provide a brief descrip- tion of any aspects of the pro- ject that were particularly in- novative or unique (e.g. con- cept, technology, financing methods, participation).	cooperation between the municipality and businesses; it is suitable for companies of all sizes and industries (Wiesbaden: businesses with 5- 4900 employees). It provides the possibility to respond flexibly to new legal requirements or issues. Nevertheless, the obligatory and struc- tured nature, and the continuity of this 15-years old project is valued by its participants.
Drivers of success	Keys to success of ÖKOPROFIT in Wiesbaden are:
What element(s) was most important to the success of the project (e.g. personnel/staff, long-time/short-time perspec- tive, (sustainable) financing and participation)?).	<ul> <li>Continuity for 15 years, independent of political tendencies within the respective municipality</li> <li>Reliable project structures, integration into the federal net- work</li> <li>Trustful and constructive contact between agen- cy/environmental agency and companies</li> <li>High personal commitment of all participants</li> </ul>
Key recommendations and lessons learned	ÖKOPROFIT depends on the cooperation between the municipality and industry. Early integration of the relevant institutions is, therefore, important
From the experience with this project, what advice should be given to other cities or regions when pursuing a similar pro- ject?	The acquisition of participating companies is always a special chal- lenge. The attractiveness of the program for the respective local cir- cumstances must be carved out. Notwithstanding its standardization, the program has sufficient flexibility to achieve this.
	Networking is a central component of ÖKOPROFIT. The responsibil- ity to create the adequate structures to enable networking lies with the municipality.
	In 2015, a special training to introduce ÖKOPROFIT in Poland was offered in Graz. Several participants were trained as "ECOPROFIT Manager in Poland" on that occasion. The project has, however, not yet been initialized in Poland.
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## 2.2.5 Case study 5: City of Rostock

Name and brief description of the case study	
City	Rostock Inhabitants: 204.167 <sup>12</sup> Characteristics: City on the Baltic Sea coast, large harbor
Name of the project	Klima-Aktionstag (Climate Action Day)
Project timeframe	Annual event since 2009, ongoing
Sector (e.g. transport, energy, build- ings)	Overarching event on local activities in several sectors, in particular on mobility and living in the city
Short description of the problem addressed What problem or challenge was the project aimed at solv- ing?	To increase urban mobility while improving on the local traffic situa- tion, that often suffers from a high share of individual traffic is a chal- lenge for many cities. Since the topic affects all inhabitants to a different extent and with different aspects, it can prove very demanding to discuss ideas and create a good exchange and – where possible – the largest consen- sus possible. The Klima-Aktionstag aims to bring the topic and discussions to the public and not only raise awareness but to include citizens in a recur- ring format. Using a central public space that is usually used for (car) traffic, the event brings the topics of sustainable urban traffic and living to a wider public.
Project initiation Who initiated the project? Project management Who manages (managed) the project within the administra- tion?	The project was initiated in 2009 by the local working group on "Cli- mate Change and Mobility". The working group itself is a local initiative that began under the Agenda 21 process in 1999. Partners in the working group include the members of the city's administration and other regional and federal partners such as the Deutsche Bahn AG (national rail company), the Allgemeine Deutsche Fahrrad-Club (national bicycle club), and the Rostocker Straßenbahn AG (local transportation provider).
Short description of what was done This can include e.g. initiative, outline/plan, decision-making processes, project start, mile- stone(s) and evaluation.	The event includes actions and presentations of local climate action projects, in particular in the mobility sector. It takes place in the Euro- pean Mobility Week (every September) since 2009. The project aims to engage citizens in discussions and widen their knowledge on opportunities to play their part. In 2009, it was for in- stance demonstrated how much space a bus at full capacity saves compared to the same number of people in individual cars. In the following years, the focus turned towards cycling. In 2012, the event location was moved from the main square (in front of the council hall) to the main street, locking the street down from car traffic and freeing up all parking spots. This allowed to use the space

<sup>&</sup>lt;sup>12</sup> On 31 December 2014, see http://www.statistik-mv.de/cms2/STAM\_prod/STAM/de/bhf/index.jsp.

Name and brief description of the case study		
	usually taken up by (individual) car traffic for stalls, presenting local activities and initiatives. In recent years, this included for instance awarding Rostock's most cycling-friendly business, carbon neutrality efforts in the city's administration, e-mobility, and others. <sup>13</sup>	
Estimate of project costs	The project is organized by the working group "Climate Change and Mobility" (see above on project initiation)	
If possible please distinguish between personnel costs and direct costs.	The project has increased in scope over the years. The project budg- et for a single year's event is set to 30.000 EUR in total, including the set-up of a stage and technical equipment.	
	In addition, the partners contribute person hours to the preparation and implementation of the event.	
<b>Results</b> Please provide a brief descrip- tion of the project results, in particular the project's impact on the residents of the affect-	The change of location in 2012 has resulted in an increase of partici- pation. For 2015, the number of visitors was estimated between 7000 to 8000. The project itself has not been evaluated yet. However, since the event aims at awareness inclusion and the change of preferences	
ed area. This can include: CO2- reduction (if possible), partici- pation increase and possible health benefits.	directly related CO2-reduction effects could not be measured.	
Stakeholder participation	Stakeholder participation is at the core of the project:	
Please describe the forums of "influence" for stakeholders (e.g. businesses, citizens, utilities, banks, sports clubs and churches). To what extent and how were citizens involved in project planning and implementation?	The city's citizens are the main target group but also included in the planning and implementation of the event. Local initiatives, business- es, artists and individuals are invited to contribute to the planning process with their ideas. During the event, they can use the available space to present their initiatives and activities on sustainable living in the city of present.	
	The city of Rostock. The city provides the framework – and with its partners from the work- ing group – the main program points, but the additional content is open to participation. Also in the main program, the city invited in past years for instance schools, local businesses and cyclists to present their activities or to award them for their participation in local-level climate action.	
Innovative elements	Innovative aspects of this project are in particular the focus on show-	
Please provide a brief descrip- tion of any aspects of the pro- ject that were particularly in- novative or unique (e.g. con- cept, technology, financing methods, participation).	(mass) traffic to alternative uses	
	Focusing with its use of the location on the sustainable use of urban space and sustainable living, this event is set apart from "regular" public festivities (that might also mention climate actions). Using the main street through the city centre and parking lots in such a different way challenges the existing perceptions of the usually occupied urban space. It also aims to reach people that are usually not focusing on climate action by putting them into the center of it, using a familiar area for this rather unfamiliar purpose.	

<sup>&</sup>lt;sup>13</sup> For more details, see http://www.radregion-rostock.de/aktionen/klima-aktionstag/. For the most recent event on 11 September 2016, see http://www.radregion-rostock.de/aktionen/klima-aktionstag-2016/.

Name and brief description of the case study	
Drivers of success	Main drivers of success include:
What element(s) was most important to the success of the project (e.g. personnel/staff, long-time/short-time perspec- tive, (sustainable) financing and participation)?).	<ul> <li>The continuing work over years within the organizing working group, enabling to create a routine cooperation between the participants and constructive feedback;</li> </ul>
	<ul> <li>Early and open-minded involvement of local initiatives and societies in the process, but also including residents in the di- rect neighborhood;</li> </ul>
	<ul> <li>Low entrance barrier with a variety of offers; focusing on in- teraction (incl. networking), fun and entertainment;</li> </ul>
	• Discussions on the ecological footprint go beyond the "classi- cal" environmental protection approach.
Key recommendations and lessons learned From the experience with this project, what advice should be	The key recommendations mainly mirror the drivers of success: As a main recommendation for similar approaches, the early inclusion of the main local stakeholders (and close coordinating with the neighborhood of the event) stands out.
given to other cities or regions when pursuing a similar pro- ject?	The annual repetition of the project (via its annual link to the Europe- an Mobility Week) allows using different aspects or sectors of climate action as a focus. Over the years, this allows to continue discussions on local developments, and also make the project to a regular city event.
	In cities where a forum already exists for the exchange of stakehold- ers on mobility issues, this project could build on existing local dis- cussions.
	The size of the project can (and should) be up- and downscaled to fit the size and activity levels in climate action of the city.
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## 3 Summary overview

The selected case studies follow different approaches to the development of local low-carbon initiatives. Their approaches are described in the following categories:

- (Overarching) Sustainable urban planning and coordination: be it on sustainable mobility (Sustainable Urban Mobility Plan, Bremen) or with an approach that covers several sectors (InnovationCity Ruhr, Bottrop) including private households and businesses (see also aspect below).
- Target-group specific programs: Aiming at energy consumption and energy efficiency in private households (Energiekarawane, Schwabmünchen) and companies (ÖKOPROFIT, Wiesbaden), or in a broader approach to several stakeholders (Klima-Aktionstag, Rostock).

While more details and recommendations can be drawn directly from the case studies and from the provided contacts in the respective cities, this section provides a brief overview on specific aspects in the areas of participation, innovation and key elements of success.

### 3.1.1 Participation

Looking at the case studies from an angle of their participation, it should be distinguished between the two categories mentioned above.

Municipality **planning** can include citizens and businesses at various stages of the process with very different methods and to varying degrees. This can range from purely internal administrative decision making procedures to stakeholder initiated processes that are later picked-up and joined by the administration. The two case studies of this report that focus on planning (Bremen and Bottrop) are two good examples of projects that included an extensive participatory approach, using different multipliers:

- Bremen offered several ways to participate in the scenario development for its sustainable mobility plan, including an online participation tool (with a low barrier of entry for participation), regional forums and exhibitions in shopping centers on weekends.
- The InnovationCity coordination in Bottrop included planning on a larger scale with about 200 projects in a variety of sectors. This resulted in an invitation for ideas by the citizens via an online form but also via five citizen workshops and an additional workshop for businesses.<sup>14</sup>

The **target-group specific programs** also depend on the participation of stakeholders. However, their role is not necessarily within the stage of gathering ideas and minimizing conflict by early-on exchange of arguments but as the beneficiaries of the programs. Without convincing the respective target group, the projects cannot fulfill their aims. This holds true for advising private home owners (Energiekarawane in Schwabmünchen) to invest in efficiency measures, or for businesses participating in consultations and trainings (ÖKOPROFIT in Wiesbaden). The case study on Rostock shows an example of including local initiatives and societies in the planning stage of the annual Climate Action Day as well as in the implementation of the event by inviting them to participate with their ideas and activities.

#### 3.1.2 Innovation

The innovative aspects of the selected projects show new angles on how to approach local challenges. The examples included in the study show the use of new methods of participation and/or process coordination or even a new approach to the contents that a local program can include.

Online tools play a role in the citizens' participation in the cities of Bremen and Bottrop. Lowering the thresholds for participation while offering also in-depth discussions (see stakeholder forums in Bre-

<sup>&</sup>lt;sup>14</sup> See http://www.icruhr.de/index.php?id=276&L=1. The German version also contains a link to the protocols and results of the workshops, see http://www.icruhr.de/index.php?id=282&L=.

men or citizens' workshops in Bottrop), widens the range of participation while maintaining a flow of more detailed input and the benefits of "traditional" participation formats.

Using a coordinating entity on the regional level (InnovationCity) with a "holistic" approach, spanning a whole range of sectors, can also be described as an innovation: If coordinated in a transparent way for the participating cities and stakeholders, the sheer amount of activities and stakeholders can increase the likelihood of synergies between different projects and foster the exchange between cities on the one hand and of stakeholders within the respective cities on the other hand.

The Energiekarawane project (Schwabmünchen), ÖKOPROFIT (Wiesbaden) and the Klima-Aktionstag (Rostock) aim for approaches to include previously inactive stakeholders: house owners, business owners, and local initiatives in general. In the case of the Energiekarawane, this is achieved by putting the focus on a specific district within the municipality with a kick-off event, an outreach and information campaign and – the main element – sending consultants from door to door. While the basic idea for the ÖKOPROFIT project has been implemented in Wiesbaden already in the year 2000, the big flexibility of the project allowed it to scale from small to large companies and allowed it to be still relevant until the present day. The Klima-Aktionstag not only showcases initiatives in a public setting but also uses the events' location itself to raise awareness on the use of public space, its role in urban mobility concepts and potential alternative forms of use.

#### 3.1.3 Key elements of success

All chosen case studies highlighted a number of key elements of success. As main elements were identified:

- Commitment by all of the participants;
- Trustful cooperation between the administration and local stakeholders;
- Persistance (during the project) and continuity, in the project's organization as well as in its offers to the public;
- Visibility of the project (or making the project visible);
- Different channels of inclusion (not "one size fits all"), making use of existing flexibility.

For further information, please see more specific descriptions in the tables above and reach out to the respective contacts for additional questions.

# 4 Annex I: Template for the Case Studies

City	
Name of the project	
Project timeframe	
Sector	
(e.g. transport, energy, buildings)	
Short description of the problem addressed	
What problem or challenge was the project aimed at solving?	
Project initiation	
Who initiated the project?	
Project management	
Who manages (managed) the project within the administration?	
Short description of what was done	
This can include e.g. initiative, outline/plan, deci- sion-making processes, project start, milestone(s) and evaluation.	
Estimate of project costs	
If possible please distinguish between personnel costs and direct costs.	
Results	
Please provide a brief description of the project results, in particular the project's impact on the residents of the affected area.	
This can include: CO2-reduction (if possible), par- ticipation increase and possible health benefits.	
Statement on project outcome from the re- sponsible agency	
Optional	
Stakeholder participation	
Please describe the forums of "influence" for stakeholders (e.g. businesses, utilities, banks, sports clubs and churches).	
To what extent and how were citizens involved in project planning and implementation?	

Innovative elements Please provide a brief description of any aspects of the project that were particularly innovative or unique (e.g. concept, technology, financing meth- ods, participation).	
Drivers of success	
What element(s) was most important to the suc- cess of the project (e.g. personnel/staff, long- time/short-time perspective, (sustainable) financing and participation)?	
Key recommendations and lessons learned	
From the experience with this project, what advice should be given to other cities or regions when pursuing a similar project?	
Contact	

# 5 Annex II: Declaration of Bremen

Third European Conference on Sustainable Urban Mobility Plans, Senator for the Environment, Construction, and Transportation, Free Hanseatic City of Bremen:

#### Bremen Declaration on Sustainable Urban Mobility Planning in Europe

Mayors, political representatives and transport experts of numerous municipalities and regions in Europe and beyond, are assembled in Bremen on April 12-13th, 2016 for the 3rd European Conference on Sustainable Urban Mobility Plans.

While recognising that European guidance documents exist on sustainable urban mobility planning, Bremen and other European cities demonstrate that it is possible to breathe life into a planning document by grounding the plan in the experience and context of a city with all of its large and small challenges. The purpose of this document is to place the EU's sustainable urban mobility planning guidelines firmly in the context of the reality of European cities.

The third annual SUMP conference focuses on an efficient and people-focused city as a core objective of Sustainable Urban Mobility Planning. Following on the conference themes, this declaration emphasises some cornerstones of content and process:

**1. When talking about transport efficiency, look first at efficient use of street space.** Street space is a limited and precious resource. Efficient transport means providing accessibility for people and for business activities with a minimum of technical infrastructure. Congestion data demonstrate that walking and cycling are extremely space efficient and cycling cities have low congestion levels. We need to look more closely at more efficient use of space as a starting point for efficient urban transport.

**2.** Put people ahead of vehicles. Decades of car-oriented development has claimed more than its share of public space. Liveable streetscapes put walking and cycling at the forefront and the movement of people ahead of the movement of vehicles. Data is often lacking on non-motorised modes of transport – particularly walking. We need to understand what motivates people to use non-motorised modes of transport to foster their use.

**3.** Address the changing transport challenges for business. Cities are nodes of business development. Trade and services are core activities in cities – requiring transport of people, goods and information. Increasing e-commerce is creating new challenges for delivery transport. We need to combine good logistic concepts, intermodal transport and a range of old and new concepts for clean vehicles – including pedal-powered delivery services – to innovations such as 3-D printers in order to deal with the current and future problems of freight transport.

#### 4. Plan your city and its mobility together.

Spatial planning and urban design strongly impact mobility patterns. SUMPs are not a repair shop for car-orientated spatial planning but a foundation for future development. A certain density and an orientation toward the needs of sustainable transport modes are pre-requisites for environmentally-friendly travel behaviour. Low-car housing developments can play a role in affordable housing strate-gies –by reducing the costs of parking infrastructure and removes the running costs of car ownership. We need to better integrate mobility into spatial planning and urban design.

**5.** Consider simple solutions first and use technology appropriately. Technology should be used as a tool to achieve goals, not as a driver or as a goal in itself. Wise cities use technology to serve the needs of their citizens. For example, while electric cars can help to achieve climate goals, they do not solve the problems of congestion and space consumption. We need to support and enable the use of the simplest, most efficient modes of transport before promoting less efficient modes. Sometimes no-tech and low tech may be the smartest solution.

**6.** Put use ahead of ownership. Urban space suffers under the number of private cars – both moving and parked. Public transport is one form of shared transport but, thanks to new technology, other forms exist today such as ride sharing, bike sharing and car sharing that can help improve transport efficiency, save street space and reduce transport-related emissions. Car sharing helps to reduce the number of cars in our cities. The potential at the European level is huge but unexploited: 500,000 cars could be taken off the road in European cities – but it is not incorporated in European strategies. We need to better integrate the concept of use over ownership into local, national and European strategies.

**7.** Enable people to participate in shaping their city. The ultimate goal of SUMP is creating the kind of cities in which people want to live, work, raise families and grow old. In order to achieve this, planning processes should involve as many groups and individuals as possible, ensuring that the needs of under-represented groups are accounted for. New online tools and creative outreach methods can help to make the process more transparent and relevant and to connect people with decision-makers. The process needs to be honest so as not to raise false expectations and so that goals are realistic and achievable. As transport is a politically sensitive subject we need to explain objectives and involve citizens in a transparent way.

**8. Be prepared to face future challenges.** Urban mobility constantly faces new challenges. Ongoing digitalisation carries both potential and risks. Autonomous cars are currently being developed but the potential impacts of these technological developments on urban transport systems, which are widely discussed by the media, are not being discussed by municipal and regional governments. Without the early involvement of policy makers, these developments could thwart the goals of many SUMPs. Use of scenarios in plan-making can support the establishment of strategies for dealing with these developments and set a framework for their application. Cities need to be involved in the debates around new technology and its impact on cities in the future.

This declaration was presented at the 3rd Annual European Conference on Sustainable Urban Mobility Planning in Bremen, Germany, 12-13 April 2016 and will be available for further electronic discussion by a wider audience at www.eltis.org until Friday, 13 May 2016.