

WORKSHOP REPORTS

I.VIIROSTOCK

WORKSHOP DATES AND LOCATIONS

The first workshop was held on 04 December 2014 in Rostock at the *Gästehaus Lütten Klein*, a typical East German “Plattenbau”⁴, and consisted of a presentation and discussion of the initial assessment results as well as a vision-building exercise. The second workshop took place on 29 January 2015 at the *Hanse Messe Rostock*, a modern exhibition ground, and included a presentation of the city’s existing climate protection plan (“Masterplan 100% Klimaschutz”), a prioritisation of the measures identified in the Master Plan as well as a back casting exercise for these measures.

PARTICIPANTS

The first workshop was attended by 19 out of the 20 invited stakeholders, with one leaving right after the start due to other commitments. In addition, the POCACITO team was represented by Ecologic Institute with Max Grünig as the POCACITO project coordinator, Doris Knoblauch as the workshop moderator, and Stefanie Albrecht as the note taker. Fourteen out of the 16 invited stakeholders as well as Doris Knoblauch and Stefanie Albrecht from Ecologic Institute attended the second workshop. Most participants from the first workshop also attended the second one. The stakeholders represented a wide range of decision-makers in Rostock. The main expertise was in the sector of energy, transport, city planning, engineering, waste management, and research. Environmental NGOs were somewhat underrepresented. Most participants knew each other from the “Energiebündnis” – an alliance that meets regularly to discuss energy issues. The following table gives an overview of the participants, their organisation, and attendance for each workshop:

Table 22: Workshop Participants

TITLE	LAST NAME	FIRST NAME	ORGANIZATION	WS 1	WS 2
	Albrecht	Stefanie	Ecologic Institute	x	x
	Arnim	Andrea	Environmental Agency Rostock	x	x
	Böhme	Steffen	Waste Disposal Rostock GmbH	x	x
	Brückner	Ralf	Craftsman Association - Kreishandwerkerschaft		x
	Czech	Thomas	Tenant Association - DMB Rostock e.V.	x	
	Dengler	Cindy	Engineering Consultancy GICON GmbH	x	
	Matthäus	Holger	Environment & Construction Senator	x	
	Grünig	Max	Ecologic Institute	x	

⁴ A building made with precast concrete slabs.

TITLE	LAST NAME	FIRST NAME	ORGANIZATION	WS 1	WS 2
	Hübel	Moritz	Engine & Energy Research - FVTR GmbH / LTT, Uni Rostock	x	
	Kaufmann	Britta	Waste Disposal Company - EVG Entsorgungs- und Verwertungsgesellschaft mbH Rostock	x	x
	Knoblauch	Doris	Ecologic Institute	x	x
Dr.	Koziolok	Dagmar	Environmental Agency Rostock	x	
Dr.	Lembcke	Hinrich	City Planning Agency - Amt f. Stadtentwicklung, Stadtplanung und Wirtschaft		x
	Krase	Bernd	Public Utility Stadtwerke Rostock AG	x	
	Ludewig	Mario	Public Utility Stadtwerke Rostock AG	x	x
	Nispel	Hanno	Water Provider EURAWASSER Nord GmbH	x	
	Pfau	Rudolf	Pensioner Council Seniorenbeirat Rostock	x	x
Dr.	Preuß	Brigitte	Environmental Agency Rostock		
	Rath	Christian	Waste Disposal Company - EVG Entsorgungs- und Verwertungsgesellschaft mbH		x
	Retzlaff	Kai	Industry Association IHK zu Rostock	x	x
	Riedner	Klaus	Engineer Association Verein Deutscher Ingenieure BV M-V e.V.	x	x
	Schulmann	Peggy	Public Transport Rostocker Straßenbahn AG	x	x
	Schumacher	Susanne	Environmental NGO BUND M-V e.V.	x	
Dr.	Sielberbach	Karsten	Water provider EURAWASSER Nord GmbH		x
	Söffker	Ulrich	Energy NGO BUND-Projekte Energiewende	x	x
Prof. Dr.	Weber	Harald	Uni Rostock, Inst. f. Elektrische Energietechnik	x	
	Zander	Kerry	Environmental Agency Rostock	x	x

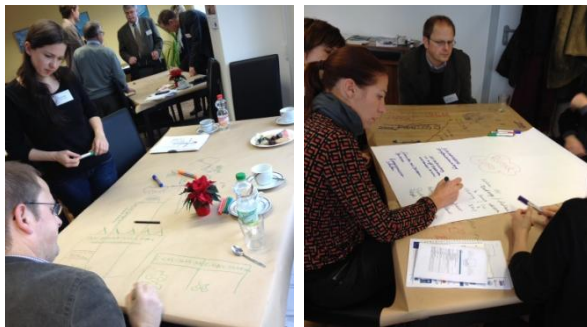
I.VII.I METHODOLOGY AND RESULTS FOR VISION BUILDING

The first workshop started with Holger Matthäus, Senator for the Environment and Construction of Rostock, welcoming the participants and Ecologic Institute. Max Grünig and Doris Knoblauch thanked him and introduced Ecologic Institute, the POCACITO project, and gave an overview of the day. Doris Knoblauch, the workshop moderator, then initiated a discussion of the term *post-carbon* (in German “kohlenstofffrei”). It was discussed and rejected by the participants as it implies that “one has to stop breathing” and it was agreed that the term *post-fossile* was preferred.

Following the first round of discussions, Max Grünig presented an overview of the social, environmental, and economic indicators collected during the initial assessment of Rostock. These indicators were criticized as Rostock had already gone through relevant data and time-intensive discussions during the development of its *Masterplan 100% Klimaschutz* – a climate protection

programmed to reduce CO₂ by 95% until 2050 compared to 1990 levels. We agreed that it is necessary to check this data again and update the Initial Assessment Report.

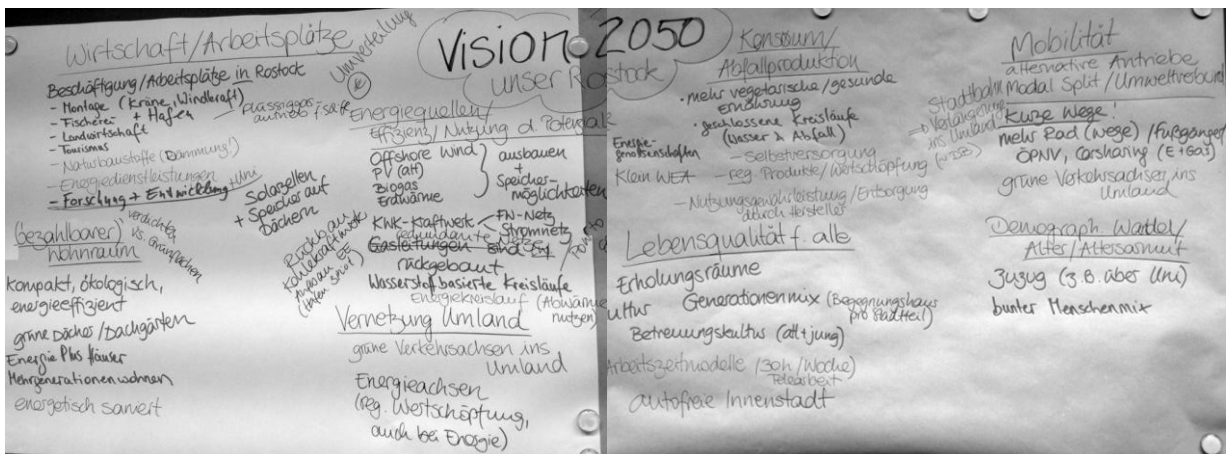
In a first step, critical challenges were identified that were kept in mind during the following vision-building exercise. For the vision-building exercise, stakeholders sat in groups around four tables by self-selection upon arrival. When encouraged, two people changed their spots before the drawing process. Each group was then asked to begin drawing their 2050 vision for Rostock. During the exercise, each group rotated four times. Staying in the same group constellation for most of the time, they discussed and continued the drawings on other tables. Two to three people drifted away from their groups or remained at tables when asked to rotate. Two POCACITO team members were nearby to answer questions, remind the groups of their initially identified eight themes, and motivate them



to draw the vision. One POCACITO team member stayed more in the background and took notes and photos.

At the beginning, all stakeholders were too timid to draw their part of the 2050 vision. After an initial conversation and agreement on an idea within the group, one person would usually start the drawing on the table. The groups were of

different sizes; the largest group engaged in much conversation whereas the smaller groups tended to focus on drawing. One expert found it too difficult to draw, but expressed his vision later verbally. Many ideas emerged and were discussed and some drawings were repeated on the next table. The interpretation of the drawings on each new table took some time. Finally, all four groups went back to their initial table, interpreted the drawing, and summarized it on a flip board paper (see below for a description of the outcome). Each group then presented their results. Lunch was held in the canteen of the same building. One POCACITO member stayed back and put together the four group visions on one larger paper. After lunch, each point was checked for completeness and consent in the vision



synthesis. The final vision can be found in the

subsequent section, The 2050 Post Carbon Vision for Rostock.

MAIN SECTORS IDENTIFIED IN VISIONING A FUTURE FOR THE CITY

After engaging in conversation, the group of experts identified eight areas of challenges and strengths that were to be discussed for the 2050 vision:

- Economy/Employment,
- Mobility (Alternative Drives, Model Split/Public Transport Network),
- Consumption and Waste Management,
- Quality of Life for Everyone,
- Working with demographic change/old-age poverty,
- (Affordable) Living Space (vs. Increased Building Density/Green Spaces),
- Energy Sources/Energy Efficiency/Using the Potentials,
- Networking with the Region.

THE 2050 POST-CARBON VISION FOR ROSTOCK

ECONOMY/EMPLOYMENT

- Focus on and support the assembly sector (cranes, wind power).
- Fishery & harbor (liquid gas operation of ships).
- Agriculture & tourism as focal areas.
- Promote natural building material (insulation).
- Encourage energy services.
- Enhance research and development within the city and at university.

MOBILITY (alternative drives, model split/environmental associations)

- Short distances- more bike (way) s/pedestrians/public transport, Car sharing (E&Gas).
- Green transport axis into the region.
- City train – extension into the region (Deutsche Bahn).

CONSUMPTION/WASTE MANAGEMENT

- More vegetarian/healthy diets.

- Closing cycles (water, waste).
- Self-sufficiency.
- Regional products/value adding.
- Warranty on usage/recycling by producer.

GOOD QUALITY OF LIFE FOR ALL

- Rehabilitation spaces.
- Culture.
- Generational mix (meeting center per district).
- Supervision/care culture (old & young).
- Working time models (30h/week, home office).
- Car-free city center.

DEMOGRAPHIC CHANGE/AGE/POVERTY IN OLD AGE

- New arrivals (e.g., through the university).
- Heterogeneous people.

AFFORDABLE LIVING SPACE

- Compact, ecologic, energy efficient.
- Green roofs/roof gardens/solar panels on roofs.
- Energy-plus buildings.
- Multigenerational living.
- Energy refurbishment.

ENERGY SOURCES/EFFICIENCY/USING THE POTENTIALS

- Offshore Wind, PV (old), Bio gas, geothermal – further develop and increase storage capacities.
- Cogeneration plant (district heating grid, electricity grid) – dismantle redundant grids/Power to Gas.

- Dismantling the coal-fired plant, develop renewable energy (harbor 3 Mio. EUR).
- Hydrogen based cycles, energy cycles (utilize waste heat).
- Solar panels on roofs.
- Liquid gas operation of ships.
- Energy cooperatives.
- Small wind energy plants.

NETWORKING WITH THE REGION

- Green infrastructure axis into the region.
- Energy axis (regional value-adding, incl. energy).

REFLECTIONS

At the start of the first workshop, the atmosphere was a distant “wait-and-see” – criticism was openly expressed and some existing power structures between the participants hindered a fully open interaction. Due to Rostock’s Master Plan, stakeholders were already thinking about concrete measures and the exercise to build a vision initially proved difficult as they felt past this process. However, the atmosphere became more relaxed throughout the workshop as participants were warming up to the project idea and very motivated to compile their 2050 vision. A variety of sectors were covered, with a focus on the energy sector, which included the most specific visions and measures. There was a consensus that the second workshop should to be more related to the Rostock Master Plan. Furthermore, the participants were curious to see what other POCACITO cities are doing. Concerning the methodology, we followed the technique presented in the training workshop almost exactly, i.e., stakeholders were asked to draw a vision, summarize their drawings, and organize their ideas to form one city vision. However, the last step was not done using a mind map since stakeholders had the impression that everything was related to each other so they only made a summary. A mind map based on the vision will be created by the Ecologic Institute and presented to the stakeholders at the sensitivity model workshop. The vision building methodology worked quite well and although stakeholders were skeptical of the drawing exercise during the first workshop, during the second back casting workshop, they expressed appreciation that a vision-building exercise was previously performed (see below).

I.VII.II METHODOLOGY AND RESULTS FOR BACK CASTING SCENARIOS

METHODOLOGY FOR BACK CASTING WORKSHOPS

The second workshop was adapted to the needs of the case study city and hence, the back casting methodology was modified. The objective was to therefore priorities the existing measures identified

in the Master Plan and align them with the POCACITO 2050 vision. Obstacles, opportunities, and milestones of implementing these measures were identified through the back casting exercise.

Prior to the workshop, the *Energiebündnis* (energy alliance) met for two hours at the same location. There was no desire by the *Energiebündnis* participants to share their discussion points. Some of them stayed for the workshop but the majority of workshop participants arrived independently from the energy alliance meeting. After a short break, Doris Knoblauch, Ecologic Institute, welcomed the participants and started an introduction round consisting of everyone presenting something personal, partly from their wallet. Afterwards, Kerry Zander, Environmental Agency Rostock, presented the Masterplan 100% Klimaschutz. Ms. Zander gave an overview of the goals, some exemplary measures, and the obstacles of this CO₂ reduction programmed. Stefanie Albrecht, Ecologic Institute, followed by summarizing the results of the vision-building exercise that took place during the first workshop as a basis for a renewed prioritization of the *Masterplan 100% Klimaschutz* and identification of additional measures necessary to reach the 2050 vision.

Afterwards, everyone had time to look at the 44 Master Plan measures. The participants were asked to evaluate the measures using a point-awarding system based on their priority, acceptance by the target group, and probability of implementation. Each participant was given five points to highlight one or more measures across these three categories. The measures were presented on a flip chart and participants gathered there or came to the chart later with a list of measures to be marked. Furthermore, the economic efficiency of the measures was assessed through written comments. One participant added additional comments regarding the content of the measures. Afterwards, a discussion began on the key measures identified in the area of transport, construction, energy management within businesses, and energy provision for the city. Analyzing the evaluation at a later stage, the following measures were rated as the top 10 priorities. Moreover, according to the Rostock Master Plan, the top three measures were further evaluated as economically efficient and potentially high CO₂ reducers (highlighted in bold below). The number in brackets refers to the *Masterplan 100% Klimaschutz* identification number.

- Strengthening the public transport system (V1),
- **Climate protection and construction planning (SV13),**
- **Implementation of energy management systems (GI5),**
- Conceptualization for the conversion of the heating and power plant “Marienehe” to renewable energy (EV3),
- **Increasing the share of long-distance heating for homes; 80% supply rate in apartment constructions (EV1),**
- Conceptualization of improved urban-rural transport linkages (V3),
- Obligation for municipal businesses to provide an energy report (SV15)
- Conceptualization of educational projects for energy efficiency in schools/ kindergartens (PH2),
- Establishment of energy cooperatives/ climate funds (EV6),

- Energy concept buildings (SV9).

During the back casting exercise that took place after lunch, all 44 measures were classified on a timeline and the milestones and further challenges were discussed.

KEY POINTS OF THE SCENARIO

The Rostock stakeholders were mainly focused on the years 2015 to 2020 and did not focus on a longer time frame due to uncertainties regarding the political and technical developments in the long term.

Some measures identified in the Master Plan have been completed and many are currently running or are to be finished by 2020. A few measures were added in order to reach the 2050 vision. The table below gives an overview of the measures, responsible actors, milestones, and deadlines as well as opportunities and obstacles.

TIMELINE	MASTER PLAN + ADDITIONAL MEASURES, BOLD = HIGH PRIORITY	ACTOR	MILESTONES, DEADLINE	OPPORTUNITIES, CHALLENGES
finished	Analysis of the potential of regenerative energy in Rostock	Municipality	2013	Low potential: Water (geographically unsuitable), wind and energy crops (no space). Medium potential: Geothermal (good usability; but undesirable inefficient competition with existing solutions may emerge); waste & grey water are already used as sources of energy. High Potential: Solarthermics for heating and photovoltaic for energy generation. Share of renewable in energy consumption: 4%.
	Consumer climate saving book	Private HH	2013	direct saving incentives through vouchers
	Online information platform for local energy supply options in Rostock	Municipality	since 2011	ongoing updates, promoting private investments for climate friendly energy options
	Waste company using LED-advertisement	Waste company	2013	energy savings
	Waste company driver training	Waste company	finished	incentives for eco-friendly driving, diesel savings
started	Energy-oriented housing refurbishment	Public transport company	to be finished by 2020	energy savings/sqm
running	Concept climate-neutral municipalities	Municipality	to be finished by 2020	energy savings, role model function
running	Implementation of the communication concept for the Master Plan	Municipality	ongoing	supporting climate protection actions, informing & motivating citizens
running	In city climate protection planning, development & construction	Municipality	ongoing	especially influential during the conceptual phase e.g., through guidelines; environmental reports; long-term CO ₂ - reduction; difficulties in internal acceptance
running	Obligation for municipal businesses to provide an energy report	Municipality		support energy efficiency in municipal companies
running	Conceptualization of educational projects for energy efficiency in schools/ kindergartens	Private HH	yearly	support energy efficient behaviour
running	Information on independent individual energy advisory services for home owners / tenants	Private HH, energy alliance		spill-over effects in energy efficiency

TIMELINE	MASTER PLAN + ADDITIONAL MEASURES, BOLD = HIGH PRIORITY	ACTOR	MILESTONES, DEADLINE	OPPORTUNITIES, CHALLENGES
running	Public information and education events for energy efficiency in private households	Private HH, municipality, service companies	ongoing	spillover effects in energy efficiency
running	Executing thematic campaigns, e.g., city cycling, climate action day	Municipality Private HH	ongoing	spillover effects in energy efficiency; missing project carrier
running	Participating in a national energy saving project for low-income households	Private HH, NGOs, employment agency		spillover effects in energy efficiency
running	Including more businesses and industries into the energy alliance	Energy alliance, municipality	ongoing	strengthening energy alliance, improved data base
running	Information on funding for qualified individual energy consultation for businesses	Municipality		website, start now!, spillover effects in energy efficiency
running	Coordination of group projects for energy efficiency such as regular energy tables, ÖKOPROFIT	Municipality	ongoing, min. 100 businesses until 2020	energy alliance is exchanging on this, spillover effects in energy efficiency, average energy reduction of 1,5% p. a.
running	Implementation of energy management systems in businesses	Businesses, service companies	ongoing	financial incentives should turn this into a sure-fire success, SMEs probably have higher implementation barrier and should be supported
running	Influence user's behaviour; solar systems; extend storage systems; energy-oriented refurbishment; thermal pumps, optimizing heating surfaces, new concepts (plasma toilettes, grey water use)	Housing company	to be finished by 2050	reducing electric/heating energy by 36% (compared to 2010 levels)
running	Topic area heat (services, industry, commerce)	University Rostock	ongoing	reducing electric/heating energy use per sqm
running	Introducing a workplace mobility management scheme for the municipality incl. Fleet management, increasing bike and public transport use	Municipality		emission reduction, role model function

TIMELINE	MASTER PLAN + ADDITIONAL MEASURES, BOLD = HIGH PRIORITY	ACTOR	MILESTONES, DEADLINE	OPPORTUNITIES, CHALLENGES
running	Increasing the share of long-distance heating for home's room heating, in apartment constructions 80% supply rate	Public utility	objectives: by 2030: 70% of the housing market are covered and profitability is reached; until 2050: 53% of total heating demand covered by long-distance heating	other sources of energy can be fed into long-distance heating systems
running	Checking options on new wind energy parks (on/offshore) close to Rostock with physical network into Rostock	Public utility and further actors	ongoing request	obstacle: connection of operators; shares are checked
running	Foundation of energy co-operations / climate funds	Private initiative, Agenda 21 group, initial support by municipality	ongoing	increase share of, acceptance and participation in renewables, one citizen coop exists, further should emerge; obstacles: commercial management missing
running	Staff training in energy and climate protection	Municipality	ongoing	new: extend training target group to politicians & city administration
running	National energy saving campaign	Municipality	to be finished by 2015	awareness raising and energy saving
running	Energy saving competition in schools	Municipality	to be finished by 2015	support energy saving action, reduce energy consumption
	Study on sewage sludge disintegration, heat usage & energy management systems	Water supply company	to be finished by 2020	reducing electric energy use by 28% and heating energy by 10% in 2050 compared to 2010 levels
2015	Master Plan data bank system + maintenance	Municipality	to be finished by 2015	long-term, efficient controlling
2015	Website + maintenance	Energy alliance, municipality, service provider	asap	efficient communication, obstacle: not possible on municipality website
2015	Planning guide energy and construction / energy standards	Municipality	to be finished by 2015	technical efficiency, minimum standards, role model function
2015	Municipal energy management	Municipality	ongoing, property management evaluation finished	project hangs between divisions

TIMELINE	MASTER PLAN + ADDITIONAL MEASURES, BOLD = HIGH PRIORITY	ACTOR	MILESTONES, DEADLINE	OPPORTUNITIES, CHALLENGES
2015	Energy concept for buildings	Municipality		identify energy efficiency potentials, have more concrete energy efficiency measures, using renewables
2015	Inspection of the technical facilities at the waste management company for options on energy optimization, demonstrating energy saving potentials	Waste company		reducing heating energy demand by 10%, increasing security at facility
2015	Feasibility of heating oil substitution in the compost plant	Waste company		saving 30.000l heating oil/year
2015	Strengthening the public transport system (developing a future mobility plan)	Municipality	mobility plan by end of 2015 and prior that: third public forum, commuter survey	the public utility and public transport company are working on a mobility strategy
2015	Conceptualization of improved urban-rural transport linkages	Municipality, regional municipal association		reducing individual motorized traffic
2015	Construction of solar system "Old Gasworks", 1 Mwpeak	Public utility	land use plan is with city mayor, response pending	increase in share of renewables, electricity generation by 0.9 GWh/a
	Use of efficient technology (Green IT), improved user behaviour, space reduction, energy-oriented refurbishment	Municipal construction department	finished by 2020	reduce electric energy consumption by 5% and heating consumption by 15%
2016	Sustainable procurement catalogue	Municipality		improve energy efficiency, reduce negative environmental impact, role model function
2016	Continue energy efficient street lightening	Municipality, public utility		reducing energy use
2016	Development of a energy & climate protection concept for the industrial area	Municipality		obstacles: interested parties missing
2016	Develop a mobility management concept for improved rural-urban transport linkages in regards to a mobility central and a bicycle station at central station	Mobility coordinator, planning association, municipality, service providers		reducing individual motorized traffic

TIMELINE	MASTER PLAN + ADDITIONAL MEASURES, BOLD = HIGH PRIORITY	ACTOR	MILESTONES, DEADLINE	OPPORTUNITIES, CHALLENGES
from 2016 onwards	Energy-oriented city refurbishment & quarter management	Municipality	integrated city concept to begin in 2016	reducing energy consumption in historical buildings, using national funds
2018	Technical refurbishment of the heating & power plant Marienehe	Public utility		securing expansion potential of the long-distance heating system
2016/17	Green-IT in municipality	Municipality		energy reduction, role model function; obstacles: staff capacities
2030-2050	Conceptualization for a conversion of the heating and power plant "Marienehe" to renewable energy	Public utility	starting 2025	high CO ₂ -reductions; obstacles: technically difficult to assess and realize, last gas turbine change in 2014 leads to another 20 years of status quo run time - this investment pays off esp. if future focus is on Power2Gas
to be added	Roof-top solar systems			obstacles: housing companies have held back, for the cooperatives it is difficult for legal and tax reasons as energy production is not major operational field

The city's measures are mainly transport and energy related. The consumption and waste management part of the vision was discussed shortly through the concept of *sufficiency* where individuals question their wants and needs, asking what they really need, and hence reduce their resource and energy use. However, this proved to be too abstract for the participants to deduct measures. During the final discussion, the stakeholders highlighted the following main **opportunities**:

- The Master Plan should be considered by all decision makers in all sectors in Rostock or at least those responsible for implementing the measures, which is not yet the case,
- The energy alliance could host a showcase event where participants of the Master Plan present their implementation status, which would further strengthen the overall acceptance and understanding of the Master Plan,
- Focus could be placed on the prioritized Master Plan measures,
- Rostock has a lot of ambitious projects (see table of Master Plan measures above)

The following **challenges** were expressed:

- The city of Rostock will not be able to do this alone, financial support and expertise is needed.
- The implementation of measures may be disrupted by unforeseeable dynamics and technical developments,
- The concept of *sufficiency* is necessary, but difficult to mediate.
- Conflicts of interest exist: e.g., establishing or sustaining green space vs. building a compact city with high mobility and short distances (soil sealing)

BACKGROUND SCENARIOS, ROBUSTNESS OF ACTIONS, FEASIBILITY

Concerning the methodology, the technique presented during the training workshop was used only to a certain extent. This was due to the fact that the city of Rostock has gone through the process of developing a master plan in which they list measures to reduce the city's CO₂ emissions by 95% until 2050 and to raise energy efficiency by 50% compared to 1990 levels. As a result, the workshop had to include and build upon the measures listed in the Master Plan. This is why we started by listing and prioritizing the existing measures before applying the technique as presented during the training workshop, i.e., we put the actions on a timeline, discussed the obstacles and opportunities, and tried to add to the measures listed in the Master Plan.

However, although it was clear to the participating stakeholders that the measures listed on the timeline would not be sufficient to reach the 2050 vision, they were not ready to discuss measures beyond 2020 (with an exemption of two measures, see above). This was because of two reasons: On the one hand, participants could not imagine the world beyond 2020 and thus, could not think of any measures to be added for that time period. On the other hand, stakeholders did not want to make any commitments in the given context. The underlying background is that the majority of the participating stakeholders regularly meet in the framework of the *Energiebündnis* to discuss the

implementation of the measures listed in the Master Plan. Participants thus had the impression that they would commit to actually having to implement the measures if they would suggest them. Although it was highlighted by the moderator that the exercise was exactly about designing a theoretical future (as a first step), stakeholders refrained from making suggestions because, for the time being, they are busy implementing what they have already agreed upon earlier. This eventually led to the end of the discussion, although the atmosphere was still positive and constructive.

There was a common sense that more actions are necessary in order to actually achieve the 2050 vision. This is why the background scenarios were not discussed in order to check the robustness of the measures since they do not go far enough anyway. This is also the reason why no special check was done on feasibility: There was common sense that the measures already listed are indeed feasible and further critical measures could not be added.

I.VII.III GENERAL REMARKS

During the workshop, it was a challenge to balance participants' wants and needs with the POCACITO project methodology. Although not all opportunities, threats, goals and milestones were worked out for each Master Plan measure, the adapted methodology worked well with and structured the extensive existing measures.

Furthermore, participants gave very positive feedback after the workshop and agreed that the discussions helped establish a shared mental model of the vision for Rostock as well as a common understanding of the purpose of vision-building exercises in general. Towards the end, a discussion evolved on the concept of vision building and some expressions of doubt were countered with the comment: "with dreams reality begins".

The participants expressed the following wishes or suggestions for the next workshop:

- Information on ideas and factors of success of other cities,
- Exchange with other cities regarding the development and implementation of a master plan,
- Experts showing new options e.g., in regards to demographic change, technical options
- Special measures should be worked on more intensely e.g., e-drive, heating supply
- The inclusion of stakeholders from the health sector, which was not represented in the previous workshops

In Rostock, the measures for climate protection are well planned for the next five years. However, participants did not identify the necessary measures for the years 2020 to 2050 due to the unforeseeable technical and political developments. More concrete milestones and indicators can therefore improve long-term planning and decision making.