TANGO-W

Transformative capacity in energy-food-water

Vision 2050

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Disclaimer

About TANGO-W

The TANGO-W project is an applied research project that develops urban transformative capacities (UTC) as a novel governance ability at the interface of food, energy, and water. TANGO-W follows Wolfram's (2016) capacity building approach, adopting a needs and requirements-based focus on the capacity building priorities of urban stakeholders. At the heart of TANGO-W is the two-level capacity building approach. At the urban level, TANGO-W designs and implements Urban Living Labs 2.0 (ULL). At the European level, TANGO-W establishes a transdisciplinary Community of Practice (CoP) as an integrative coordinating transformation system. Both provide the spaces for the development of UTC according to the needs of urban actors in several dimensions (i.e., transformative governance formats, shaping new transformation roles, self-organisation, and technical skills and tools). At the same time, the ULLs and CoPs act as novel governance formats at the local and EU levels to accelerate urban change in a desired, sustainable direction. The activities of TANGO-W result in policy recommendations for replication and upscaling measures as well as in training concepts and pilot courses that support capacity building in TANGO-W fellow cities.

Technical references

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Version	Date	Author	Summary of changes
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1.2	30.08.2022	Peter Biegelbauer	First review
1.3	30.08.2022	Stjan Melhus	Second review
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Executive summary

This document is the formulation of the TANGO-W vision that was developed during the workshop on the 20 to 21 June 2022 in Vienna between the members of the TANGO-W consortium.

The two images (TANGO-W Vision, TANGO-W Roadmap) were created by Karin Hoffmann. They represent a summary of the core statements of all project members on the application fields "Water, Food, Energy and Governance" by means of "Graphic Recording" and offer a good overview of European core topics and medium- and long-term goals. The text was formulated by Doris Wilhelmer (AIT) on the basis of the workshop documentation and graphic recording images and will subsequently be reviewed and supplemented by project members responsible for the single topics.

The core statements and goals of the present TANGO-W vision are to be understood on the one hand as a first, common rough orientation and on the other hand as a framework for the planned, local vision development processes in the seven TANGO-W cities in Austria (Klagenfurt, Weiz), Sweden (Stockholm, Norrtälje), Norway, and Lithuania.

The results of the planned local vision development processes are then to be combined with the present TANGO-W overall vision to form an overall document for the purpose of differentiation and concretisation. The final document will then serve other cities as a good practice guide of how coordinated vision development processes can be carried out between different EU cities and what exemplary results can be expected.

We wish the reader a lot of fun and look forward to feedback!

Introduction

The TANGO-W project

TANGO-W project brings together researchers as well as local and regional authorities to strengthen European municipalities in their capacity of change towards more sustainable and resilient cities. The project addresses the three most critical areas for human well-being - energy, food, and water - and their interrelation. The TANGO-W project therefore promotes urban transformation capacities (UTC) at the interface of energy, food, and water in seven Urban Living Labs 2.0 (ULL) in Austria, Sweden, Norway, and Lithuania. By establishing a transdisciplinary community-of-practice (CoP) transformation system, TANGO-W aims to drive transformative change at the social, organisational, technological, and economic levels.

Goal and process of the circular TANGO-W vision development process

The first TANGO-W CoP workshop from 20th to 21st June 2022 in Vienna brought together all project partners for the first time in a vision development process. The workshop objectives included the development of a vision for transformable, CO_2 neutral European cities and the definition of long and medium-term strategic goals from a European perspective.

This TANGO-W vision provides a rough strategic framework for all planned steps within the experimental TANGO-W real laboratories in Austria, Sweden, Norway, and Lithuania. Its core statements and goals are intended on the one hand as a first, common rough orientation and on the other hand as a framework for the planned, local vision development processes in the 7 cities Halden, Marker, Campus Roslagen in Norrtälje, Stockholm, Alytus, Weiz and Klagenfurt. All 7 cities are invited to develop or update their own local strategic agenda and to include topics that have not yet been considered in their own objectives and bundles of measures.

The "rough" TANGO-W vision presented here is expected to be reformulated at the local level by setting local-specific priorities and formulating necessary and feasible objectives in the short and medium term.

In a third step, the seven local visions will be merged with the overall TANGO-W vision and made available to other cities as an overall document. The aim is to show how a strategic agenda setting towards transformable, CO_2-neutral European cities can be carried out and which exemplary priorities for European cities such circular vision processes can lead to.

Result 1: The TANGO-W vision image

This image was created by Graphic Recorder Karin Hoffmann (INKOMMUNIKATION; unikat@karinhofmann.com; http://www.karinhofmann.com/): The core statements refer to interpretations of VISION images developed and drawn by the TANGO-W partners in 4 working groups for the application fields "Water, Food, Energy and Gover nance". The task for the working groups was to develop a positive utopia for the respective field of application and to illustrate its effects on life in European cities.

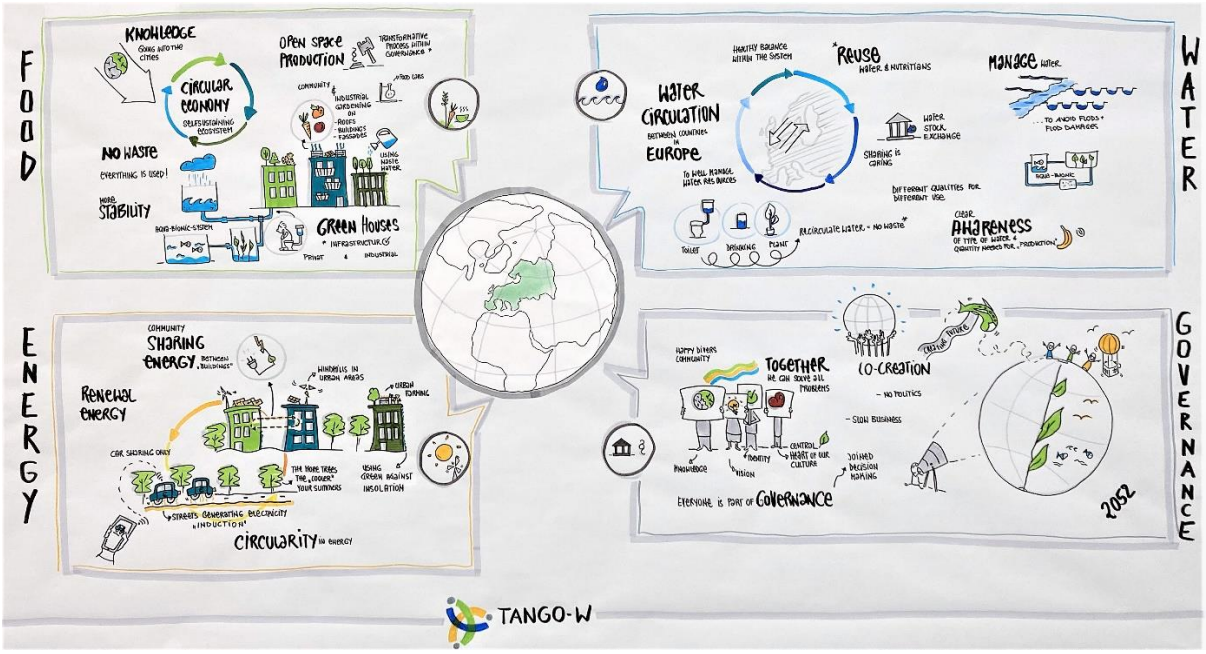

Figure 1. TANGO-W Vision 2050 (Source: Karin Hoffmann, CoP WS Vienna 20-21 of June 2022)

Result 2: The TANGO-W roadmap graphic

The roadmap graphic presented here was also created by Graphic Recoder Karin Hoffmann: The core statements represent the backcasting results of the 4 thematic groups for the application fields "Water, Food, Energy and Governance" . The task for the working groups was to look back from 2050 and describe the milestones that had enabled the positive transformation of their respective field of action towards the positive Vision 2050. They were asked about measures with a leverage effect and points in time at which central actors were able to turn the transformation into reality. The central steps of change are shown on the timeline per field of application in the picture by Karin Hoffmann (see below).

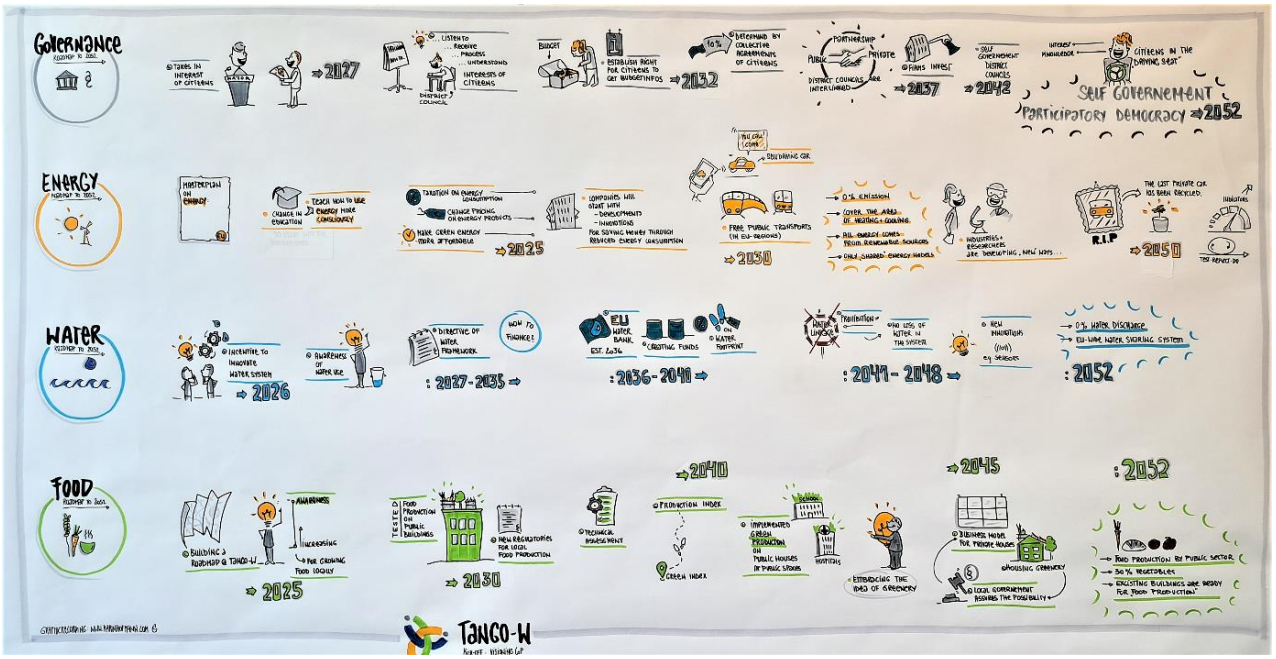

Figure 2. TANGO-W Roadmap 2022 to 2050 (Source: Karin Hoffmann, CoP WS Vienna 20-21 of June 2022)

Result 3: Description of the TANGO-W vision

Basically, we assume that without water and energy, life could not exist in this world. Water and energy are prerequisites for life for all plants and animals/humans. The quality and extent of these resources thus set clear limits to the possibilities of biodiversity and life on earth.

The production of food and energy and other public goods is based on these preconditions as a form of human "cultivation experiments". The development and use of technologies are understood here as interventions in the ecosystem just as much as the development of strategies, programmes, regulations and processes that seek to regulate the nature of interventions in the ecosystem for the conservation of the ecosystem and the overall well-being of all people. From this perspective, governance becomes a momentum of meta-reflection and thus a prerequisite for questioning the effects of human routines on nature and biodiversity/humans and correcting them in the direction of a sparing use of natural resources as prerequisites for life.

Everything is connected to everything else: The unpredictability of the interactions of complex organic and social systems has often been described in detail in constructivist-systemic approaches.

If we want to remain capable of action as human beings, then we need heuristics in between, which, as models of simplification, enable us to analytically identify central drivers and possible high-impact measures. As long as we do not confuse these models with reality and keep in mind that they are temporary decision-making aids but not descriptions of reality, they help us to decide on actions for change in a desired direction and thus make change more likely.

He who has only a hammer sees only nails: The fact that the effects of human interventions do not correspond to the intended goals in a high percentage of cases and therefore have to be continuously questioned and corrected is assumed as a fundamental approach for every intervention planning in the circular process of "hypothesis formation - intervention planning - implementation - evaluation". Above all, the involvement of all research partners in the vision development process helps to increase the complexity of intervention planning and thus to bring negative effects back into view more quickly.

From this perspective, the division into the four application fields "Water - Food - Energy - Governance" made in the TANGO-W vision development process represents an analytical separation of complex life contexts into simplified perspectives. In the context of vision development and action planning, it should help us to identify opportunities, threats and interactions in sub-areas more quickly and to develop assumptions about where to start and with which levers in order to stop dysfunctional developments in European cities and regions or to steer them in more desirable directions.

In this sense, we ask the readers, where the integration of all four fields of application as facets of an overarching picture has not succeeded from their point of view, to carry out this integration themselves and thus support us in keeping the significance of the individual descriptions as clear as possible.

Minimum water footprint for a good life 2050!

Weather turbulence has made unpredictable floods, hurricanes and extreme heat periods in European countries the new normal in 2022 and increased the call for a pan-European solution strategy. A new European Water Directive for the protection of all citizens was the answer: on the basis of this Water

Directive, the European Commission was able to make groundbreaking changes in the years between 2027 and 2035 and thus implement a new way of dealing with water throughout Europe.

A first important step towards the careful use of the precious resource water was the gradual establishment and expansion of a pan-European water management system. The next quality leap was achieved through the widespread use of local treatment facilities and reduction of water leaks, which enabled the continuous local recirculation of water for plants, toilets, and in some examples also as potable water etc., and thus contributed significantly to the further reduction of (drinking) external sources for potable water.

Based on lessons learned from the first research projects, an indicator-based impact monitoring system was developed and implemented to measure the water footprint of all relevant actors (municipalities, industry, citizens, etc.). The knowledge of the range of possible water consumption of different target groups then enabled the use of effective incentive measures from 2026 onwards for users, who achieved a particularly low water footprint and thus contributed to the success of the pan-European water cycle economy through their daily actions.

In 2036-2040, regulations and incentives to reduce water consumption finally laid the foundations for the establishment of a common EU water bank: the registration of existing water resources in the newly created European water bank made it possible for the first time in 2037 to test new types of sharing and distribution schemes between northern and southern countries - while at the same time creating water banks for future droughts in Europe. Today, in 2050, these sharing systems are indispensable, as they have created high added value for all European countries.

Step by step to success: In addition to regulations and incentive measures, from 2035 onwards, ecological, technological (e.g. use of sensors), legal, economic and other optimisation measures of the European water management system led to the fact that the uncontrolled loss of water could finally be stopped in 2041 - 2048. The interplay of all expertise and measures ultimately made it possible that today, in 2050, a fair, circular economy-based water sharing system is in use throughout Europe.

It is time to celebrate: The comprehensive, self-optimising, circular EU water management has been in full operation since 2041. The careless use of water has been replaced by a circular and conscious use of water by industry, citizens, public authorities, etc., which allows for a constant replenishment of reserve banks during daily operations without any loss of quality of life. In 2050, water has become an "important commodity" for fair trade between northern and southern countries. The enforcement of "aquaculture" has put a stop to water liberalisation efforts and thus corporate profiteering across Europe and opened the doors for the new, sustainable EU water-sharing system. Declining mortality rates of vulnerable populations in EU countries in response to widespread, healthy diets with local produce are seen by the health system as a success of these efforts.

Today, in 2050, the value of water is highly respected by all European citizens. Each individual supports the careful use of water in his or her own sphere of influence through conscious consumption and the use of individualised recycling and recovery systems. In 2050, settlements, offices, production sites and private homes act as consumer and recycling nodes within local water networks and are encouraged and supported by municipalities in saving water through the ongoing optimisation of municipal and regional water cycles. The focus is on the effective implementation of multiple use of water by all actors (complete water cycle). This applies to dense housing as well as single-family homes, communal living and co-working projects as well as intelligent production lines and service organisations.

In 2050, these changes have also reached the labour market and increased the demand for professionals throughout Europe: water managers are considered sought-after professionals throughout Europe who are well paid for the responsible use of their high qualifications.

At the same time, a new culture of sharing has taken hold in large sections of the population: Everyone knows that water from rain and floods must be fed into the cycle analogously to service water and kept in the reuse process and managed as long as possible. Press reports and ongoing study visits from the USA, China and Africa show that Europe, with its technological, economic and social innovations, has succeeded in taking a big step in the area of careful use of the precious resource of water.

One thing is clear: the quality and accessibility of water is guaranteed for all regions of Europe, despite ongoing hot spells. Today, in 2050, no one wants to do without effective pan-European water management, which derives its resistance to extreme weather events precisely from its decentralised logic. Lush green spaces and high biodiversity in green EU cities and rural regions are proof of the success of the European way.

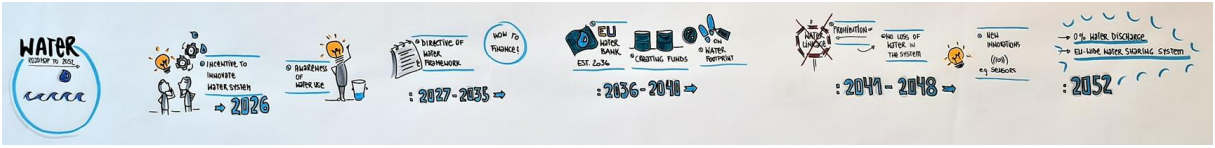

Figure 3. TANGO-W Roadmap, water (Source: Karin Hoffmann, CoP WS Vienna 20-21 of June 2022)

Let's go for collective harvesting and snacking in the public green space 2050!

It all started with the TANGO-W Roadmap 2025: After the first successful steps towards the implementation of an EU-wide water management system, another focus of the European Union and its member countries was to experiment with ways to increase food self-sufficiency in cities. The search was on for urban areas that could be used for greening and thus for urban food cultivation.

Demographic change towards a shrinking population has made access to healthy food for all European citizens a priority issue for the health system. At the same time, it was also a matter of reducing as much as possible the energy wasted by long-distance freight transport for food. In addition, possibilities were sought to use as much space as possible in European cities for greening and water reservoirs in order to counteract the urban heat islands caused by climate change and add biodiversity into the urban greenery. Green spaces in parks, from facades and on roofs invited to rethink urban food production on the basis of functioning, decentralised water management and to move in the direction of expanding the living with increased self-sufficiency of cities. In all these measures, it was always clear that it could never be about food autonomy but rather about compensating for unnecessary transport ways and expanding access to healthy food for all citizens.

Analogous to the decentralisation trend in the EU water management system, the city was also envisaged as a municipal producer for the first time in the food supply in 2025. Accordingly, the first step was to look for possible urban cultivation areas for local vegetable and fruit varieties. These areas included abandoned metro shafts, harbour facilities, former industrial sites, recreational and park areas, facades and roofs of public buildings (city hall, schools, kindergartens, nursing homes, hospitals) and subsequently also of office buildings, factories, housing estates and single-family houses.

In the search for suitable sites, it was important to identify sufficient space not only for community gardening but also for professional and industrial gardening. In addition, experiments were conducted with the use of novel plants as food substitutes for humans and animals. The search was on for plant foods that had a cooling effect on cities and were able to quickly absorb water from heavy rains and make it available to the water system. In keeping with the tradition of the circular economy, a technologically simple separation of plant nutrients from human waste (toilet) and its use on greened house surfaces was also investigated and brought to product maturity.

Despite a few lighthouse projects in the private sector, the pioneering role for the implementation of life-sustaining resources producing cities then fell to the public administration again: initial regulations on greening buildings and industrial production of food on rented building roofs and façades were the impetus for setting up many experimental, applied research projects in European cities in 2030. New, sensor-based irrigation and lighting systems and experiments with different, more or less heat-resistant and extreme water-absorbing plant varieties then led to a broad set of technological solutions. Monitoring of these solutions then promoted the development of the systems to product maturity and certification of systems with the highest effect on cooling and food production in one. Part of these certified systems was the consideration of ecological data on wind and solar incidence or the probability of rain, as well as different building conditions (old or new building, statics, building regulations, planned energy technology, size of facades or roof surfaces). Innovative business models then combined the technological and constructional requirements with suitable plants and irrigation and lighting/shading systems for the first time to create affordable offers for public or private customers. Prototypes and business plans that were implemented accordingly were then checked against the criteria of the green/production index that will still be valid throughout Europe in 2050 and, after positive approval, passed on to innovative companies for replication and upscaling.

By 2040, the time had finally come: across Europe, the majority of public buildings were used for food production. Real labs and findings were used by schools and start-up companies to explore the advantages and disadvantages of single systems in use and to look for ideas for further developments.

Available prototypes, business plans and site visits to functioning systems then led to a multiplication of food-producing greening systems at various locations in European cities and the emergence of a new profession of technology-affine urban food producers.

The search for ways to involve residents or owners in the operation of the systems and for food production that is as demand oriented as possible resulted in novel, agile cooperative organisations. These cooperative organisations brought together operators/producers, consumers and distributors under the umbrella of equal decision-making at eye level in order to ensure the best possible utilisation of all foodstuffs.

Delicious, new types of fruit and vegetables conquered the market from 2040 onwards. The desire to be able to produce them within one's own four walls led to a further development of b2b business plans into business plans for the mass market: single-family homes and rented apartments with large terraces were rediscovered as a possible customer group and approached. This trend was subsequently followed by municipal regulations, which finally allowed all types of buildings for the greening of urban food production in 2045. This meant that all buildings in the city in the areas of living, working, industrial production and public administration were finally accessible.

Today, in 2052, the public sector has become an acute food producer, supplying 30% of the municipal or national demand for vegetables and fruits. European cities, with their green facades, rooftops, underground corridors and park systems, have long become hotspots of biodiversity: In addition to healthy, local products, a wide variety of water areas and pleasant microclimates invite people to linger and collectively harvest and nibble in public spaces.

In 2050, it is clear that urban farming improves the quality of life of European citizens in their cities and, according to official health data, also contributes significantly to increasing the number of years of life spent in good health through the expansion of healthy eating in Europe.

Figure 4. TANGO-W Roadmap, food (Source: Karin Hoffmann, CoP WS Vienna 20-21 of June 2022)

In 2050, we will have an energy-autonomous, green Europe!

Plants and living beings need water and energy. But both resources are becoming more scarce goods on our planet. For energy at least the resources we have used in the past are becoming more scared, but there are options.

The good in the bad: Climate change and the Ukraine crisis have done more for energy transition than most actions in the last decade! Zero emissions and energy transition have become priority goals in Europe in the EU's 2022 Master Plan.

As early as 2023, the TANGO-W project anticipated this development in the areas of experimental research and training and has developed lessons learned from best practices in cooperation with cities and incorporated them into first European training modules and curricula. The findings of many subsequent research projects have supported this path in the long term. The addressees of the EU Master Plan are primarily decision-makers and users in the application fields of "living", "working" and "mobility", i.e. in contexts where energy is produced, exchanged, consumed and recycled.

A first implementation step driven by the EU energy crisis in 2022 (soaring energy prices, loss of Russian gas and oil; little energy from water due to drought disasters, etc.) was the introduction of Europe-wide regulations for the financial support of low energy consumers and for the taxation of large energy consumers at national level. Another important step in terms of economic policy was the obligation, introduced in 2025, for companies to report the amount of energy required to produce goods at the product level and to price it accordingly at different levels. This step increased the demand for technologies for the recovery of used materials and technologies as well as recycled products many times over and thus contributed significantly to the spread of the circular economy and thus reduce the energy consumed for producing new goods.

In addition, the dominant public discourse since 2022 on the expected negative economic and societal impacts of the prevailing energy shortage and thus high energy prices had led to new European mechanisms. These enabled the provision of affordable, ecological energy for all EU citizens and promoted the willingness of companies to invest in technologies and processes to reduce energy consumption: After

the gas shock of 2022, corporate investments in the paper, glass and steel sectors were primarily aimed at increasing energy efficiency through the use of new technologies and processes. Self-Generation of renewable energy in combination with energy saving became the order of the day.

In the area of mobility, the cost explosion of energy had led to a Europe-wide upgrade, standardisation and co-financing of public transport. From 2030, public transport was available to citizens of all EU countries free of charge. In addition, residents of rural communities were able to use self-driving electric cars as a new service of individualised public transport from 2030 onwards. The effect of the concerted efforts across Europe to replace fossil fuels in a sustainable way was that by 2030 we were on the stepping stone towards a zero emission mobility.

Overall, 2030 is considered the year of the successful energy transition: The zero emissions target was also achieved at this time in the areas of heating and cooling buildings thanks to new technologies (vertical windmills, insulation through greening, effective storage systems, etc.). Energy efficiency and new energy production and sharing systems could thus be effectively expanded: Since 2030, energy has only been produced from renewable sources such as sun, wind, geothermal, biomass or biogas and water in both a centralised and a decentralised manner. Decentralised energy is locally stored, consumed and exchanged.

All the efforts and endeavours have proven us right: Today, in 2050, recycling the last privately owned car is celebrated in a big way: Public transport has become 100% accepted as a means of transport and all indicators measuring climate change mitigation point to a positive development. Compared to Europe 2022, the Europe of 2050 has become more autonomous in terms of (energy) economy, security and democracy in relation to the USA, China and Russia, and has established itself worldwide as a reliable and universally sought-after partner for global innovation and peace policy measures.

Figure 5. TANGO-W Roadmap, energy (Source: Karin Hoffmann, CoP WS Vienna 20-21 of June 2022)

The right people in the right place (roles)—Let's share 2050 together!

Since 2018, the JPI UE and Green Deal programmes have led to urban development projects that, in addition to technological innovation, have also increasingly aimed to expand local, participatory governance processes. The need for rapid implementation of the energy transition had made it clear that the 2030 energy goals would remain unattainable without the active cooperation of all citizens using their respective roles in business, education, research, administration, politics and civil society.

Thus, for the first time, knowledge and experience regarding the use of helpful interventions became relevant. However, interventions need a common orientation in order not to interfere with or even neutralise each other. Interventions aiming at the joint development of values, visions and roadmaps, which in turn aim at changing decision-making processes and routines in politics, administration and business, were therefore increasingly in demand. In addition, new roles and decision-making set-ups were to increase the ability of cities and regions to actively develop themselves in the direction of the Energy Transition 2030 and to sustainably manage the upcoming major challenges.

What actually makes mayors successful in reaching such a set of goals? The requirements for successful mayors have evolved and increased: In addition to open communication with all citizens, an orientation on cross-party cooperation and problem-solving skills as well as the ability to see uncertainties as an opportunity for innovation and development in one's own municipality have emerged. In addition, they should actively convey trust in open-ended change processes to all those involved. Standing up for the necessary change makes mayors more vulnerable to critics than before. This requires from them not only a clear vision but also cross-party credibility and trust in successful cooperation with a wide range of experts and decision-makers from politics, administration and civil society.

Only the clear goal in front of one's own eyes and the trust in successful cooperation make it possible to use and further develop existing roles and structures and to use unfamiliar co-creation methods to develop agile, co-creative, municipal development processes. The role of citizens is changing from that of an "object of action" to a "subject" with whom important communal issues are discussed and decided at eye-level.

The new requirements reduce the question of political affiliation in favour of the request for change-agent skills: Standing up for the proven and the new, using proven and unfamiliar structures/methods for the pragmatic and feasible implementation of jointly developed goals are in the foreground in 2027, and have also fundamentally changed the self- understanding of city and municipal councils.

Accordingly, by 2027 it is perfectly normal for all European municipalities to make at least 10% of all budget decisions in cooperation with their citizens. Pioneering municipalities have already reached a percentage of 60% and more.

New roles and structures have also made it possible to involve companies as partners in municipal decision-making processes, where a balance of interests is ensured - in relation to the municipality as a whole and beyond one-sided short-term profit motives. Among other things, this has also led to an increased willingness on the part of companies to invest in public, communal goods and local infrastructures in order to sustainably support the transformation and success of the region.

In 2042, the time has finally come: the basic demands of the 2022 Club of Rome report "Earth for All" on necessary, major turns for stopping global warming by relieving the burden on the planet have finally prevailed in 2030. Common sense in 2050 is that if the political and economic course of the 2020s would have been maintained, humanity would be heading toward further growing inequality and social escalation. Increasing inequality would have led to a further decline of democratic societies in favour of autocracies in 2030 - 2050, as inequality would have permanently undermined trust and thus the basis for collective, long-term decisions benefiting all of society. Everyone knows today, in 2050, that without the fundamental reversal since 2022, average global temperatures would have risen well above two degrees and the climatic and ecological tipping point would thus have been passed in 2040 or even before - with inevitable consequences for millennia.

From 2025, the following five extraordinary turns were pursued by all nations: Ending poverty, eliminating glaring inequality, empowering women, building a food system that is healthy for people and ecosystems, and supporting the use of clean energy.

This has been made possible in part by the shift in the function of political parties away from political power-play to appraisal, negotiation, and quality assurance functions at the regional and nation-state level. When new laws or resource allocation measures are passed, they are scrutinized for a balance of

intended impacts toward the common good, climate and economic prosperity, and are re-honed to limit climate change through the interplay of all national measures. While, in the spirit of representative democracy, party representatives are identified, trained and sent to high-level QA bodies, the task of experts from administration and science is to suggest appropriately balanced laws and measures with citizens and business representatives and to prepare them for QA bodies.

A new feature is that at the local and regional level, non-partisan citizens can run for various municipal decision-making functions in the short and medium term, such as the role of mayor or city councillors. Regular elections and a clear time limit for the assumption of individual roles by individuals or family networks ensure regular satisfaction feedback and regular personnel changes of responsible people in municipalities and regions. Only those who prove themselves in the eyes of all stakeholders can hold a mayoral office for a maximum of 10 years.

In addition, specialists from civil society and business can also apply for time-limited, long-term tasks and roles in the administration. Role structures and processes enable transparent decision-making processes for the maintenance and further development of infrastructure supply-security (energy, mobility, etc.) as well as for the provision of public goods such as education, health, energy, transport.

New, agile organisational and decision-making structures (e.g., sociocracy) have made it possible, with the help of open elections, to use the most available, committed and competent people for a wide variety of temporary community roles. Commitment to the community has thus become a normal intermediate step in many people's life cycle, which also contributes to one's livelihood for a certain percentage of time.

The knowledge of the possibilities and limits of the different municipal roles has increased the viability and goal orientation of participatory democracy by a great deal by 2052. Additionally, it has turned the citizens at the end of 2052 into people oriented towards the common good from the roles as drivers, affected parties and cooperation partners of all political decisions.

Figure 6. TANGO-W Roadmap, governance (Source: Karin Hoffmann, CoP WS Vienna 20-21 of June 2022)