

LOCAL GOVERNANCE

FROM

TO

POSITIVE
GLOSSARY
OF THE ENERGY
TRANSITION



energycities

WHERE ACTION & VISION MEET



LOCAL GOVERNANCE FROM A TO Z

POSITIVE GLOSSARY OF THE ENERGY TRANSITION



This publication invites you to discover the multiple facets of a collaborative city from A-Z, based on our over 25 years' experience of what works well in Europe.

The list is, of course, not exhaustive as the beauty of energy transition is the wide and unlimited field of possibilities that it opens up! What it is proposing however is a change of perspective. As the energy landscape is undergoing radical change, from a once

hierarchical and monopolistic system to a more distributed and decentralised one, so too should the decision-making architecture. Indeed, a new system cannot be designed using outdated models: in writing a new chapter of our history, we must also empower its new stakeholders. We, the local and regional actors, are these new players, through the role we play in mobilizing civil society and SMEs, tapping into the large array of dispersed renewable or locally recovered energy sources and increasing energy savings and efficiency through ambitious building, urban planning and mobility strategies. This publication complements Energy Cities' "30 proposals for the energy transition of cities" with its many case studies.

26 letters, 26 concepts: test them out and scale them up! As a policy-maker, you can get inspired by this positive glossary and write new locally-driven stories to deliver the vision of low energy territories with high quality of life for all!

Enjoy your reading!

Dr. Eckart Würzner, President of Energy Cities & Mayor of Heidelberg (Germany)

A

Agency

(Local Energy
and Climate)

A true collaborative city needs to develop places where it can interact with its citizens and local stakeholders to drive the energy transition. A local energy and climate agency is an effective way of creating these links. Such a local team of energy and climate experts will recommend best energy management practices for the local community. This can range from information and guidance through to coordinating partners in specific projects.

...inspired by

Brasov (Romania)

Thanks to its dynamic and committed local energy management agency, ABMEE, created in 2003, the Romanian city of Brasov has rapidly defined its energy policy and pioneered sustainable development in the new Member States. ABMEE not only raises awareness through measures such as educating children about soft mobility, but also provides technical assistance and advice and promotes sustainable development among local communities.



► www.energy-cities.eu/cities/proposal_detail.php?id=22

► www.abmee.ro

B Buildings

Housing policy is crucial for cities to provide better living conditions. It is not only about using technical solutions when renovating existing buildings or constructing new ones. To improve energy efficiency, indoor comfort and thereby health over the long term, cities have to encourage dialogue between architects, engineers and housing managers on the one hand, and owners and tenants on the other. From consultations to co-housing schemes, a collaborative approach ensures that buildings are designed in line with people's housing needs and used in the most efficient way.

...inspired by
Freiburg (Germany)

The Vauban solar district features 92 passive houses and 10 “positive energy houses”. In the late 90s, the Vauban district was created in a participatory way, as right from the start of the project, residents were able to voice their interest by taking part in thematic working groups. Their views were then integrated into Vauban's design, leading to a high level of motivation and acceptance by citizens.



► www.energy-cities.eu/cities/cities_actions_detail.php?id=1069

C Cooperatives

(energy)

Across Europe, cities and their citizens take action to radically change the energy market. Thousands of individuals are collectively investing in local, renewable resources. As members of an energy cooperative, they take the production and distribution of sustainable and affordable energy into their own hands. Some local authorities are following the example of these post-carbon pioneers and buying into cooperatives. Energy democracy is on its way!

...inspired by **Pamplona (Spain)**

Som Energia, established in 2010, is Spain's first renewable energy cooperative. Supported by the city of Pamplona and others, it produces and sells 100% renewable electricity, thanks to small-scale production plants situated close to its members. Just 100 euros is enough to participate. Today, Som Energia is active throughout Spain and has 22,000 members. With annual generation of 5 GWh, it can power the homes of 2,000 members.



► www.somenergia.coop/es/

D Devolution

D

A wind of change is blowing, as sub-national governments are pushing for their local grids to be taken back under municipal control and to set up their own energy companies. Devolution is needed to transfer powers related to energy policy from national governments to the local level. Further constitutional arrangements to reform the legal and financial capabilities in a number of European countries will give cities and regions the means to decide – with the local community – their energy supply, while creating local added value.

...inspired by **Bristol (UK)**

Bristol is the first city in the UK to establish a municipal energy company. Bristol Energy provides green electricity to UK customers at more competitive and fairer tariffs. The city council is investing 2 million euros into the company, which is set to make a 35% profit within the next 10 years – money which will boost the local economy and help tackle fuel poverty.



► www.bristol-energy.co.uk

E Employment

E

The energy transition offers many economic opportunities. Instead of being viewed as a constraint, low-carbon energy and climate policy is now seen as a source of increased business activity and revenue creation. A city can boost jobs both in the public and private sector by fostering renewable energy and energy-efficiency. New skills are needed in manufacturing, construction, operation and maintenance or services. With effective policies designed with the local community, the city can encourage businesses to engage in the energy transition and create value for the local area and its residents.

...inspired by

Brussels-Capital (Belgium)

The Job-Environment Alliance launched in 2010 wants to create 4,300 green jobs in sustainable construction by 2020. Brussels-Capital has set up a partnership with local construction companies to stimulate their competitiveness with a plan which includes 44 measures. By 2014, the alliance had created 500 jobs and cut citizen's energy bills by 6%.



► www.energy-cities.eu/db/brussels_1323_fr.pdf

F

Funding

F

Ownership models for local power keep money in the community instead of letting it go into the pockets of (multi)national energy giants. In addition, savings will increase as renewable decentralised energy can be expected to become cheaper over time. This is particularly important in times of public budget cuts. Conventional financing systems have shown their limits, thus hampering effective local governance and long-term investments. It is now time to implement solutions combining third-party financing, cooperative solutions, “revolving” funds, etc. And we need financial engineers to design bankable projects.

...inspired by

Stuttgart (Germany)

Since 1995, Stuttgart has used an internal contracting scheme and a revolving fund which is designed to increase energy efficiency and the use of renewable energy, e.g. in public buildings. Different city departments are collaborating and cross-financing energy efficiency measures. No external funds are needed, since all resources come from the municipal budget.



► www.energy-cities.eu/IMG/pdf/dossier_intracting_en.pdf

Governance

(multi-level)

G

G

Local authorities play a pivotal role in multi-level governance: On the one hand, they are the closest level for collaboration with citizens and other stakeholders. On the other hand, they are subject to decisions taken at the regional, national and international governance levels. Policy coherence across the different levels is needed and can only be attained if local authorities are recognized as the node that brings everything together.

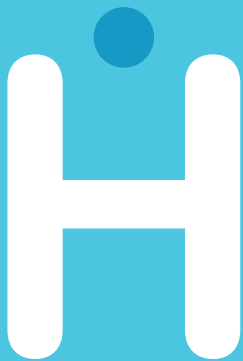
...inspired by

The Covenant of Mayors

The Covenant of Mayors, adopted in 2008, is a prime example of multi-level governance. This unique movement mobilises local and regional actors across Europe to engage in climate and energy action and go beyond the EU's objectives. Over 6,500 signatories, representing 40% of EU inhabitants, are fully supported by EU institutions and have submitted close to 5,000 local action plans to propel territories into a low-carbon future.



► www.eumayors.eu



Habits

H

The energy transition requires people to be prepared to do things differently. Both top-down decision-making and bottom-up actions are needed so that less resource-intensive habits are adopted. The key actors in these change processes are those who are 'in between', those who can rally support among policy-makers and businesses and can engage others in joint action. Local authorities can create a desire for change if they promote and encourage those already active in developing low energy lifestyle options, including by creating the appropriate infrastructure.

...inspired by
Besançon (France)

In 2009, Besançon launched the "200 climate-active families" initiative to curb the rise in domestic energy use and household waste. Families are shown how to limit their energy use and waste production, e.g. through workshops or home audits. The project has been a success and in 2011 was extended to Besançon's twin city, Freiburg. 170 families in Besançon and as many in Freiburg have joined the initiative.



► www.energy-cities.eu/cities/proposal_detail.php?id=24



Involvement

The involvement of stakeholders brings many benefits for cities. Harnessing the wisdom of the crowd can result in a city taking bolder action or focusing on issues it had not previously considered. The collaborative approach also transforms the city into a more inclusive, innovative place. Engaging locals as partners can take many forms, from consultations to delegating the creation of an energy plan to citizens.

...inspired by
Odense (Denmark)

Odense's Sustainability Puzzle helps sustainability to be considered in all aspects of a project. The puzzle has 3 pieces representing the social, economic and environmental fields of sustainability. Thanks to the puzzle, participants find new ideas to integrate sustainability into their projects. It is an innovative tool used by employees in all city departments of Odense.



► www.energy-cities.eu/db/Odense_involvingadmin_politics_sustainability_puzzle_2014_en.pdf

j Justice

One goal of the local energy transition is to bring about greater social justice, tackle fuel and energy poverty and improve living conditions for all citizens. An effective tool can be a local fuel poverty eradication plan – an accurate and geo-localized diagnosis of both collective and individual situations. Also, by cooperating with peers in regions of the world that are disadvantaged when it comes to dealing with climate change and resource scarcity, local authorities can show that social issues extend beyond their boundaries.

...inspired by **Frankfurt (Germany)**

In 2009, Frankfurt and the social charity Caritas launched an energy efficiency programme that helps disadvantaged people lower their energy bills. As part of this programme, long-term unemployed people are trained to become energy advisers. Cariteam gives low-income households free advice on how to save electricity and supplies them with a pack of energy-saving items. The project has been extended to 60 other German cities.



► www.frankfurt-greencity.de/en/environment-frankfurt/climate-protection-and-energy-supply/what-we-are-doing/

K Knock Out Fossil Fuels

Produced and controlled in a centralized and top-down way, both socially and environmentally damaging, fossil fuels are remnants of the past. While renewable energy is becoming more affordable and competitive by the minute, the fossil fuel giants can no longer keep up. Now is the time to knock out fossil fuels and give priority to a distributed energy market that drives change towards a sustainable future.

...inspired by

Christchurch (New Zealand)

Christchurch is the first city in New Zealand to divest from fossil fuel companies. In 2014, Christchurch City Holding Limited, the company that holds the city's investments, enacted a policy to no longer invest in "companies whose primary focus is the extraction and production of fossil fuels". With its commitment, Christchurch is part of a growing world-wide community that has decided to redirect its money towards renewables and energy efficiency.



► www.cchl.co.nz



Laboratory

A city, if given autonomy, is the ideal place for experiments. It is a laboratory for new ideas, brought forth by its “engineers” – the local administration, its inhabitants and socio-economic players. They are the city’s intelligence that tests and collectively puts in place large-scale solutions to major issues which often divide and hold back national governments. Encouraging new practices is what shapes open and innovative cities.

...inspired by

Leicester (UK)

It all started in 2005 in the medieval town of Totnes, when permaculture teacher Rob Hopkins chose Totnes as the birthplace of the transition movement. Some 900 Transition Towns are now convinced that local communities should drive the transition towards a post-carbon society. Among them is Leicester, where people are committed to creating a positive and sustainable future for their city, with projects such as community harvesting or swap shops.



► <http://transitionleicester.org.uk/about/>

Mobility

Reinventing the way we move in and between cities by emphasising low-carbon options is key to the energy transition. Car and bike-sharing schemes, extended bike lanes and incentives for public transport are but a few examples of energy-friendly measures with positive effects: freeing up valuable public space, reducing air pollution, stronger cohesion by linking up neighbourhoods. The most forward-looking cities develop their urban mobility plan with the local community!

...inspired by **Essonne (France)**

Supported by the EU Programme LIFE+, Essonne created a mobility platform that informs its users about all travel opportunities, so as to encourage alternatives to car travel such as public transport. This collaborative platform relies both on input from institutional players and from users on the ground. It has been online since October 2014 and received the Innovation Trophy at the Public Transport Show.



► <http://mobil.essonne.fr/>

N

Networking

Networking between cities is crucial to harvest new ideas. Connecting with peers helps overcome limited power and gain a stronger voice. This is equally vital within a city, to prevent a silo mentality from being formed and to create partnerships around common goals. Currently, the role of the city is changing from commander to facilitator working towards shared responsibilities and collective leadership.

...inspired by

Delft (Netherlands)

Delft aims to be carbon-neutral by 2050, but only has an influence on 2% of its territory's emissions. Therefore, it has chosen to become a facilitator to reach its target, by furthering the green projects of its citizens and companies. Through the e-deals programme, Delft is supporting these initiatives by facilitating networking between actors and providing their projects with subsidies and public visibility. For example, e-deals have enabled a school to install solar panels on its roof.



► www.energy-cities.eu/cities/cities_actions_detail.php?id=1308

► www.delft.nl/Inwoners/Nieuws_2015/E_deal_in_Delft

Out of the Box

The current energy and climate challenge is unprecedented. To redefine society, we need to think out of the box. How can we resist to collapse and, instead, come up with many small resilient systems? Going beyond a belief in technology, uniting people from different disciplines, involving arts and culture – this should be part of our path towards a new energy paradigm.

...inspired by **Helsinki (Finland)**

In Helsinki, two artists contacted Helsinki Energi to invent the “Green Cloud”. The “Green Cloud” interacted with residents’ homes and, using laser tracking, projected a green cloud into the sky. The cloud grew bigger as energy use decreased. This experiment made MWh “visible” and raised awareness about energy consumption. Following its success, it was replicated in other forms in Helsinki, such as the “Power Flower”.



► www.energy-cities.eu/cities/proposal_detail.php?id=27

► www.inhabitat.com/green-cloud-hehe-helsinki-environmental-art

Partnerships

P

The energy transition is set to become a success story only if the task is shared by everyone. As each sector has its part to play and its own creative ideas to contribute, uniting public, private and associative players in local energy alliances is key. A partnership enables all stakeholders to express their expectations, enlarge their visions and shape energy policy together. It is a forum to exchange points of view and make proposals. The beauty of it: Competition leaves space for cooperation with unexpected common interests emerging.

...inspired by **Munich (Germany)**

Munich wants to reduce its CO₂ emissions by 50% by 2030, but knows it cannot do so by itself. Therefore, it created the “Munich for Climate” Alliance in 2007, a network of local stakeholders that promotes climate protection. Munich is the coordinator of this highly successful partnership, which has already enabled 60 projects to be created which have reduced CO₂ emissions, such as the “Climate Savings Account”.



P

► www.energy-cities.eu/cities/cities_actions_detail.php?id=1469

Q Quantify

In order to set goals, it is important to first quantify the impacts of a city's energy and climate actions. Collecting a territory's energy data, such as its energy consumption or CO₂ emissions, is a tough, but rewarding task. Collaboration is essential for obtaining the data, not only within the different municipal departments, but also with regional stakeholders like regional energy agencies or technical stakeholders such as Distributed System Operators.

...inspired by **Barcelona (Spain)**

As a signatory of the Covenant of Mayors, Barcelona has developed a sustainable energy action plan (SEAP) in which it sets out the actions that cumulatively will decrease its CO₂ emissions by 23% by 2020. Drafting its SEAP has changed the city's governance, since different departments have collaborated to collect accurate energy consumption data in each sector, in order to best assess where improvements can be made.



► www.barcelonaenergia.com/

R Resilience

Resilient cities and communities prepare for change and cope better with economic, social and environmental crises. It is not only about being prepared and responding proactively to new, adverse situations such as climate change, but more importantly about self-sufficiency and independence while simultaneously cooperating with the outside. A resilient city produces the energy, food and water that it needs locally, and at the same time maintains a high quality of life for its inhabitants by offering them jobs and social activities that keep the city vibrant.

...inspired by
Bistrita (Romania)

In 2012, Bistrita launched a competition between the residents of blocks of flats to reduce their water consumption. 14 blocks for a total of 168 flats participated in the competition. Besides engaging citizens to use the scarce resource water more responsibly, the competition also helped identify malfunctions in the water pipes and meters, thereby improving Bistrita's resilience.



► www.energy-cities.eu/db/Bistrita_involvingcitizens_citizencompetition_water_2014_en.pdf

S Smart Cities

Technology is not everything when it comes to defining a smart city. A city is first and foremost a community of human beings who all have their ideas and visions. These humans are best placed to come up with individual and collective solutions to improve life in the city and enable real change to occur. A city is truly smart when it creates opportunities to harvest this crowd intelligence.

...inspired by
Milton Keynes (UK)

“MK:Smart” is a collaborative initiative which brings together companies, universities and citizens to make Milton Keynes a smart city. Various activities form part of the project, such as encouraging pupils to create smart apps, developing sensors for the water system so that leaks are detected earlier or an open energy map which empowers local communities and businesses to better understand energy trends in their areas.



► www.mksmart.org

Twinning

The challenge of the energy transition is multi-faceted, as it involves a political, social, technical, environmental and cultural dimension. Peer-to-peer exchange between local leaders is a perfect means for stimulating and helping one another, with experiences made across borders. Both cities and their local stakeholders benefit from town twinning, as they exchange best practice models, promote new ideas and pool experiences.

...inspired by **TANDEM**

The TANDEM project, which is jointly led by the city networks Energy Cities and Klimabündnis aims to facilitate exchange between French and German local authorities in the field of local energy transition. This cooperation provides an opportunity to make joint progress by learning from each other's practices and launching and implementing joint cross-border initiatives on topics such as buildings, transport, energy supply or low-carbon plans.



► www.ville-tandem.eu

Urban Planning

Energy and urban planning often work in isolation from one another, even though they are interlinked. Urban planning can be used to control the territory's energy use, e.g. by establishing heat networks. Considering both fields jointly also has the advantage of bringing energy specialists and urban planners together and combining their know-how to create an integrated urban agenda.

...inspired by
Utrecht (Netherlands)

The railway station of the future is in Utrecht. "Utrecht Centraal" is subject to a major renovation programme that involves thermal retrofitting and developing a new neighbourhood. Aside from becoming energy-efficient, the future terminal will integrate all modes of transport and provide citizens with direct access to trains, trams and buses. Users will also benefit from a wealth of services, such as new cultural facilities.



► <http://cu2030.nl/page/ovterminal>

V Vision

In an increasingly unpredictable world, cities must more than ever develop a vision of their future, imagining a sustainable tomorrow that makes sense and brings hope. By uniting people, local authorities manage to overcome diverging interests and conflicting ideologies on what tomorrow should look like. The collaborative city co-builds with its inhabitants a long-term vision of the low-energy city with a high quality of life for all.

...inspired by

Dobrich (Bulgaria)

In Dobrich, the local energy roadmap for 2050 is designed at community level. A large number of stakeholders are involved, from city decision-makers or youngsters to the local business community. The document, which is based on the Sustainable Energy Action Plan, sets out the city's vision: improving quality of life and comfort for all at lower costs through decentralized renewable energy and integrated energy efficiency measures.



► www.imaginelowenergycities.eu/IMG/pdf/140822_case_study_analysis_dobrich_final.pdf

W

(Nega)
Watt

We used to consider energy in terms of MegaWatts, of how much energy we produce and consume. The energy debate has shifted to NegaWatts, which refers to the amount of energy we save. Thinking in NegaWatts means “energy efficiency first”. It is about consuming less and better, which results in less dependency on energy imports, lower energy bills and a healthier environment.

...inspired by
**négaWatt Association
(France)**

The négaWatt association is a French energy think tank founded in 2001. It brings together leading energy experts and practitioners who collaboratively come up with the energy solutions of the future. In their “négaWatt scenarios”, the think tank provides an ambitious, but realistic path for an energy efficient, carbon-free, energy independent and energy democratic France by 2050.



► www.negawatt.org

W

X XXIst century

At this beginning of the 21st century, the energy revolution is already on its way. Community energy is blossoming and is providing green, affordable and inclusive energy to citizens. To ensure that we keep on track in the coming decades, it is vital to involve youth in the energy transition. By enabling them to interact with energy and climate issues at an early stage, we make sure that the next generation will continue the work we have started.

...inspired by **Namur (Belgium)**

In 2007, Namur distributed an energy fairy tale called “Lucien l’étincelle” (Lucien the spark) to children aged 3 to 6, to raise their awareness of using energy responsibly. The energy fairy tale turned out to be a huge success and gained hundreds of new, little supporters for the energy transition.



► www.energy-cities.eu/db/namur1_575_fr.pdf

Y

Yes in my backyard (YIMBY) !

Originally, the energy transition is a grassroots movement. Local communities have become the new allies of local authorities in making it happen. Citizens are pooling resources to support the installation of clean energy in their neighbourhoods, such as wind turbines or solar farms. Instead of saying “Not in my backyard”, they are saying “Yes in my backyard!” with creativity and a strong sense of ownership of their low-carbon future.

...inspired by **Växjö (Sweden)**

Växjö wants to become fossil-free by 2050 and will do so through community governance. Its inhabitants and businesses are fully behind the fulfilment of the city's ambitious vision, e.g. by encouraging the installation of biogas and biomass CHP plants in the city. Citizens are also actively contributing to the 2050 goal, by switching to renewable energy, consuming less energy and providing new ideas to the municipality.



► www.vaxjo.se/-/Invanare/Other-languages/Other-languages/Engelska--English1/Sustainable-development/Fossil-Fuel-Free-Vaxjo/

Z

Zero (carbon)

The low-energy city of the future is a city powered by local, renewable energy. The shift to clean and local energy such as the sun or the wind spells the end, sooner or later, of carbon-based energy forms. National, local and regional governments around the world are proving that 100% renewable – in close conjunction with energy efficiency – is technically doable, economically profitable and has lots of social advantages.

...inspired by

Fredrikshavn (Denmark)

Fredrikshavn municipality has developed a strategy plan that aims towards a 100% renewable energy supply and optimum energy consumption for the municipality by 2030. The plan sets out a development strategy for a diverse but coherent renewable energy system, which is based on the three main energy sources of biomass, waste and wind. It is founded on strong and flexible partnerships that mobilise and motivate every local stakeholder.



► www.energy-cities.eu/db/Fredrikshavn_MP-for-Renewable-Energy2030_2014_en.pdf



Energy Cities'

proposals for the energy
transition of cities
and towns

- Empowering local players
- Knowing our territories' resources and flows
- Rethink financing solutions
- Inventing new local governance
- Urban planning as a way of reducing energy use

► www.energy-cities.eu/30proposals



energycities

WHERE ACTION & VISION MEET

www.energy-cities.eu