



Low energy cities
with a high quality of life for all

THE IMAGINE MEMORANDUM



A LOW ENERGY CITY WITH A HIGH QUALITY OF LIFE FOR ALL

THE IMAGINE THINK-TANK MEMORANDUM

January 13th, 2010

*The failure of the COP15 in Copenhagen in December 2009 makes the need for decentralised initiatives even more urgent. We are faced with the challenge of creating **a low-energy, low-carbon city with a high quality of life for all** and an energy supply predominantly based on renewable energy. This will require a lot of imagination, since we have to invent something that does not yet exist, taking long, medium and short-term considerations into account and combining the local, national, European and global levels, whilst mobilising a multitude of stakeholders and citizens.*

*This "Factor 4 city" will be very different from the city we know today. Only **long-term visions** will place us on **a trajectory** that will enable us to successfully pass **interim phases**. This is the challenge of IMAGINE.*

*Although an increasing number of cities are committing themselves to achieving the European objectives, notably through the **Covenant of Mayors**, they are also coming up against a number of obstacles, the most important ones being:*

- *the difficulty for any society and all its elements to imagine, evaluate and accept the extent of the **changes that are needed**, and*
- *consequently, the **weakness of institutional and commercial frameworks** at all levels, which does not encourage transition towards these changes.*

*Helping overcome such obstacles is the objective of the IMAGINE think-tank which is the continuation and prolongation of an initiative called "**IMAGINE the energy future of our cities**" within the time horizon of one generation or more, launched in 2006 by Energy Cities as a platform for **foresight, collaboration** and exchanges, leading to **action and change**. The IMAGINE think-tank unites a number of partners from the public, private and community sectors around Energy Cities, all committed to working together on the basis of this memorandum over the coming years.*

*Through **innovative and creative** work methods, IMAGINE aims to facilitate the transition towards the "low-energy city with a high quality of life for all" and to contribute to enriching the reflections and strategies of social, institutional and economic players at all levels.*

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1. Energy and Territories & foresight: the purpose of imagine

1.1. *Energy and Territories: a new way of thinking through the energy issue in cities*

- 1.1.1. Traditionally broached from an economic or technical point of view, energy has gradually become a cultural, citizen, territorial, civilisational and governance issue.
- 1.1.2. The energy issue has to be tackled considering both the ecological impact of energy use and transformation, especially in terms of climate change, and the impact on fossil resources, a potential source of conflicts, destabilisation and increased inequalities.
- 1.1.3. The availability of abundant energy deeply contributed to the modelling of our lifestyles by freeing Western, and then other, societies from energy-related constraints. Human and economic activities could take place on a territory regardless of its energy profile.
- 1.1.4. However, the predictable future of energy scarcity is likely to not only make territories more vulnerable but also the activities taking place upon them and the populations they host, especially the most socially sensitive.
- 1.1.5. From an environmental perspective, we will have to divide by 4 our greenhouse gas emissions by 2050. This will involve reducing our energy consumption and significantly increasing the share of renewable energy. This will also involve rethinking our mode of development, our societies, lifestyles and territorial organisation in order to make territories more responsible and reconcile them with their natural environment. A territorial approach to energy will improve territorial coherence.
- 1.1.6. Rethinking our mode of development involves gradually changing our energy paradigm, moving towards the so-called concept of “energy subsidiarity”. This involves mobilising in an integrated way and in the following order a) local energy-efficient and energy-saving potentials and b) local and decentralised renewable energy sources, complemented, if necessary, in a concentric way with c) exogenous supplies on the basis of a “bottom-up”, customer and citizen-oriented approach.
- 1.1.7. From an urban practice viewpoint, this means inventing a less energy vulnerable city by integrating (as opposed to separating) energy consumption and production on a large scale, whilst keeping a maximum of energy expenses on the territory, within the local economy.
- 1.1.8. The scope of action goes beyond those sectors traditionally concerned with energy issues (buildings, transport, etc.), to include other areas such as: local food production, transport of manufactured and food products, use of public facilities as opposed to individual ones, use of services rather than products, relations between urban and rural areas, entertainment needs, etc.
- 1.1.9. Therefore, involving society as a whole, and not only conventional energy-supply stakeholders, to co-create integrated energy solutions is a necessity. The responsible participation of citizens and the civil society in inventing sustainable and desirable cities through democratic renewal is also essential.

1.2. *Foresight: target-based challenges and means for achieving them, 2020 versus 2050?*

- 1.2.1. We are faced with energy and climate challenges that oblige us to simultaneously ponder short, medium and long-term considerations.
- 1.2.2. In Europe, the “3x20” objectives by 2020 have proved a powerful instrument to encourage all levels of decision-making and a large series of stakeholders to work in the same direction with common target-based objectives. However, the situation is far from being simple.
- 1.2.3. On the one hand, the -20% objective by 2020 often seems to be “out of reach”, although it is the most easily attainable. Achieving high emission reduction rates is in fact easier when the baseline situation is poor, because the first measures often require only limited adjustments.
- 1.2.4. On the other hand, these objectives are not aligned on the “Factor 4” by 2050 trajectory. Aiming at a - 20% by 2020 target rather than a Factor 4 by 2050 trajectory could end up in stalemate. Focusing only on relatively short-term (2020) measures may lead to difficulties in achieving the post-2020 targets. Our visions have to go beyond 2020 and have to consider the necessary re-organisation / re-thinking of our lifestyle.
- 1.2.5. Of course, action has to be taken as of now, but today’s actions have to integrate long term considerations, which is the heart of sustainability and responsibility. Moreover, a long term vision – that usually provides enthusiasm – is a very powerful stimulus for carrying out short term changes.
- 1.2.6. The city and its peri-urban area must be “redesigned” within a timeframe that exceeds 2020, using a new “arithmetic” and excluding the concept of forecasting which can correct undesired trends but cannot reverse them.

- 1.2.7. It is only by rethinking the city within a broader timeframe (one or two generations) that we will give ourselves the means of introducing a “new deal” – including on a short-term basis - by inventing the “Factor 4 city”, the “post-carbon” city or the “low-energy” city. “Backcasting” methods can help us describe a desirable (and sustainable) future and define the (flexible) strategies needed to achieve it.
- 1.2.8. These diverse methods are there to help define different possible futures (ranging from unacceptable scenarios to desirable visions). In a democratic society, change is not possible without the support, and the desire, of the society. And this is our challenge!

2. A new governance for low-energy cities with a high quality of life for all: the challenge of the IMAGINE think-tank

2.1. *Overcoming a sector-centric logic*

- 2.1.1. Every economic sector, company business, professional, environmental or social protection association is involved -individually and collectively- in sustainable development processes, including through their energy aspects.
- 2.1.2. The same applies to the levels of administration and governance at international and European levels as well as local and regional levels, passing through the national level. All are now self-declared followers of “sustainable development” principles, but they often play in their own court, giving priority to their institutional logic, at the expense of the goals of a true sustainable society.
- 2.1.3. Sectoral action is necessary. The natural trend is that of seeking an optimum within one’s own sphere. Virtually all the players consider energy and climate change issues seriously, but they usually address such issues according to the logic of their own sector or activity. Under the cover of convergence, their routes can, therefore, easily diverge. Such divergence is not abnormal, but we must not be satisfied with it.
- 2.1.4. IMAGINE offers an opportunity to those actors to look beyond all this, towards new time horizons and towards the logic of other players, an opportunity to “stop and look at oneself walking”, “to look for more promising ways of building together”.

2.2. *The territory as a place for integration*

- 2.2.1. Territories are increasingly becoming places for innovation through the way they invent their future; neighbourhoods, mobility, local energy systems, (new) awareness of their responsibilities in terms of energy supply and reduced ecological footprint, etc.
- 2.2.2. This is why IMAGINE aims to carry out its action at a territorial level, that is, a space associated with a form of governance. The territory is indeed -by nature- a “transversal” place where the various sectors act and where the various players have the collective responsibility of organising themselves to live together. This integration concept embraces those of collaboration, co-creation and co-construction all of which the IMAGINE initiative aims to develop at the local level.

2.3. *Engaging stakeholders*

- 2.3.1. The actors influencing – directly and indirectly – energy consumption and supply within a territory are numerous and varied, on both the demand and the supply sides: technological and industrial actors; those from the energy and service industry; craftsmen; consumers; local communities, politicians and trade unions; the academic, cultural and media sectors; public actors; social actors, citizens, etc.
- 2.3.2. All of these stakeholders act directly and indirectly on territories, at different territory levels and shape local markets as well as the supply and availability of products and services.
- 2.3.3. The “territory” offers the focal point for overcoming this “reductionism” induced by sector-based approaches and for optimising pathways towards sustainable urban (energy) systems.

2.4. *Quality of life*

- 2.4.1. The concept of quality of life is essential to IMAGINE as it exposes the sustainable city to the subjective judgment of the citizens (and their various social components) and actors of the territory.
- 2.4.2. Although discussions on how to measure the quality of life have to be carried out, it seems that quality of life can be grossly characterised by the relationships between the citizens themselves (fair city, social city), between the citizens and their environment, between the citizens and the local authorities and between the citizens and the local economy; as well as by the opportunity given to all citizens to access the services they need on an every-day basis and the possibility of giving sense to governance through a feeling of belonging to a given territory, of living together.

3. Feeding the public and private decision-making centres: the objective of the imagine think-tank

3.1. *The relationship between Energy and Territories is not taken sufficiently into account*

- 3.1.1. Public policies largely remain segmented, impervious to one another. The same applies to private companies' industrial and business strategies.
- 3.1.2. Most energy policies, therefore, ignore the territorial issue or reduce it to an energy transmission infrastructure matter.
- 3.1.3. As a quid pro quo, most territorial policies (territorial development, urban planning, transport, local development, etc.) ignore the energy issue.
- 3.1.4. This phenomenon is valid at all public decision-making levels -local, regional, national and European- and also concerns the private sector.
- 3.1.5. Hence, the innovation potential that could be raised by a simultaneous approach to energy and territorial issues is not tapped because it is widely underestimated, not to say ignored.

3.2. *The legislative, fiscal, legal and financial frameworks as well as commercial offers from private companies are not providing sufficient encouragement to bring about these much needed changes*

- 3.2.1. Consequently, the legal, fiscal and financial frameworks in which local decision-makers, anxious to accelerate the transition towards "low-energy cities", operate are not adapted to such challenges.
- 3.2.2. The actual political and administrative organisation of local authorities – vertically integrated and segmented – is also sometimes an obstacle, especially when it comes to establishing appropriate relations with the private sector.
- 3.2.3. As for private companies' commercial offers, they are sometimes too much based on short-term oriented criteria which can, in turn, create confusion amongst public decision-makers. Public and private actors need stable economic signals (fiscal policies for instance) to define their own strategies and policies.
- 3.2.4. Finally, the public funding crisis is likely to compromise the long-term investments necessary to sustainable development, thus forcing local authorities and their partners to imagine new financing solutions.

3.3. *Cities at the heart of the innovation process have started a momentum and existing frameworks are evolving*

- 3.3.1. Despite these obstacles, cities appear as major loci of innovation, especially through their capacity to integrate the various technological, economic and social components that make a harmonious urban environment into their territory. They have started inventing tomorrow, initiating foresight activities and involving local stakeholders.
- 3.3.2. The Covenant of Mayors is a new, innovative initiative that demonstrates the voluntary commitment of local authorities to achieving figure-based targets and illustrates the potentials of a multi-level governance. Its success will largely depend on the capacity of cities to imagine their future using a new energy paradigm.
- 3.3.3. Some significant developments are also taking place under the climate banner at different levels: national legislations are being updated, new fiscal instruments are being introduced, incentive schemes are adapted to the new challenges, banks are modifying their offers and companies are adapting to, or even anticipating, the new paradigm.
- 3.3.4. From a more institutional point of view, the Lisbon Strategy acknowledges the necessity for each policy to integrate "territorial cohesion". It is possible for the energy and climate policy to achieve this by developing, inter alia, new markets, economic activities and local networks.

3.4. *IMAGINE aims to feed the public and private decision-making centres so as to accelerate change processes.*

- 3.4.1. With its innovative work methods, IMAGINE aims to promote the transition towards a low energy city with a high quality of life for all, accelerate such a momentum, induce others and stimulate as many opportunities for change as possible.
- 3.4.2. IMAGINE intends to take advantage of the innovative process that is taking place in the public and private sectors to contribute to enriching the reflections and strategies of institutions and businesses at all levels, including of course European institutions.
- 3.4.3. IMAGINE intends to contribute to the success of the Covenant of Mayors by encouraging local authorities to define long-term visions.

4. A networking think-tank: organisation and commitment

4.1. *Setting up a multidisciplinary and multiplayer think-tank*

- 4.1.1. While focusing on the relationship between Energy and Territories and on the “Low Energy” City with a high quality of life for all, IMAGINE intends to feed the actions of European local authorities, providing lines of thought which are likely to fuel the strategies of the private, community and public sectors by bringing together a wide range of actors who have direct or indirect influence on energy consumption and supply at the local and urban level.
- 4.1.2. A think-tank organised as a multidisciplinary and multiplayer platform is set up to create, share and discuss future-oriented approaches to urban sustainability. This will ensure that energy is recognised as an integral part of local and regional development, with an impact on employment, sustainable growth, competitiveness, quality of life as well as health and safety.

4.2. *Producing and disseminating reflections, strategies and analyses contributing to IMAGINE’s objectives*

- 4.2.1. The IMAGINE think-tank is a place for discussion, and therefore does not seek consensus, but it will highlight dissensus as a basis for further debates. In this light, all voices have to be heard and be made public. Free, open and inventive inputs from participants will be a guarantee of success. Combining inventive and institutional issues are our common challenge.
- 4.2.2. In real terms, the think-tank will share existing information falling under the remit of the IMAGINE objectives and will produce individual and collective contributions, prospective analyses and proposals on the “low energy city” with a high quality of life for all. Seminars and thematic meetings will feed the reflection and collective productions.
- 4.2.3. At the same time, the think-tank will put forward ideas and proposals to put the “low energy city with a high quality of life for all” concept on the agenda at all decision-making levels in the relevant sectors. Every contribution, under the proposer’s own responsibility, will be put on the IMAGINE website – which will become a central instrument.

4.3. *Networking*

- 4.3.1. The IMAGINE think-tank operates as a network. In this context, members will contribute to the strategy and philosophy of the think-tank in various ways: meetings, seminars, free contributions, etc.
- 4.3.2. Each partner will strive to introduce an IMAGINE dimension to their own activities and events, labelling schemes being based on a number of criteria.
- 4.3.3. The IMAGINE website will be the online support and showcase for all these activities.
- 4.3.4. Energy Cities will co-ordinate and moderate the work of the think-tank.

4.4. *Sustainability and originality*

- 4.4.1. The IMAGINE think-tank will only be viable if a significant number of key-players are willing to give the initiative their long-term support and are willing to contribute and take an active part in it from an intellectual, material and financial point of view.
- 4.4.2. The think-tank requires participants to adopt an open-minded attitude, to question themselves, to question their own ways of thinking, and generally, to accept having their usual way of thinking disturbed.
- 4.4.3. The future of the think-tank will also depend on the degree of commitment and capacity of its participants to lay claim to, and use, the IMAGINE concept in a decentralised way.



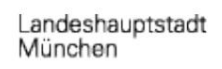
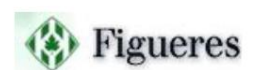
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