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TRANSFORM – Governing the Smart City by Projects

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1 ABSTRACT

With the recent ascendance of a sociology of public policy instruments (Le Gales & Lascoumes 2007), particular interest has been devoted towards understanding the emergence of the project as broadly indicative of wider transformations in strategic urban policy making (Pinson 2007, 2009, Beal 2010). Many Smart Cities are governed by research projects, and these are practically marked by an inherent tension. On one hand, the Smart City research project has the purpose of shaping consensus around acceptable "smart" urban futures, instituting new pluralist political spaces, in which scientific targets are always practically reversible if they do not fit consensus. On the other, the Smart city research project aims to scientifically evaluate what "right" choices have to be made to lead the city towards effective Smart City development in line with supranational targets and climate wisdoms. How can the Smart City research project shape consensus among a multiplicity of institutions, actors and groups while not compromising the scientific validity of the set targets and strategies? Drawing on the experiences of the project TRANSFORM in monitoring and shaping the transition strategies of six European cities, the aim of this paper is to elucidate some of the logics of strategic urban policy processes in their peculiar pathways towards the Smart City. In the course of the paper we would like to show how some of the tensions inherent in the role of Smart city research projects are practically addressed in the local framework of the project TRANSFORM and give a first tentative evaluation whether this has been successful so far.

In the context of stagnant growth prospects and increased territorial competition, the urban project has become a primary vehicle for the promotion of local development. Newly build urban districts, such as Hamburg Hafencity or Aspern Seestadt in Vienna, mega events like the London Olympics, large scale revamps of urban public spaces such as the pedestrianization of Times Square, or the proliferation of cultural venues from the London Megadome to the old butcheries of Casablanca are prominent examples for the spread of the project form in urban policy making. Yet, while the urban project has become a preferred instrument of contemporary urban policy, it cannot be conceived of as a mere effect of the strategies it is embedded in but should be seen as a marker of the very advent of a project-based polis (Boltansky 1999) in which urban governance assumes the logic of the project itself. As has been argued elsewhere((Pinson 2005;2006; Brake 2000) it is a form of metropolitan governance whose primary purpose it is to shape consensus to scientificically elaborated urban development goals by substantively linking urban strategy and its implementation through the social mobilization of different actor constellations, thereby flexibly adjusting the strategic environment to changing external and internal circumstances, and monitoring the actions of local actors and their interests where they are generally segregated.

Smart Cities are governed by research projects, and these are marked by an inherent tension. On one hand, the Smart City research project has the purpose of shaping consensus around an acceptable "smart" urban future instituting new pluralist political spaces, in which scientific targets are always practically reversible if they do not fit consensus. On the other, the Smart city research project aims to scientifically evaluate what "right" choices have to be made to lead the city towards effective Smart City development in line with supranational targets and climate wisdoms. How can the Smart City research project shape consensus among a multiplicity of institutions, actors and groups while not compromising the scientific validity of the set targets and strategies? Drawing on the experiences of the project TRANSFORM in monitoring and shaping the low-carbon transfromation strategies of six European cities, the aim of this paper is to elucidate some of

the logics of strategic urban policy processes in their peculiar pathways towards the Smart City. Drawing on the experiences from the TRANSFORM cities in general and particularly from Vienna in formulating and experimenting their Smart City strategy, we would like to show how some of the tensions inherent in the role of Smart city research projects are practically addressed in the framework of the project TRANSFORM.

In the first part we will provide a general theoretical background to the sociological analysis of the urban project, with particular focus on the challenges on the governance of local climate affairs. In the second part, we shall illustrate this by looking at the TRANSFORM project, first form a European perspective, then from the viewpoint of Vienna.

2 DEFINING THE SMART CITY THROUGH ITS PROJECTS

2.1 The logics of the Urban Project

Since the early 1980s, the Project has consequently substituted the strategic plan as the principal tool for urban policy making. Bounded rationality and uncertainty about the future are endemic conditions of the project-based polis. The Project is thus first and foremost to be considered as an instrument of social mobilization. The determination of objectives and policy goals, rather than from the scientific knowledge of a few experts, engineers and scientists, results by definition from a deliberative, open-ended process of tit-for-tat interactions between a multiplicity of local groups and institutions, private and public perspectives and resources. With the ascendance of the Project, the goal of urban planning has hence markedly shifted from product to process- a concern for the question of what objectives are scientifically accurate and probable is more and more displaced with a concern for what objectives can be consensually agreed upon by a constantly changing actor-network(Healey 1992; 1997). The Project has become a sort of consensus – making machine in which process has as important a role to play as concrete material results or regulatory effects, and in which the "right" choices, rather than emanating from a technocratic definition of truth, are those that permit to ally the greatest amount actors and resources possible around a locally acceptable vision of the urban future (Pinson 2005 p. 199-233). The rise of the Project thereby illustrates a so-called "non-standardization" of planning practices. The focus lies on a spatially and thematically selective development strategy in which the primary interest consists in the integration of various different actor-projects in an overarching spatial and thematic context, and the creation of a reference framework for the multiplicity of decisions that influence urban and regional development (Altrock et al 2004). In this context, the Project as a form of metropolitan governance is essentially marked by a temporal coexistence of strategic orientation and implementation (Brake 2000, 285), and characterized by the fact that it leaves actors many liberties for self-responsible actions and initiative (Frey et al 2003). In this context the Project on the local as well as on the European level, can be defined as a form of metropolitan governance whose purpose it is to shape consensus to scientifically elaborated urban development goals by substantively linking urban strategy and its implementation through the social mobilization of different actor constellations, thereby flexibly adjusting the strategic environment to changing external and internal circumstances, and monitoring the actions of local actors and their interests where they are generally segregated. The Project is the name of a mode of governance in pluralistic urban societies of which the projects in the plural, whether the construction of a new urban quarter, the design of a database tool for the evaluation of urban CO_2 emissions, or the set up of a participation process for sustainability management on the district level, are the local manifestations of.

2.2 Project and projects: some contradictions of metropolitan governance

While projects in the plural have at once become the adapted institutional solutions and instruments to solve the strategic and political problems of today´s fragmented metropolitan areas, the Project in the singular embodies thus on the other their very mode of local governance. If metropolitan areas are shaped by strong interdependencies combined with the fragmented geography and roles of agencies that govern them, the reduction of complexity through the stabilization actor-networks has become the sole end and virtue of metropolitan institutions (Rawls 1999). As Storper argues, metropolitan fragmentation "is not an accident. It responds to the underlying differences in the preferences of constituencies, the scale of provision of public goods and regulation, and the bundling of attributes of the city into jurisdictions". From an economic viewpoint, there exists no "pareto-optimal" solution to the large scale principal-agent problem that metropolitan governance is the name of. Some form of bricolage and tinkering is thus a necessary and common feature of all urban governance processes. But bricolage also creates an omnipresent risk – namely:

"that neither public officials nor citizens generally know who does what, why they do what they do, and how much it costs, as well as what isn't getting done" (Storper 2013). Pluralisation is thus "not synonymous with the non-governability or absence of a capacity to act within urban areas" (Pinson 2006, p. 619). Rather, pluralisation gives rise to new modes of governance of which the Project is the primary example of. Yet, this pluralisation of planning processes is not generally synonymous with a greater democratization of planning processes, but may very well consolidate pre-existing power asymmetries in urban governance networks.While the Project´s aim is to reduce metropolitan fragmentation,it can never do this totally, so that certain actors and interests essentially escape the found consensus.. If we can attribute this impossibility to totalize to the "natural" sorting effect of fragmented metropolitan areas as described by Storper, they are in much the same manner the result of deliberate political choices that illustrate concurring and conflicting strategies, alliances and sectoral visions(Brand&Gaffikin 2007).The realm of metropolitan governance is thus marked by a fundamental contradiction between the desire for the taming of contingency through an all encompassing a framework strategy defining how to set targets and how to achieve them, and the very creation of contingency through the coexistence of a multiplicity of frameworks – metropolitan governance is defined by a constant tension between the Project and the projects that makes it "neither completely ungovernable nor necessarily more democratic" (Pinson 2006, p. 620)

2.3 Smart City: a vehicular policy ideal defined through local projects

This tension described above is particularly difficult to solve in areas where costs and benefits are not immediately clear and reasonably widespread among actors- the coordination of local climate change policy and Smart city development in the European context being an excellent example thereof. Local climate change policy is not a sector like any other; it is a domain of public action characterised by weak institutionalisation determined by a rather uncertain definition of problems, little horizontal integration of actors, and a generally contestable character of the right scales for intervention and measures, that more often than not have to be invented from scratch. Smart City policy is marked by the absence of clear rules, of strong routines present through time. Unsurprisingly, Smart City policy may be nowadays conceived as something like the prototype of project-based governance (Béal 2010, p. 540-543).With the 20/20/20 goals, the European Union has provided local actors with a strong common normative framework for the alignment of Smart City and climate change policies and strategies. Energy targets set by the European Union for 2050 overcome the 20-20-20 goals, aiming at an 80% reduction in greenhouse gas emissions and a near-zero carbon energy system. These targets are as ambitious as they are necessary and will require fundamental transformation of our society. Urban areas, currently responsible for three-quarters of the global energy demand, are the logical starting point for intervention to transform urban areas into resource efficient, low carbon places. Places that use their energy in an optimal way.

However, recent work suggests that local elected officials and local government administrators define and pursue these policies in very different ways (Feiock&Coutts 2013). Similar Smart City projects can operate in very different formal government and legal arrangements. Conversely, very different kinds of applications of Smart City projects can coexist under one similar discursive and formal consensus. Policy ideals, such as the Smart City function if they can engage a range of policy actors and institutions across institutional and spatial contexts. They must "exhibit a certain quality of practical portability and adaptability in their associated formulations and frames, while enabling at least the impression of local political 'ownership' (Peck 2012, p. 464)." In terms of Peck, the Smart City is a "vehicular" idea:

"Vehicular policy ideas (…) are constructed for travel. They may themselves have a transitory existence, as straws in the policymaking wind, but they can also function as facilitative frames, working around blockages, disarming opponents, enabling new projects to move forward. As such, they are formulated with purposive ambiguity/mutability (rather than as a fixed template), so as to move swiftly and smoothly between policymaking sites, and to lubricate new (or rebadged) initiatives in distant locales (…) (Peck 2012, p. 464).

If the Smart City is a vehicular idea that is continually defined and reframed in terms of local projects adapted to local politics, the governance of the Smart City assumes the form of a meta-project itself, closely following its interactionist and procedural logics. As such, the Smart City may best be defined as a municipal change management process, allowing for certain particular interest coalitions and clusters to be formed and new governance practices to be developed, rather than others.

2.4 The Smart City as a municipal change management process

For municipal governments the decentralization of control functions that the project is the indicator of is not followed by a necessary weakening of their power. Municipal governments have become less central in urban policy making processes because they do not possess the adequate resources on their own to entirely control the policy process and the projects they are involved in. But they have become more nodal because they control the resources that allow them to join what is generally disjointed, to construct actor-networks and provide coherence to their work through an all encompassing framework- notably through a shared Project that we will name Smart City, but that also fits to other urban ideals such as the Creative City. As Pinson argues, "if there is control it is less in the definition of the substance and content of the projects than on the level of providing a general framework in which all operating actors are included"(Pinson 2006 pp 634). While the governance of Smart Cities by projects has thereby the potential of reducing fragmentation in metropolitan areas while preserving a degree of democratic accountability and organizational flexibility, it may just as well be at the source of the dysfunctionalities that it tries to prevent.. The Project as a meta-logic can potentially fulfil a practical role in Smart City governance if it can contribute to the finding of common ground by successfully monitoring the plurality of interest-driven projects within a commonly acceptable framework strategy. More so, it consists de facto in the set-up of practical expiration dates for governance agencies, contracts and organizations that are part of the bricolage, keeping agencies from perpetually reproducing themselves. At the same time, municipalities are for their financing of the Smart City development, themselves dependent on the acquisition of a multiplicity of project funding sources, only aggravated in the context of the crisis. Different projects may exhibit contrasting if not sometimes rivalling and closed actor-networks, hindering the finding of a consensus that is infinitely postponed within the framework of the meta-project of an all encompassing framework strategy itself. As such, the plurality of Smart city projects may be at the source of greater confusion while running the risk of transforming governance into an opportunistic power trade-offs and hostage-taking, and thereby introducing new dysfunctions into the metropolitan governance system (Storper 2013). The incremental and procedural character of the Smart city project should ideally foster greater identification of the actor-network with the objectives set out in the local strategy- the action of stabilising the urban actor-network being as or even more important than the concrete, objective content of local and international targets in CO_2 reduction, energy efficiency or energy production stemming from renewable sources.The incremental nature in the setting of strategic policy goals presumes therefore always their partial reversibility in case the defined goals do not stick anymore to what allows for consensus to take place (Pinson 2006, p. 635). While political alliances and interest coalitions are infinitely reversible in the way the Smart City is governed, the exigencies of climate protection and justice in Europe are not so. As such, the project-based governance of the Smart City proves to become particularly difficult when frameworks, in an attempt to align multiple strategies with supranational and European climate goals, aim to set precise quantitative targets for the pathway of local urban energy efficiency, renewables or energy consumption.

Thoroughly comparing these dynamics in becoming the Smart City described above in different European cities would greatly overcome the extent of this paper. In the following section our aim will be to give a brief account of the experiences that 6 European cities had in formulating and organizing their Smart City strategy through and within the project TRANSFORM so far. At this point it needs to be emphasized that we are not even half through the project; that means that results can at best be considered as preliminary. After presenting the European project, we would like to show how some of the tensions related to climate change policy in metropolitan areas are addressed in Vienna, within the local mirror project TRANSFORM+, demonstrating how project-driven governance practically shapes Smart City development in the Austrian capital city.

3   TRANSFORM AND TRANSFORM+

Everywhere around Europe, the work of actor stabilization described above in the setting of strategic energy targets is embedded in a context of segregation, conflict and struggle between different interests in the urban policy apparatus. Yet, it seems fair to believe that particular local planning cultures are more adapted towards the interactionist processes of horizontal and vertical integration that Smart city projects necessitate. As Storper puts it, "(T)hough all cities share common problems of the urban land nexus, and the common situation of fragmentation and principal-agent de-alignment, they are not identical in the public goods they

provide and the mixture of governance instruments they deploy"(Sorper 2013, p. 13). The target population and instruments of Smart City projects may for instance be quite different. They can be directed to individuals and individual behavior or to organizations and firms, and they may be geared more to transforming the supply (energy production technologies of utilities and municipal governments).or the consumption (taxes and other incentives, or they can mandate behavior with regulation) of the urban environment. They may be directed inward towards the transformation of government institutions and buildings or outward to the actions of non-governmental actors (Evans et al 2013). How can these policies be harmonized and coordinated in order to achieve the 20-20-20 targets?

3.1 TRANSFORM- convergence and divergence patterns in making the low carbon city

3.1.1   A Project enabling the definition of the Smart City in terms of local projects

The FP7 funded project TRANSFORM aims at supporting different European municipalities in the development of their Smart City Agenda to meet the 2020 and 2050 targets set by the European Union. In this context, six European cities (Vienna and Amsterdam, Copenhagen, Hamburg, Genoa, Lyon) are working on city-wide as well as city-quarter level ("Smart Urban Labs") strategies and implementation plans for the local development of the Smart City strategy, as well as on common frameworks and templates to compare and harmonize the respective strategic orientations. In this process, TRANSFORM relies on a vast actor network of both municipalities, major scientific, knowledge based institutions and industrial partners, and is backed, in most of the participating cities, by mayoral or high level political support. However, the extent of this commitment, the way that partners are involved and the role that TRANSFORM should play in assisting the different cities- the appropriate degree of paternalism- is generally contested within the project. While TRANSFORM sets the template for comparison, harmonization, and mutual learning, what should be compared and harmonized, how it can be, and what we can be learned from that is itself a contested outcome of the project. Within TRANSFORM, the Smart City presents itself thus essentially as part of a set of vehicular policy ideals, whose main role is to function as "facilitative frames, working around blockages, disarming opponents, enabling new projects to move forward (…) formulated with purposive ambiguity/mutability (rather than as a fixed template), so as to move swiftly and smoothly between policymaking sites, and to lubricate new (or rebadged)(PECK 2012: p. 464). As such, TRANSFORM enables the definition of the Smart City in terms of contrasting local projects and path dependencies, giving many liberties to the different cities in doing so, while at the same time trying to scientifically guide them towards the achievement of 20-20-20.

3.1.2   Transformation Agenda and Implementation plan: on the coexistence of strategic orientation and implementation in Smart City development

TRANSFORM is best understood as a set of procedures marked by the temporal coexistence of strategic orientation and implementation (Brake 2000, 285), characterized by the fact it leaves actors many liberties for self-responsible actions and initiative on the local level. It practically illustrates the tension in contemporary strategic planning processes between the desire to harmonize and tame local contingent developments, while harnessing the creative potential from divergent local pathways.

In TRANSFORM; each city develops a Transformation Agenda, containing energy efficiency measures and actions that need to be taken by stakeholders, in order to make a city smart. The process concerns city regulators and decision makers, private companies, and other relevant stakeholders. The Transformation Agenda addresses the main components influencing the chain of energy production and consumption at city level: main infrastructure and sources of energy (thermal energy, electricity, gas) and efficiency potentials. It also addresses the possible energy efficiency in flows of water, waste, IT and mobility. It includes urban planning & regulation and the participation of end users. It is based on qualitative and quantitative insights and contains a strategic financial strategy. The Transformation Agenda is brought to the operational level in the form of an Implementation Plan, which is being drawn up for specific city districts. These districts are selected for this project under the name of "Smart Urban Labs". Morphology, urban density, functional mix, demographic aspects, (energy-) infrastructures vary from district to district. This requires more specific Implementation Plans to take them into account to find an optimal mix in terms of production of energy, storage, reduction and exchange, supported by feasible business plans. Each Implementation Plan is a product made in a joint effort by all relevant local stakeholders and includes for example renovation of the

building stock, heating and cooling possibilities, use of intelligence on both electric and thermal networks, the potentials of existing water systems, innovative (electrical) transportation possibilities and urban green. The Implementation Plans relate district scale with the city and metropolitan scale to scan for possibilities, relate local developments with strategic choices made on the (energy) infrastructures.

3.1.3 Contrasting strategic environments for the development of the Smart City through TRANSFORM

In practice, Smart City development greatly varies between the different TRANSFORM cities. Existing Transformation Agendas and Smart Urban Labs insert themselves in very contrasting strategic environments, both as to what concerns culture, economic and energetic challenges and local political traditions. While districts where the Smart Urban Labs are located are transformation areas undergoing redevelopment at the moment, the stages of relative development are varying. Where with some SULs we are at the stage of brainstorming about urban futures like Genova or Liesing, others are already implemented or pretty advanced in implementation (for instance Hamburg, Copenhagen or Amsterdam). Hamburg, for instance has been a frontrunner in the sense that the city through its successful engagement in the IBA process has practically achieved what other cities are still looking a political mandate for. Political commitment to this status as an environmental frontrunner has been manifest well before TRANSFORM, so that the project often at best retroactively justifies what has already been put in place. In Genova, by contrast, at the moment of writing, political commitment for the SUL Mela Verde has still to be secured. It can also be shown that contrasting environments can coexist within a similar cultural and political framework- the divergent development patterns of the Greenfield development aspern Seestadt and the brownfield development Liesing Groß Erlaa being an excellent example thereof. If actor networks evidently overlap for both SULs in Vienna, there exist important differences, especially as to what concerns the divergent challenges of Brownfield and Greenfield sites in terms of integrated planning, but also in terms of the political commitment. These differences are illustrated in a graphic in the Annex, showing that issue definitions and their political salience vary strongly between local contexts in the different TRANSFORM cities.

3.1.4 Taming metropolitan fragmentation on the European level through TRANSFORM? A first tentative answer

What all local contexts share through, whether they are located on the city or SUL level, is a high degree of pluralization and fragementation. In monitoring conflicting interests, Transformation Agenda and Implementation plan are two features of TRANSFORM for the potential shaping of greater consensus about local urban futures, while enabling a real comparison of the way the Smart City is developed in different settings. As such the involved municipalities can ideally use TRANSFORM as a way to integrate where local actors and projects are generally segregated; to harmonize policy goals in the context of widespread strategic and territorial competition on the European level and contrasting planning cultures and path-dependencies; and finally to ensure implementation beyond the timeframe of a particular project.

In practice, while TRANSFORM can work as an external reference point for the stabilization of local actor-networks, finding consensus within the project on a standardized framework procedure that would provide such reference has proven very difficult so far. An example is the difficulty in finding a template for the way that the local Transformation Agendas should be structured- should they make reference to quantitative targets and if yes, on what basis are they calculated? What thematic areas should they cover? How should progress be monitored? There is much to debate about, so that the main role of the project, rather than providing scientific content for Smart City development has become the shaping of consensus between varieties of actors and interests.

3.2 From Transform to Transform+:

3.2.1 The emergence of Smart City Vienna

In many ways the antinomies between the general framework of TRANSFORM and the different local Transformation Agendas, is reproduced on the local level between city-specific Transformation Agenda and the multiplicity of local projects and actors that it aims to frame. In looking at the special case of Vienna, we will argue that the aforementioned tensions are exalted by the very organizational conditions in which the Smart City policies emerge. Starting as a mayoral project, the Smart City institutions are by definition at the interstice between the sectoral departments of the municipal planning apparatus. Not being allocated a

budget from a specific resort and due to a general resource scarcity aggravated in the context of the crisis, municipalities are for their financing of the Smart City development, themselves dependent on the acquisition of a multiplicity of project funding sources. This introduces a further complication into the process of finding "common ground", adding to an already present contingency that climate change targets are subjected to in the context of project-based governance.

The governance of local climate change in Vienna is as fragmented as anywhere else in the European metropolis. The coexistence of different sectoral strategies, various scales, contrasting target groups is a recognizable feature of Vienna´s metropolitan governance processes in this particular subject area. Concurring strategies exist both at the level of Energy Planning, Mobility, Buildings and Infrastructure, as can be illustrated in Chart 2 below showing sectoral strategies and their origin within the municipal apparatus.[1] For the purpose of developing and coordinating the Smart City in Vienna an ad-hoc entity has been set up within its municipal governance, in the Department MA18 for Urban development and planning, named "Smart City Wien". The tasks of this organisation are threefold: (1) providing a comprehensive framework for Smart City Development for the multiplicity of sectoral approaches in Energy, Mobility, Buildings or Infrastructure, (2) providing strategic and expert impetus to Smart City development through the involvement with several research projects on the European level and (3) communicating the Smart city as brand both internally and externally so as to assure greater awareness of the Vienna´s position as a Smart City. Furthermore, Smart City Vienna is at the origin of the Smart City Vienna Framework strategy, providing a common framework for all the different sectoral strategies with attempt to harmonize them towards a common pathway.

3.2.2 Transform+: an instrument of social mobilization

The local mirror project Transform+ directly supports Vienna's roadmap to a Smart City. The project´s aim is to enable the work done in the European FP7 project TRANSFORM. As such, Transform+ is first and foremost to be considered as an instrument of social mobilization affiliated to the Smart City Wien. Its principal mission is to shape consensus for an acceptable local vision of the Smart City, by coordinating a communication process between a multiplicity of local groups and institutions, private and public perspectives and resources. Transform+ brings on the table several municipal departments of different level and status, Vienna´s energy service and utility companies, industry partners and specialized research organizations.

The process of actor network stabilization is coordinated on several levels. On the city level, the project provides a practical input into the Smart City Vienna Framework Strategy (local version of the Transformation Agenda in Vienna), and helps to advance the development of Transformation Agenda for the EU project. On the level of the city district, the project defines Smart Urban Labs (SUL) in aspern_Seestadt and Liesing Groß-Erlaa, with the aim of making them models for the way Smart City planning can practically be implemented in the future. Within these SULs, it coordinates two pilot projects, one tackling the question of e-mobility for delivery uses, the other focussing on creating a digital interface between consumer and energy data. In the process of making the SULs in aspern_Seestadt and Liesing Groß-Erlaa, bringing together different municipal departments and external actors is of practical necessity in order to successfully integrate the energy and the planning side in the implementation of a sustainable city district. For the determination of future housing needs and supplies in Liesing for instance, coordination has been set up both with the municipal management for the district, the municipal energy department, its energy service provider, construction companies as well as the local population. Transform+ has thus helped to bring together sectorally and hierarchically distinct actors, opening up a space for the discussion of what the Smart Ciyt should be.

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[1] This chart does not incorporate the strategies that are produced by the different organizations of the Energy Service provider Wiener Stadtwerke. These strategies are equally if not more important than those produce within the municipality, but as such theses are no less fragmented.
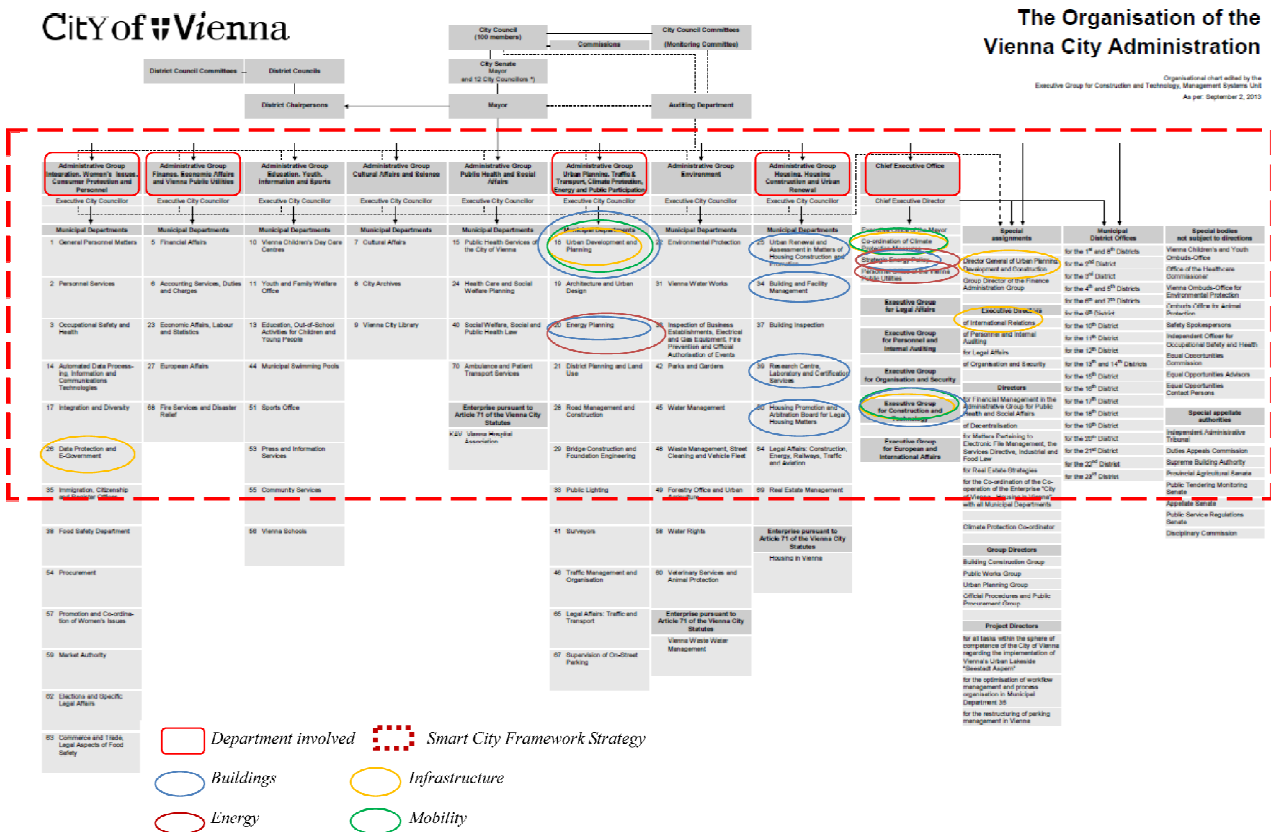
Chart 2: Sectoral Strategies and their place origin within the municipal body (source ÖIR).

3.2.3 Urban public sector change management in Vienna through research projects: a tentative assessment of the governance of Smart City policies

In the process of institutionalizing the Smart City Wien new practices of approaching the question of strategic policy making have been experimented in Vienna, bringing together actors that have not collaborated in the same way before. TRANSFORM and Transform+ have supported the city of Vienna in this process. A practical example of this is a workshop on the strategic priorities and issue definition in energy planning which was held in Vienna under the presence of various different stakeholders from the city´s planning regime. As a neutral forum, behind the veil of the research focus, the project has already successfully steered the horizontal integration and vision building different sectoral streams within the municipal body from the bottom-up, while continually up-and down streaming the results on different levels of the policy-making a11pparatus both locally and internationally.

While this practically illustrates how a research project can steer organizational change management processes within the municipal governing body, Transform+ and TRANSFORM are only but two of several projects in a network of different European and local research projects through which the Smart City mission is regulated and financed. These projects represent varying and overlapping actor networks on the local and international level. The roles of Smart City Wien and Transform+ are in this context of a two-fold character: while Smart City Wien and Transform+ proceed as a consensus making machine, as a Project, fostering greater identification of the actor-network with the objectives set out on the local level, they are also at the source of a multiplication of various different projects whose boundaries strategically overlap, but whose interest coalitions and aims are potentially conflicting.

If Transform+ aims at providing coherence between a plurality of conflicting strategies, it is practically operating in a challenging environment dominated by competing strategic frameworks at different levels of the municipal apparatus. This becomes particular evident when it comes to the question of setting strategic quantitative targets as a frame for the various sectoral strategies internal and external to municipal energy governance. Practically speaking, the complexity of setting a C02 or a retrofitting target presents itself both as an organizational issue- of knowing what is done by others and reviewing what is done by them- and a question of power constellations- of making different parties comply with a hypothetical contract about the future goals in urban development, be they in the area of energy, buildings or infrastructure. The process of

reviewing while essential for establishing coherence both at the local and European level, has a paradoxical incentive built into it: as Storper puts it "if agencies know they are being reviewed, they tend to increase the resources devoted to self-perpetuation. And if we ask them to participate in their own benchmarking, there is a serious opportunity cost with respect to their basic mission, the resources and attention devoted to obsessional benchmarking can arguably crowd out the core mission"(Storper 2013, p. 21). While we are, at the time of writing, only half way through TRANSFORM and Transform+, we can see these institutional dynamics at play in the metropolitan governance of Smart Cities in Vienna and all around Europe.

4 CONCLUSION

What does the research project TRANSFORM tell us about governance processes of Smart Cities in Europe? In this paper we showed how the process of Smart city governance through different projects, be they on the local or European level, is effectively institutionalizing "new pluralist political spaces associating different actors, groups, elites and institutions linked through relationships of mutual interdependence" (Pinson 2006 pp 649), thereby activating new types and potentials for collective action in local climate change policy. In an era of non-standardization in strategic planning practice, the best a research project can do is instituting a temporary monitoring system of local interest coalitions, thereby reducing complexity in the fragmented whole that the Smart City is the name of. Yet, as we have also seen the process of what a research project should monitor and how they should approach the question of monitoring is contested between different interest groups and local projects. The Smart City is thus very far away from the institutionalization of a public urban space, a common democratic forum accessible to all urban residents in the same way. So far the EU project TRANSFORM has not been able to provide the input necessary for establishing a common reference framework for all actors that need to be involved and informed in the process of effective climate change policy, citizens included. For on the European level, finding "common ground" is as difficult as on the local level- the hypothesis of Pinson that today´s metropolitan governance is essentially the work of elite interest coalitions mutually legitimating themselves through a shared Project cannot be readily thrown overboard- even if new coalitions and relations have been created giving a life to the Smart City, this does not make this urban vision necessarily more democratic, and more accessible to the Smart Citizen.

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6 ANNEX

Topic/issue	Amsterdam, Energiek Zuidoost	Copenhagen, Nordhaven	Genova, Mela Verde	Hamburg, IBA / Wilhelmsburg	Lyon, Part Dieu	Vienna, aspern Seestadt	Vienna, Liesing Groß Erlaa
Low energy demand, energy efficiency	targets and strategies	binding targets and measures	ideas	binding targets and measures	targets and strategies	targets and strategies	some measures / projects
Energy systems	objectives defined	targets and strategies	ideas	binding targets and measures	objectives defined	some measures / projects	ideas
Renewable Energy	pilot actions	targets and strategies	ideas	binding targets and measures	binding targets and measures	pilot actions	ideas
Mobility	some measures / projects	binding targets and measures	-	targets and strategies	some measures / projects	binding targets and measures	some measures / projects
Water	ideas	guidelines	ideas	-	ideas	ideas	-
Waste	ideas	guidelines	-	-	some measures / projects	-	-

Qualitative legend on the priority of respective topics

no priority (or not yet decided during the planning process)						very high priority	
no activity	ideas	some measures / projects	guidelines	pilot actions	objectives defined	targets and strategies	binding targets and measures
no objectives, no measures foreseen	some ideas are being discussed	some measures / projects are foreseen	general guidelines/ qualitative objectives, some measures	pilot projects, priority actions	guidelines/ qualitative objectives and measures	quantitative or qualitative targets and strategies	binding quantitative targets plus aligned measures (with defined effects)

Source: OIR