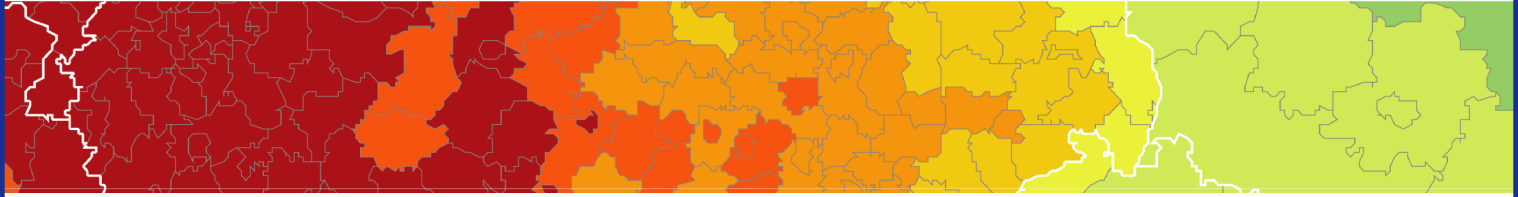




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SUPER – Sustainable Urbanisation and Land Use Practices in European Regions

Applied Research

Annex 3.13: Case study comparative analysis

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Abbreviations

CEO	Chief Executive Officer
CS	Case study
ESPON	European Territorial Observatory Network
ESPON EGTC	ESPON European Grouping of Territorial Cooperation
EU	European Union
ITI	Integrated Territorial Investments
LAU	Local Administrative Units
METREX	The Network of European Metropolitan Regions and Areas
NUTS	Nomenclature of Territorial Units for Statistics
PCA	Protected Coastal Area
PSC	<i>Piano Strutturale Comunale</i> (Municipal Structural Plan)
RPG	Revision of the Swiss Spatial Planning Law
SEA	Strategic Environmental Assessment
SDG	Sustainable Development Goal
SUPER	ESPON Sustainable Urbanization and Land Use Practices in European Regions
UN	United Nations

1 Introduction

By following the methodological framework of the project (see Annex 3.1), each of the 11 case studies developed within SUPER has described the prevailing land-use practices, how each intervention sought to affect these practices, how it was implemented and how these interventions performed in terms of land-use sustainability and, more precisely, in each of its three dimensions: economic, ecological and social equity. The outputs of the task are:

- 11 case study reports,
- Stakeholder maps and tables illustrating the challenges that each intervention was facing and how these were addressed in terms of organization and setting sustainability goals,
- A synthesis on how the interviewed stakeholders assess the degree to which goals were achieved, and
- A synthesis on how land uses were transformed over time.

Read individually, the case study reports enable a case-by-case assessment of the factors that led to positive and negative results in each context, providing valuable lessons to the respective local, regional and/or national practitioners and decision-makers (see Annexes 3.2 to 3.12). Because the case studies followed a rigorous methodological framework (see Annex 3.1) a scientifically sound cross-comparative analysis of the outputs was also possible. The comparative analysis can:

- provide a stronger basis on which to generalize results,
- identify patterns between similar cases, exceptions, and what pre-conditions, practices and governance arrangements tend to support desirable results,
- identify common mistakes and potential future steps towards better land-use decisions that support sustainability in Europe.

This report describes the methods and results of this comparative approach. This introductory section contains a sub-section offering a brief description of the methodological approach used to conduct the comparative analysis. Section 2 is focused on how broad institutional aspects and more case-specific features of each intervention determine the character and applicability of different initiatives and enable or threaten their success. Section 3 is focused on assessing how each intervention addressed land-use sustainability, from the aims set in their inception to their actual performance in the economic, ecological and social dimensions. The legacy of these practices is explored in section 4, that presents how the interventions helped shape European land-use planning and development cultures. The best practices and most valuable lessons extracted from the case studies are briefly presented in section 5. To facilitate the reading of this annex, Table 1.1 synthetically presents the notation used to identify each case study and some basic characteristics of each of them.

Table 1.1: Notation labels and basic characteristics of the 11 case studies

ID	Case study	Year	Scale
AT-Vorarlberg	'Vision Rheintal' (Vorarlberg)	2004	LAU 1
	In the Austrian federal state of Vorarlberg, the valley of the Rhine has undergone massive change over the past 50 years. Once separated villages and small towns have become an almost closed band of settlements. In 2004, Vision Rheintal was put in place as a coordinated strategy of 29 municipalities to consider the region as a whole and tackle spatial planning challenges jointly across the communities.		
BE-Flanders	Integrated Policy Planning in Ghent & Flemish Decree on Spatial Planning	1996	NUTS1
	In 1996, a Flemish decree on spatial planning obliged municipal governments to draw up their own spatial structure plans, with urban development as the spearhead. Some years later, in 2003, the structure plan of Ghent used this framework to address urban sprawl without explicitly mentioning it.		
CH-CantonAargau	Revision of the Swiss Spatial Planning Law (RPG)	2014	NUTS3
	Urban sprawl and land-take have been considered major problems in Switzerland. With the revision of the Spatial Planning Law, the Federal Council and parliament sought to put an end to uncontrolled land consumption and eliminate implementation deficits. The intervention under scrutiny is the Revision of the Swiss Spatial Planning Law (RPG 1 and RPG 2) and its implications for the Canton of Aargau.		
DE-30ha	German Land Take Reduction Target	2002	NUTS0
	The target to reduce land take to less than 30 ha per day of land for settlements and transport infrastructure by 2030 is an integral part of the 2002 German sustainability strategy. It is a threshold for the country as a whole, but is taken up at various administrative levels, such as the spatial development plans of different Länder.		
ES-Valencia	Huerta de Valencia Spatial Plan	2018	LAU 1
	Demands for the protection of the traditional Huerta (vegetable cultivation) landscape started at the turn of the Century, but the initiative was only approved in 2018. In the meantime, the initial vision transformed from a Green Infrastructure planning approach to a more comprehensive intervention, combining the protection of rural areas with support for agrarian activities.		
HR-Coastal	Protected Coastal Area Within the Physical Planning Act in Croatia	2004	NUTS2
	The Croatian Physical Planning Act defines a protected coastal area that encompasses a large area of coastal self-governing units. For the purpose of protection and sustainability of development, the restricted area covers the 1000 m wide continental belt (both on terrestrial part and islands) and the 300 m wide sea belt measured from coastal line. Certain limitations are prescribed for planning and use of the restricted area.		
IT-BassaRomagna	Municipal Structural Plan	2009	LAU 1
	A Municipal Structural Plan was jointly adopted by ten Municipalities grouped on the Union of Municipality of Bassa Romagna. The plan had two main objectives: counter urban sprawl and support sustainable development. This case study investigates the efficiency of intermunicipal plans in dealing with sustainable land use.		
NL-Ladder	Sustainable urbanization procedure	2012	NUTS0
	The Ladder for Sustainable Urbanization is a rule requiring all zoning plans enabling urbanization to first argue (1) the need for this development (2) why, if on a greenfield, it could not be accommodated in existing areas and (3) if on a greenfield, if it is multi-modal accessible. It was adopted at the national level in 2012 to promote compact development and prevent oversupply. Citizens can challenge plans in court on these grounds.		
PL-ITI	Integrated Territorial Investment	2014	LAU 1
	The Integrated Territorial Investments (ITI) instrument was implemented		

ID	Case study	Year	Scale
	in 24 functional areas in Poland, including 17 areas surrounding regional capitals and 7 functional areas of sub-regional cities. A total of around EUR 6.2 billion is earmarked for ITI implementation in the period 2014-2020 (the total includes national operational programs—under which support for the so-called 'complementary projects' are provided).		
RO-Constanta	Densification along the Black Sea Littoral Area	1991	NUTS 3
	The spatial planning system in Eastern Europe's post-communist countries was a major departure from centralized decision-making practices. In the coastal region of Constanta, by the Romanian Black Sea, that framework has facilitated great economic development and the growth of tourism resorts that are an economic engine but also increasingly recognized as threats to ecological sustainability.		
SE-Stockholm	Stockholm Urban Containment Strategy	2017	LAU 2
	The Stockholm Urban Containment Strategy focuses on containing urban expansion by adopting a comprehensive perspective that gives consideration to economic, social and ecological dimensions. It gives specific consideration to rural land and the provision of affordable housing.		

1.1 Methodological approach

The data sources for the cross-comparative analysis include the written reports and spreadsheet tables produced for stages A1 and B of the case study methodological framework (see figure 3.1 in Annex 3.1, reproduced below for convenience as Figure 1.1) and the quantitative land-use change maps and land-use change summaries produced for stages B1.2 and B4.2 of the same framework.

The contents of each case study report were coded with the support of Computer-Assisted Qualitative Data Analysis Software (see Annex 3.1). The code system was divided in two main sections, and further elaborated into hierarchical subsections, some of them reaching five levels in depth. The main structure of the code tree was as follows:

1. Planning practice
 - 1.1. Contextual and institutional variables: the different contexts and planning traditions, practices and challenges of the societies where each intervention was developed.
 - 1.2. Implementation: the intervention-specific mix of factors that affect their configuration.
 - 1.3. Planning and development culture: the transformative effect that the development of the different interventions had on land use planning and development cultures and practices, which can provide valuable lessons for other territories.
2. Sustainability
 - 2.1. Ex-ante sustainability assessment: how interventions addressed land use practice at the moment of their inception; analysed across the axes of economic, ecological and social sustainability.
 - 2.2. Pre-intervention sustainability assessment: whether a good correlation existed between the respective territorial needs and the character of the implemented interventions; analysed across the axes of institutional and temporal sustainability.
 - 2.3. Ex-post sustainability assessment: the impacts and degree of success achieved by the intervention as reported by the interviewees; analysed across the three main axes of sustainability (economic, ecological, social equity) and minding the transversal dimensions of institutional and temporal sustainability.

Iterative reading of coded segments facilitated the thematic comparison of case studies and the identification of common patterns and/or discrepancies across case studies in each category. In order to interpret these observations and produce knowledge that is situated within specific socioeconomic coordinates, tables, maps, diagrams and ternary and scatter plots representing a range of variables across the axes of geographical scale, year of intervention approval and sustainability dimension were generated. The reported outputs of each intervention were confronted against the land-use change maps and quantitative summaries available from each case study via the SUPER analysis of developments (see Annex 1). In a final step, preliminary results of the case study comparison were shared with all partners for validation.

To facilitate the synthetic communication of results, mostly qualitative in nature, a multicriteria quantitative analysis was produced and, as a result, a score table was generated (Table 1.2).

Table 1.2: Case study characterization (Multicriteria Analysis)

	AT-Vor.	BE-Fland.	CH-Aarg.	DE-30ha	HR-Coast	IT-BR	NL-Lad.	PL-ITI	RO-Const.	SE-Stock.	SP-Vcia.
Score (Pre)Conditions	Green	Yellow	Green	Red	Yellow	Yellow	Red	Red	Yellow	Green	Yellow
Score Process	Green	Light Green	Green	Yellow	Light Green	Green	Yellow	Light Green	Red	Yellow	Light Green
Score Sustainability process	Light Green	Light Green	Light Green	Yellow	Yellow	Light Green	Yellow	Yellow	Red	Light Green	Light Green
Score Sustainability Maps	Yellow	Green	Yellow	Green	Red	Yellow	Green	Grey	Yellow	Green	Yellow
TOTAL Aggregated	Green	Green	Green	Green	Green	Green	Yellow	Green	Yellow	Green	Green
RANKING	1	4	2	9	7	3	10	8	11	5	6
RANKING Weighted	1	4	2	7&8	7&8	3	10	9	11	5	6

The data for the multicriteria analysis came directly from the case study reports (Annexes 3.2-3.12) by extracting the factors that were common and/or identified as important throughout the various methodological stages. These factors were sorted into four main blocks.

1. Context and pre-conditions

- Urban development: demand, supply or D&S oriented
- Legal framework for developments: flexible or regulative
- Approach: proactive or reactive
- Progress: improved spatial planning practice or not
- EU inspired: yes or no
- Related to UN Sustainable Development Goals (SDG): yes or no
- Development as income source (through permits): yes or no

2. Process

- Technical capability: sufficient or insufficient. The result is a combination of factors: flexibilization of procedures, simplification of procedures, ease to update

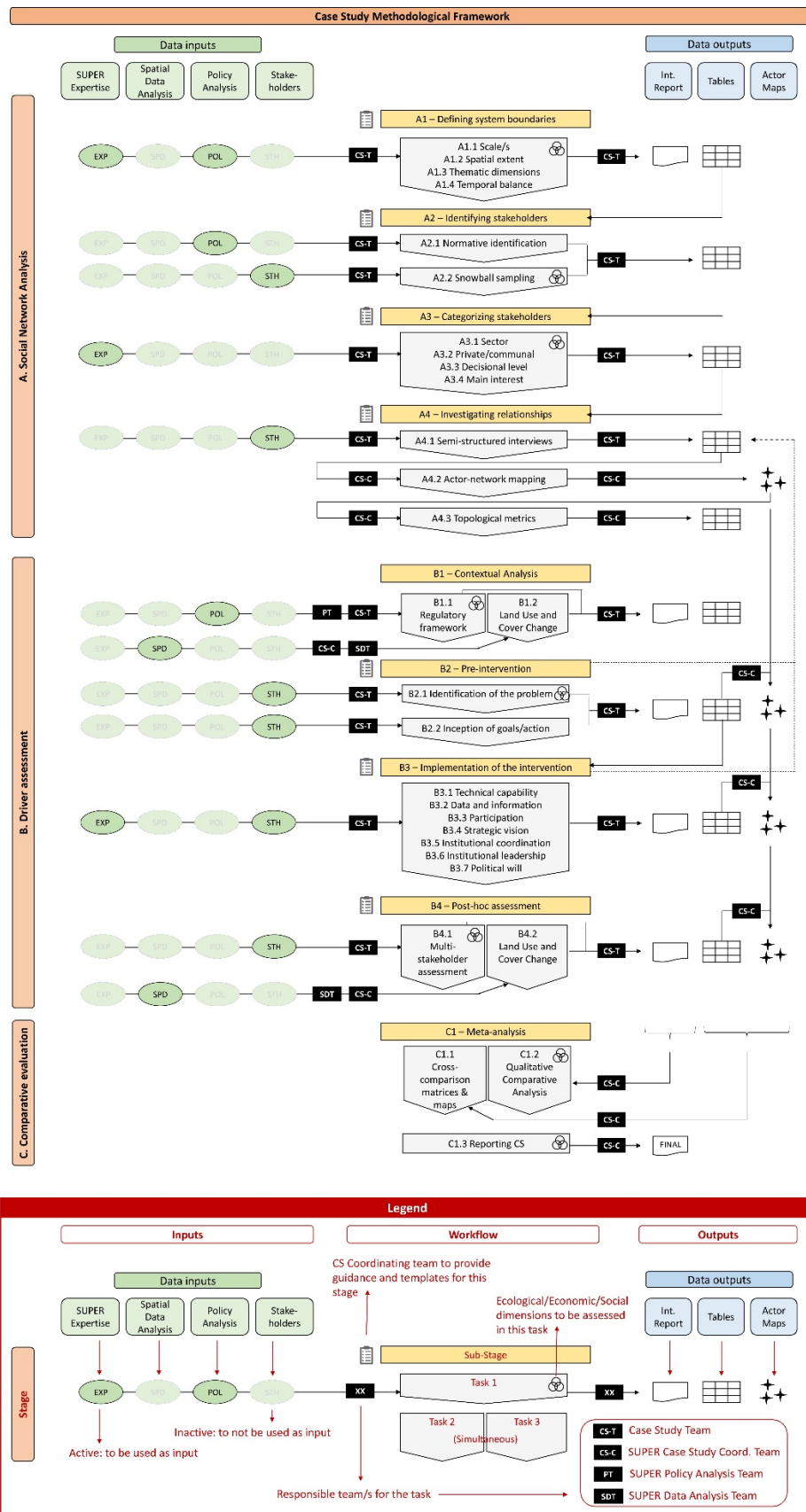
- Data and information: sufficient or insufficient
 - Participation: adequate or inadequate
 - Strategic vision guiding the process: yes or no. The result is a combination of factors: hard or soft style, degree of definition
 - Institutional coordination: yes or no
 - Institutional leadership: yes or no
 - Political stability (permanence) to implement the intervention: yes or no
 - Institutional procedure: centralization or de-centralization
 - Compensation mechanisms: carrot (incentives) or stick (legal)
 - Political will to support the intervention: yes or no
3. Sustainability assessment
- Trend (of attention to sustainability in comparison with previous situation): strengthening or weakening
 - Results (in each dimension of sustainability: economic, ecological and social equity): achieved or not achieved
 - Institutionally sustainable, in terms of time (permanence): yes or no
4. Land use change (based on change statistics and maps)
- Land consumption reduction. The result is a combination of factors: trend in urban typology (contained/concentrated/diffuse), urban regeneration, types of housing rights (first and second homes), existence of illegal development
 - Predominant urban land use: continuous urban fabric, discontinuous urban fabric, industrial-commercial, logistics
 - Predominant urban growth type (2000-2018): urban fabric, discontinuous urban fabric, industrial-commercial, logistics

Each element in each case study was initially weighted according to a -3 (negative), 1 (neutral but existing) and +3 (positive) scale. For each case study, the final score was the result the arithmetic sum of all the values (Total aggregated, in Table 1.2). The cases were ranked according to these totals.

An additional weighted calculation was also carried out. In this case, a series of relative weights (total sum is 100%) were given to the value of the sum of each of the four groups of factors considered in the table: Score (Pre)conditions (20%), Score Process (30%), Score Sustainability Process, which was the achieved result on the sustainability dimensions according to information given on each CS Report (10%), Score Sustainability Maps, based on changes of land use according to official data and maps (40%) (the two last ones Score Result). According to this new weighting Ranking Weighted a new ranking of the 11 CS was obtained, which was compared with the previous ranking without weighting (Ranking). The results show that the relative position in the ranking of the 11 CS analysed remains practically the same in both ranking systems.

The results of the weighting procedure were presented to the case study teams for comment and in some cases adjusted after receiving feedback. While the results of this approach are non-positivist or statistical, they enable a quick and approximate comparison of the relative qualities of each case study based on a common multi-criteria analysis method, broadly used and accepted in the scientific community, particularly in planning and scenario studies.

Figure 1.1: Case study methodological framework



2 Setting the scene: institutional pre-conditions and decision-making

This section focuses on pre-implementation conditions and constraints that have been observed which shape the features of each intervention and, already at this stage, determine the subsequent implementation stage and, ultimately, the degree of success. It is divided in two sub-sections. The first addresses the broader institutional context, as regards administrative organizations and planning and political traditions. The second is case study intervention-specific and deals with the factors that explain different results in each case.

2.1 The broader institutional context and its influence

The selection of case studies has provided examples of interventions a host of state structures and planning cultures. Some regard a federal regulative approach (AT-Vorarlberg, BE-Flanders, CH-CantonAargau, DE-30ha), while others centralized regulative systems (HR-Coastal, RO-Constanta), one focused on recentralized or regionalized regional economic development approaches (PL-ITI); others represent a quasi-federal regulative system with high EU influence, either tending to regional economic development (ES-Valencia) or evolving toward integrated thanks to a political tradition of coordination (IT-BassaRomagna). Finally, there are some decentralized-integrated instances (NL-Ladder, SE-Stockholm). This classification does not seem to offer clear and direct relationships with what is usually considered good (in NW Europe area) or more questionable (regulative urbanism typical of South Europe) practices. It is evident that, in some cases, the situation on the ground has shifted from these long-held and pervasive imaginaries. It has been found that most actors, even in the most permissive environments, demand a stricter basic and restrictive regulation approach. Decision makers at the top echelons of the administration tend to choose solutions that are close to de-regulatory, linked to ideology and political capitalization, but local stakeholders which are in closer contact with everyday practice, lean towards solutions that tend to increase the level of control or implement binding interventions.

In the SUPER project, this contextual 'mood' leading up to the will to change practices has been studied. A very simple way is to consider whether the analysed interventions are formulated in a proactive/leading sense (AT-Vorarlberg, IT-BassaRomagna, RO-Constanta; in this last case due to the change from a communist tradition to new market opportunities) or a reactive one instead (DE-30ha and NL-Ladder; and at some extent CH-CantonAargau as an official reaction to a more ambitious civil society initiative). Our focus is not only on the normative side (legislation, regulations and instruments) but also on socio-political and economic factors (e.g. what reasons lie behind the political decisions).

A key question to be put forward is whether land-use development responds to present needs and demand (demand-oriented; as in CH-CantonAargau, that can be manifested in high development pressure and higher degree of urbanization with respect to national or EU

averages: as in AT-Vorarlberg, IT-BassaRomagna, NL-Ladder, SE-Stockholm) or whether there is not, in fact, a clear demand that explains increased development rates (in this case, supply-oriented). If supply-oriented, the rationale sometimes concerns new business opportunities in economies with problems because their lack of diversification and alternatives (ES-Valencia, HR-Coastal, RO-Constanta). Even in the case of stronger economies, and because of the disturbance caused by the global financial crisis (DE-30ha) or both, economic crisis and pressing demand (NL-Ladder) urbanization could be understood as an economic engine to overcome economic recessions. In some cases, in fact, land development has been instrumentalised as way to help supporting local administrations (via land development permit taxes: DE-30ha, ES-Valencia, HR-Coastal, IT-BassaRomagna, NL-Ladder, PL-ITI, RO-Constanta; to a much lesser extent, to be followed in the near future after 2014 last reform, in CH-CantonAargau). In the case studies, we find that divergent socio-political contexts lead to a different 'mood' and phasing as regards practices. Nevertheless, the following common developments have been observed in this regard:

- differing valuations of spatial planning. It seems to be losing status in (DE-30ha, HR-Coastal, NL-Ladder, RO-Constanta), but gaining status in AT-Vorarlberg, CH-CantonAargau, IT-BassaRomagna and ES-Valencia (in the last case due particular pre-existent extreme adverse conditions);
- a resort to simple normative methods:
 - regulative instruments lacking clear coordination (DE-30ha),
 - regulative instruments with conflictual legislation (DE-30ha, HR-Coastal) or
 - lacking efficient coordination (DE-30ha, ES-Valencia, HR-Coastal, RO-Constanta) between political-administrative levels;
- delegation of planning to consultants and courts (vague yet legally binding policies can mean that courts determine policy via jurisprudence/case law: NL-Ladder). Delegation to courts may have the advantage that they are less influenced by everyday politics, but by the same token are less responsive to the needs of society, as they are focussed solely on the rule of law.

That end result is that, flexible orientations tend to gravitate towards deregulation. This is achieved by avoiding or reducing legislation, by over-legislation that is difficult to interpret and apply, also because contradictory legislation among sectors, departments or political-administrative levels may exist.

The EU inspiration and sometimes pressure (AT-Vorarlberg, ES-Valencia, HR-Coastal, IT-BassaRomagna, PL-ITI, RO-Constanta), as well as international soft-law initiatives in the United Nations context (mainly Sustainable Strategies and Climate Change agreements), help as references for positive behaviours leading to Sustainable Land Use (AT-Vorarlberg, CH-CantonAargau, HR-Coastal, DE-30ha) (see main report, section 3). In this sense two a priori positive factors emerged:

- a. sense of right timing for acceptance and low entry barriers
 - the receptiveness of the context/population (CH-CantonAargau, based on their own participatory democracy tradition, DE-30ha) and

- the state of the speculative real estate market: mature (AT-Vorarlberg, BE-Flanders, ES-Valencia, HR-Coastal, IT-BassaRomagna, RO-Constanta) or young (CH-CantonAargau, DE-30ha, NL-Ladder, PL-ITI, SE-Stockholm)
- b. good communication on the intervention (significantly, in AT-Vorarlberg and CH-CantonAargau).

2.2 Pillars of decision-making

This subsection focuses on the lessons extracted from the case study reports on how processes and interventions were developed and applied. The structure follows the organization of the questionnaire used for the stakeholder interviews (see Annex 3.1). An additional point was added to capitalize on some of the insights provided by the social network analysis exercise.

2.2.1 Technical capability

Previous research and the existing scientific literature on institutional innovations demonstrate that sufficient technical capability (Wong, 2006) is an important requirement for successful decision-making. For instance, since their initial steps, METREX (The network of European metropolitan regions and areas; see Rubbo, 2018), identified three types of requirements: (i) structural (allocation of powers/competencies and clear rules and procedures), (ii) economic and material resources, and (iii) technical capability. On the basis of previous experiences, technical capability proved to be the most decisive ingredient. The first two requirements were already discussed in section 2.1, but some specific comments should be made regarding timing. During the years of spatial planning prominence this did not seem to constitute a problem, but the economic crisis has impacted both the spatial planning system and land development as an economic driver, thus influencing, in turn, the demand for technical capability and technical resources in spatial planning.

According with the results of the case study analysis, a majority of the answers indicate that enough technical capability exists. The key issue remaining is to what extent new practices are innovative. This seems to be the key point in two very different cases: HR-Coastal and NL-Ladder. The first concerns a new rule in a traditional regulatory system coming from international protocols and requirements from a new central government in a relatively new State (Croatia). The second, NL-Ladder, is a curious case because one of the most trained and consolidated spatial planning systems in Europe reports insufficient capacity. The reason could lie in the decline of a spatial planning culture traditionally focussed on coordination and deliberation ('Polder culture') and the emergence of a last-resort national-level legalistic intervention. Following the tradition of basic guides, this intervention leaves it up to developers and consultants (and some municipal planning departments) to justify the foreseen urban developments, and leaves it up to the courts to decide if this justification is

enough. Finally, in order to assuage technical and procedural aspects, flexibilization (in HR-Coastal) and simplification (in AT-Vorarlberg, HR-Coastal, NL-Ladder) of procedures for the intervention was introduced. Sufficient technical capacity is clearly recognized in CH-CantonAargau and SE-Stockholm.

2.2.2 Data and information

Regarding data and information, a distinction has to be made between availability and capacity to use, from both a technical as well as a public-use perspective. Being sufficiently available, this difference was relevant in CH-CantonAargau since technical use was considered the most important and relevant. Public use depends, of course, on the possibility for participation and its final effectiveness. Availability is broadly considered sufficient, but not always (HR-Coastal, RO-Constanta). Additionally, some difficulties arise in most cases regarding the utility of such information and data to help decision making as well as public participation. Indicators are not always well-oriented or are not supplied at the necessary scale (DE-30ha, HR-Coastal, NL-Ladder). Sometimes, an apparently very clear, simple and specific indicator (such as less than 30 ha/day nationally for settlements and transports in DE-30ha), which should be easier in practice, finally they are not, in the example due to weaknesses in establishing a clear allocation of what each particular municipality should achieve. This situation is related to a lack of coordination and institutional leadership as discussed below.

Overall, it seems that greater effort in the provision of tailor-made information and indicators is needed. This would make it easier to design, implement and monitor initiatives. The mission of territorial observatories is directly related with the need to produce these suitable measurement and monitoring tools. Thanks to them, it is possible to enhance procedures and obtain better results. Their demonstrative effect is useful to support spatial planning policy as useful and necessary for sustainability land use and development.

2.2.3 Participation

According to the Aarhus convention and similar developments and agreements, participation in EU member states has achieved a binding nature with the Strategic Environmental Assessment Directive (SEA). This was afterwards updated by combining that environmental assessment to plans and projects (business as usual the first version of SEA Directive tried to improve) and adapted to each national context; so, in a very open and flexible ways allowing them some relaxation on requirements and minimum thresholds. For this reason, it is easy to conclude from the case study analysis that there is a very common 'formal' participation according the rules. In contexts with traditional participatory culture it remains stable (CH-CantonAargau, DE-30ha, SE-Stockholm) or is re-oriented to pluralism (lobbies, as consultants, NL-Ladder), or is even enhanced (AT-Vorarlberg). In other cases, following the

general SEA mainstream, it is formally/normative applied (ES-Valencia, IT-BassaRomagna), even despite a lack of real capability for it (both institutional as well as social understanding), affecting the final usefulness and general acceptance by stakeholders and civil society (HR-Coastal, RO-Constanta).

2.2.4 Strategic vision

Public support is also needed when drawing up long-term visions. The case studies revealed that a common understanding about the initial situation (i.e. the right problem definition), based on clear evidence helps parties to agree on a strategic vision. Although a strategic vision was present in almost all cases, there were differences in its status. In some cases, the vision had a hard/regulative nature (DE-30ha, CH-CantonAargau, ES-Valencia, HR-Coastal, RO-Constanta), while other cases adopted a softer vision (AT-Vorarlberg, IT-BassaRomagna, PL-ITI). The cases of BE-Flanders, SE-Stockholm presented an intermediate situation.

On the other hand, in addition to the existence of strategic visions, and with a view to filling the gap between general objectives and specific actions, the trend is to enact detailed plans and programs: AT-Vorarlberg, CH-CantonAargau, DE-30ha, ES-Valencia, IT-BassaRomagna, NL-Ladder, RO-Constanta.

2.2.5 Institutional coordination

Institutional coordination, usually referred to as multilevel governance, is usually absent. Only AT-Vorarlberg, CH-CantonAargau, BE-Flanders and IT-BassaRomagna underlined this as an existent positive factor, linked to political tradition or recent institutional reforms that have given more power to key levels (IT-BassaRomagna). All three have a regional-federal style. However, in DE-30ha multi-level coordination is lacking in order to decide how quantitatively each municipality, region and Lander contributes to the average Federal goal (>30ha). This particular situation could be related with political contingences and disputes among Federation and States (even with conflictual legislation among them). Same problem of appropriate coordination is present in cases with long centralistic political culture/tradition or structure: ES-Valencia, HR-Coastal and RO-Constanta.

This lack of vertical coordination is in part amended by means of cross-sectorial policy packages, such as transversal policies as Transport (BE-Flanders, DE-30ha, ES-Valencia, IT-BassaRomagna, PL-ITI, RO-Constanta; with an explicit multimodal approach in AT-Vorarlberg) and Energy (DE-30ha, PL-ITI). Special mention must be made to IT-BassaRomagna, with a strong commitment in pursuing an inclusive and coherent approach (integrated planning style).

2.2.6 Institutional leadership

Again, there is an apparent divergence among case studies. In some cases, there is a clear institutional formal leadership: BE-Flanders, CH-CantonAargau, ES-Valencia, IT-BassaRomagna, RO-Constanta. In these five cases recent legislative changes assign a clear responsible party in charge of initiative (coincident with a clear political will, see 2.2.7). In AT-Vorarlberg, leadership is viewed as a common purpose despite not having a clear leader (this could be understood as a positive situation). Weak or absent institutional leadership is present in cases where each party tries to avoid leadership due to potential political consequences: higher political-administrative levels (central or federal) try to defer this to lower levels (BE-Flanders, DE-30ha, HR-Coastal, NL-Ladder). It can be understood as a process of avoiding responsibilities when decentralizing while cutting financial support. Only when decisions are kept out from political confrontation, and the authority in question has no fear of paying the cost (BE-Flanders), this leadership could be applied easily.

According to the stakeholder map analysis developed for each case study, two typical situations arose, with some interventions being implemented under strong leaderships (AT-Vorarlberg, BE-Flanders, CH-CantonAargau, IT-BassaRomagna) and others being developed as a collective effort (DE-30ha, NL-Ladder, SE-Stockholm, PL-ITI –in the four first ones with a clear distribution of shared responsibilities among public and private actors). AT-Vorarlberg and IT-BassaRomagna were signalled out as the most cohesive networks and their leadership is shared. On the other side we have NL-Ladder and PL-ITI, which have emerged as the weakest ones, with no real leaders. These leaders are usually public and have planning as main interest.

In the analysis of interventions (see Annex 2), the SUPER project has found two feasible key conditions related to institutional leadership through case study analysis: Political Stability, as a positive factor (as in AT-Vorarlberg, BE-Flanders, CH-CantonAargau, IT-BassaRomagna, SE-Stockholm) and Way to Lead (Carrot: AT-Vorarlberg, CH-CantonAargau, IT-BassaRomagna; or Stick: DE-30ha, ES-Valencia, HR-Coastal, NL-Ladder, RO-Constanta).

2.2.7 Political will

Political will is an important but not the single nor most decisive factor. It is very related to other factors as Institutional Leadership and Coordination which are main drivers; so, it has very heavy indirect effects. Political will is recognized in AT-Vorarlberg, BE-Flanders, CH-CantonAargau, ES-Valencia, IT-BassaRomagna, PL-ITI, SE-Stockholm; and is not overtly present in DE-30ha, HR-Coastal, NL-Ladder, RO-Constanta.

Public control and political will appear as unavoidable conditions (interesting examples in ES-Valencia, IT-BassaRomagna). Human capital is the key factor to make it possible: technical capacities, negotiation and coordination abilities, political will and shared leadership. Not only specialist technicians and participation groups but also teams of customized civil servants to

manage the initiatives. It is not only a matter for leaders (as clearly stated in PL-ITI but teams; that is the only way to ensure their permanence. In sum, human capital is key factor to make possible: technical capacities, negotiation and coordination abilities, political will and shared leadership.

2.2.8 Networks of cooperation

In addition of providing visual evidence of the type of relationships established between stakeholders in each case study, it is possible to employ simple metrics to enable the comparison of some aspects. The density of relations is one of such measures. This is expressed as a synthetic index, the result of weighting the quantity of each type of connections between stakeholders. Cooperation and negotiation relationships are considered constructive, whereas pressure and conflict, as well as a lack of relationship, are assigned a negative weight. All calculations were made with the software package UCINET. Since stakeholders were able to define their connections with the others choosing only one relationship, the sum of the densities in every network is 1 as a maximum value. The results are presented in Table 2.1, with colour-coding using the following convention:

Green	- In cooperation and negotiation:	Density ≥ 0.4
	- In conflict-pressure and none:	Density < 0.20
Yellow	- In cooperation and negotiation:	Density ≥ 0.3 to < 0.4
	- In conflict-pressure and none:	Density ≥ 0.15 to < 0.20
Red	- In cooperation and negotiation:	Density < 0.3
	- In conflict-pressure and none:	Density ≥ 0.4

Table 2.1: Density of relationships: High (green) - Medium (yellow)- Low (red)

Relations	AT	BE	CH	DE	ES	HR	IT	NL	PL	RO	SE
Cooperation	0.41	0.37	0.32	0.26	0.30	0.56	0.41	0.35	0.41	0.39	0.56
Negotiation	0.47	0.23	0.11	0.13	0.08	0.14	0.37	0.12	0.06	0.07	0.08
Conflict-Pressure	0.00	0.18	0.00	0.16	0.12	0.02	0.03	0.17	0.00	0.21	0.07
None	0.12	0.23	0.57	0.45	0.50	0.27	0.19	0.37	0.54	0.34	0.29

With a high value in cooperation and negotiation, and a low value in conflict and no-relations, AT-Vorarlberg has the most cohesive network, followed by IT-BassaRomagna (medium new negotiation culture), HR-Coastal (lack of negotiation culture), and SE-Stockholm (lack of negotiation due clear formal rules running from long). Low indicators in the two first and high

in the second two reflect a worse situation. According to this, DE-30ha, CH-CantonAargau and ES-Valencia are the least cohesive. However, the final results of these three interventions are not so bad due to a strong spatial planning tradition in a federal system in the two first cases, and strong participatory democracy in the second one, and clear political leadership in the third one. Nevertheless, this factor clearly formed an obstacle in the medium and short term respectively (time is against them from a networking point of view).

3 An assessment of land-use sustainability

3.1 Ex-ante sustainability assessment

All 11 studied interventions dealt with sustainability issues in their formulation of regulations, plans, strategies, programs or initiatives. Most of them did so explicitly, as they recognized the need to harmoniously address economic, ecological and social dynamics through the intervention. Nevertheless, in the cases of RO-Constanta and BE-Flanders the references to the three dimensions of sustainability can only be found implicitly, particularly in older documents from between 1991 and 1996, a moment when the theoretical basis of the sustainability discourse was much less developed. It is clear that the emergent sustainability paradigm has exerted great influence on the formulation of land use management and planning instruments across Europe. The same conclusion can be drawn from analysing how all the different interventions incorporate a temporal dimension into their philosophy and wording:

- Many cases explicitly aspire to achieve long term effects (AT-Vorarlberg, CH-CantonAargau, ES-Valencia, PL-ITI, SE-Stockholm) or at least mix short-term goals with medium-term goals (RO-Constanta);
- Some cases express concern for future generations (CH-CantonAargau, HR-Coastal, IT-BassaRomagna, RO-Constanta) and the impacts of climate change (ES-Valencia, HR-Coastal, PL-ITI, SE-Stockholm);
- A number of cases set land-use targets to achieve within a given timeframe (BE-Flanders, DE-30ha, IT-BassaRomagna) and deploy a calendar for their mandatory revision and update (ES-Valencia, RO-Constanta);
- All interventions demonstrate a clear intent to remain relevant in the future (they are not projects or temporary agreements).

In spite of the acknowledgment or expressed will to achieve a good equilibrium between the three aspects of sustainability and to sustain them over time, it is clear that the attention given to each dimension often remains asymmetric.

3.1.1 Economic

The ways in which each intervention addresses the economic dimension varies enormously between the case studies, but it is an aspect that is never overlooked. It is possible to distinguish two approaches as to how economic issues are managed in the cases.

- a. In the cases of NL-Ladder and, especially, RO-Constanta, good economic performance (more specifically 'economic growth') is one of their key targets.

In the case of RO-Constanta, economic growth is identified in regional planning as a path towards socioeconomic development, an expansion of the private sector and profit. Growth is encouraged across all the sectors of the economy, with the tourism sector signalled as the main priority. Land development to support this should occur 'within the limits of environmental protection', but these limits are not set and it is assumed that development will lead to "the devaluation of the natural potential". This

mention of an explicit trade-off shows that an intervention that strives towards economic targets cannot automatically be assumed to strive towards economically sustainable land use.

In the case of NL-Ladder, economic aspects play an instrumental role in the intervention. Economic performance is not explicitly mentioned in the intervention itself, but the regulation does seek to correct a market failure and therefore promote sustainable economic development by preventing oversupply of real estate. The case study illustrates how economic instruments can, on some occasions, have an important role supporting sustainable land use.

- b. In the cases of DE-30ha, ES-Valencia and IT-BassaRomagna, economic sustainability goals are more linked to the fair distribution of economic growth than promoting economic performance per se. In DE-30ha and IT-BassaRomagna, for instance, the economic dimension of sustainability is hardly considered by the two interventions that are mainly focused on environmental goals but, even in these cases, references to the importance of affordable housing objectives are made. The ES-Valencia case, born out of a similar environmental concern as the previous two cases, was further elaborated by addressing the potential economic impacts of the intervention, and introduced goals to support the viability of agricultural activity in the metropolitan area. It does so through the diversification of the rural economy and support for the promotion of local products as strategies to boost employment and incomes of often struggling small-scale and family operations. These three cases illustrate how, in many cases, it is possible for the economic sustainability of interventions to be framed within a paradigm of positive socioeconomic returns rather than being contingent upon market-led allocation of resources towards growth and profit.

The remaining case studies present economic discourses that mix the pursuit of economic growth opportunities granted by the intervention with socially-inclusive targets. For instance, support for and optimal allocation of economic activities contributing to sustainable tourism development, industrial growth, the opening of business parks and the establishment of innovative small and medium-sized enterprises can be found in AT-Vorarlberg, BE-Flanders, CH-CantonAargau, HR-Coastal, PL-ITI and SE-Stockholm interventions. Such targets mark these interventions as facilitators of economic development. However, by increasing the value added of the supported economic activities, they may result in greater output performance without increasing land consumption in comparison to other types of more aggressive but less efficient land transformations to spur economic growth (e.g. construction of low-density residential areas or low-budget tourist resorts). At the same time, however, many of these initiatives exhibit concern for the unintended social impacts that may come with economic

development, and they foresee or establish actions to combine growth with the provision of affordable housing, employment opportunities and support for traditional activities such as farming and fishing. By coupling economic development aspirations with efforts to integrate often-overlooked social groups in the circle of potential beneficiaries from the interventions, mixed-strategies may be able to secure greater support for their actions from a wider group of stakeholders, indirectly contributing to social equity sustainability objectives (see section 3.2).

3.1.2 Ecological

The characteristics of the different interventions regarding ecological sustainability naturally vary according to the geographical scale and type of environment they inhabit. In this sense, the sample reflects that urban interventions can embrace a broad range of strategies or priorities to enhance sustainability. Well-established planning approaches such as containment, densification, compactness and re-development of brownfield areas are, at least on paper, the preferred options in the AT-Vorarlberg, BE-Flanders, CH-CantonAargau, DE-30ha, ES-Valencia, IT-BassaRomagna, NL-Ladder, PL-ITI and SE-Stockholm, case studies. It is worth noticing that, in the case of RO-Constanta, neither the regional plan (1996) nor the national planning law (2001) prioritize these options, but some local regulations do, albeit in a fragmented manner as they are dependent on each municipality.

The studied interventions that also involve the management or planning of rural or natural areas commonly incorporate, in addition to the previous urban strategies, two ingredients. First, a recognition of the intrinsic values and contributions of open areas and ecosystems to sustain ecological functionality, provide ecosystem services and pleasant landscapes (e.g. AT-Vorarlberg, BE-Flanders, CH-CantonAargau, DE-30ha, ES-Valencia, HR-Coastal and SE-Stockholm). Second, these values and benefits ought to be preserved and even enhanced by enacting the legislative protection of natural areas, the establishment of green zoning and buffer rings, the introduction of restorative and mitigative measures on impacted areas and, more vaguely, commitments to not exceed certain environmental standards. These steps can be found, with different combinations and intensities, in the cases of AT-Vorarlberg, BE-Flanders, CH-CantonAargau, ES-Valencia, HR-Coastal, IT-BassaRomagna, PL-ITI, RO-Constanta and SE-Stockholm or, put in another way, they are only explicitly missing in the cases of DE-30ha and NL-Ladder, which nevertheless are focused on the broader objective of preventing unsustainable land development.

In two cases, AT-Vorarlberg and IT-BassaRomagna, signs of innovation are observed in the type of tools mobilized to foster ecological sustainability, introducing variations on a similar compensation scheme to ensure that municipalities that preserve open land uses also benefit from revenues generated by land transformations in other boroughs. In addition to the direct benefits of the different strategies and innovations both in urban and non-urban settings, some interventions appraise the indirect positive effects that striving for ecological sustainability in the respective territories engenders for local communities and their

economies: it enhances the quality of life of the population to have protected green areas close to homes, it reduces the need for private mobility, thus avoiding pollution and saving costs, etc.

This comparative analysis illustrates how, in most cases, ecological sustainability is, at least on paper, the backbone of most case study interventions. By strengthening ecological sustainability, their advocates often expect to synergistically enhance the economic and social equity dimensions of sustainability in their territories.

Of course, it is impossible to prescribe a single pre-determined set of specific environmental policies and actions that may universally guarantee the realization of all the promised potentiality, as the optimal combination will depend on context-specific settings and constraints. Nevertheless, it seems reasonable to assume that interventions built around ecological sustainability commitments may offer advantages as a platform to articulate complementary economic and social aims.

3.1.3 Social equity

Without exception, all 11 interventions demonstrate some sensitivity to social concerns and seek to pursue greater equity and inclusiveness. The degree of development that such initial statements enjoy, however, varies greatly between case studies. CH-CantonAargau reflects a concern for the fair distribution of land development opportunities at the national level, as a previous citizen-led initiative aiming to completely stop land take was considered unfair on equity terms. This was then rejected in a referendum and replaced with the case study intervention. AT-Vorarlberg, BE-Flanders, ES-Valencia, RO-Constanta and SE-Stockholm pledge to reduce the inequality gap that exists between different neighbourhoods, towns and social groups in the respective territories. In some cases, most notably AT-Vorarlberg and ES-Valencia, the most vulnerable groups, those that should receive preferential attention are explicitly identified along the lines of age (children, youth and the elder), gender and religion. Conversely, In the cases of DE-30ha and PL-ITI a brief reference to social equity goals is made, but further development is lacking.

While some cases do not devote statements to identify the specific target-groups that may benefit from social enhancement efforts, they are still unequivocally committed to broad social benefits, in the form of enhanced quality of life, public good and/or public health, a strengthened city identity and the preservation of cultural heritage. Alongside such intangible goals, many of the case study interventions promise to deliver two rather commensurable improvements: better access to nature and services (AT-Vorarlberg, BE-Flanders, CH-CantonAargau, ES-Valencia, HR-Coastal, NL-Ladder, RO-Constanta and SE-Stockholm); and an offer of social housing that matches demands (AT-Vorarlberg, BE-Flanders and IT-BassaRomagna).

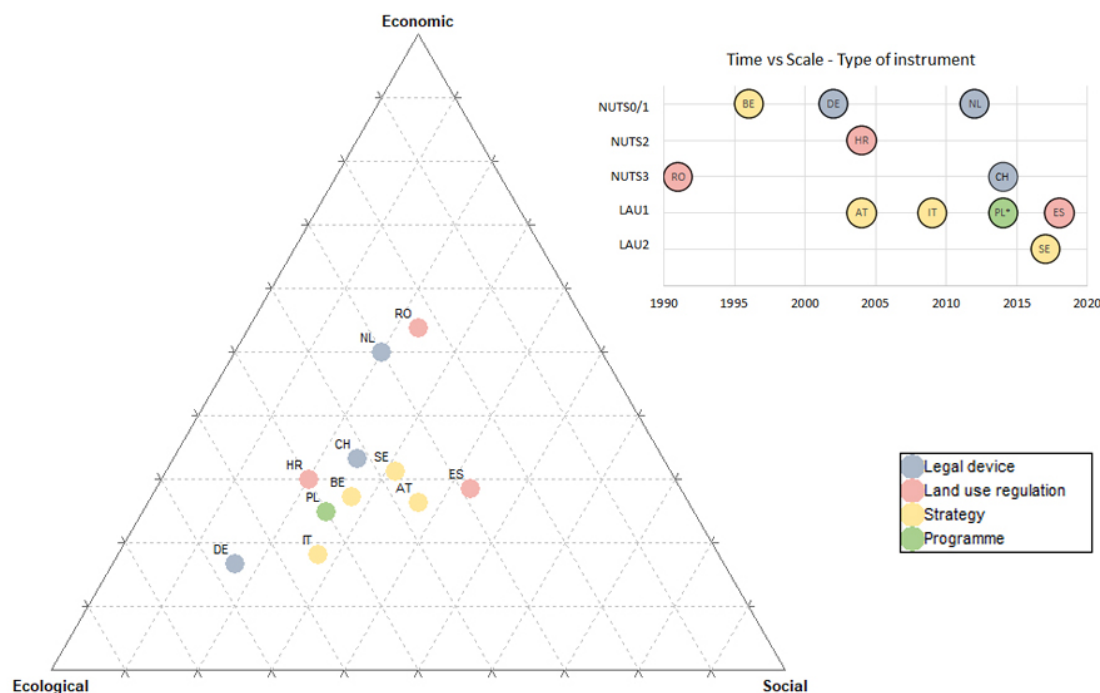
It should not go unnoticed that, in spite of widespread remarks of social equity sustainability, responsibility, equity, fairness and justice, the volume of explicit commitments of the interventions in this dimension and the degree of concretion of the proposals generally lag behind in comparison to those formulated in the pursuit of economic and, even more evidently, ecological sustainability. This shortcoming may attest to the difficulty for land use planning to effectively deal with the social equity dimension of land-use sustainability. In many cases, the loose reference to social aspects and aspirations seems to respond to a perceived need to present the intervention as suitably framed within the triangle of sustainability, for justification or even propagandistic purposes, rather than being a response to a genuine desire to tackle social problems. Of course, even if this hypothesis were to be sustained, some cases, like AT-Vorarlberg, ES-Valencia and SE-Stockholm, compare favourably to others, and could be identified as best practice examples, at least in terms of sensitive statement-making, while the actual delivery of benefits remains to be assessed. It must also be reiterated here that some of the aims and objectives listed as economic and ecological could simultaneously satisfy, if fulfilled, several social demands.

3.1.4 Synthesis

The reading of the findings on ex-ante sustainability invites further reflection on their configuration with respect to individual case studies. Figure 3.1 provides some visual indications as to which temporal, scale and the three thematic sustainability coordinates each of the 11 case studies occupy. The ternary plot on the left is an approximate interpretation of the relative position of each case study along the three axes of sustainability: economic, ecological and social equity. The closer a case study is to a vertex, the greater the weight that, in principle, the sustainability dimension is given, whereas a more central position represents a more balanced combination.

While none of the cases is entirely specialized on one dimension and blind to the others, it is manifest how a majority of land-use interventions lean towards ecological sustainability aims, while two others (NL-Ladder and RO-Constanta), put the onus on economic aspects. Only AT-Vorarlberg, ES-Valencia and SE-Stockholm interventions grant one third or more of their attention to social aspects, bringing them closer to being characterized as integrated. Of course, no recommendation can be given on what position an initiative should ideally occupy in the plot, as this will depend on the type of problem that it tries to tackle or which improvements it expects to deliver. Much less so without having assessed the performance of each intervention, as it might be more desirable to have a successful intervention narrowly focused on delivering a certain ecological (or economic or social equity) benefit than an operation that fails in materializing its unrealistic aspiration to bring progress in all three fields at once. Still, one can consider these results in light of the ongoing debate on sustainability and the prospects of achieving win/win outcomes rather than trade-offs between dimensions (e.g. Campbell, 2016)

Figure 3.1 Ternary plot of ex-ante sustainability analysis



The large figure (left) depicts an indicative location of the ex-ante character of each case study intervention (identified by country code) across the three dimensions of sustainability. The colours indicate the type of instrument used in each case. The accompanying scatter plot (top right) situates each intervention (identified by country code) against the main geographical scale and year of approval

Interventions that are articulated as strategies (coloured in yellow) tend to be directed at pursuing a balanced mix of benefits in all sustainability dimensions, whereas legal devices (in blue), seem to be considered promising tools at targeting more specific goals, circumscribed in a single dimension without being, nonetheless, oblivious to their effects in the remaining two. The varying character of land use regulations (in red) appears to make them the most flexible instrument, as different interventions exhibit divergent tendencies, with ES-Valencia occupying an almost central position, HR-Coastal presenting moderate skewedness towards pursuing ecological goals and RO-Constanta clearly aligned with economic aims.

The scatter plot on the top right corner of Figure 3.1 complements the analysis by capturing how, in general, interventions set at lower LAU1 and LAU2 geographic scales tend to be the more strategic ones and, therefore, occupy more central positions in the diagram (it must be pointed out here that even the BE-Flanders case adheres to this pattern as, in spite of being classified as belonging to the NUTS1 scale, it also includes a sub-case study of the city of Ghent). This points to the possibility that local and sub-regional administrations more commonly pursue a more comprehensive type of socioenvironmental development built around a holistic and perhaps softer discursive instrument, whereas regional and national initiatives often take a more instrumentalist approach: the enforcement of legal devices and land use regulations to prescriptively address specific problems or fulfil expectations. Whether

it is advisable for other territories to adhere to this pattern will need to be assessed against the performance of each approach (presented in section 3.3).

Finally, it might be tempting to use the scatter plot in Figure 3.1 to conclude that more recent interventions have a more integrative character, something which would be consistent with the gradual introduction of sustainability principles in land use planning practice over the past 30 years. Nevertheless, evidence to sustain this observation is somewhat thin (consistent for CH-CantonAargau, ES-Valencia and SE-Stockholm, but AT-Vorarlberg and BE-Flanders are older than comparatively-biased IT-BassaRomagna, NL-Ladder and PL-ITI) and the study of more cases would be necessary to increase the level of confidence.

3.2 Pre-intervention sustainability assessment

Each case study sought to identify what we call 'pre-intervention drivers'. This exercise allowed us to extend the analysis of sustainability to two other fundamental dimensions outside the classic sustainability triangle of the three Es/three Ps, which affected the implementation of the studied interventions.

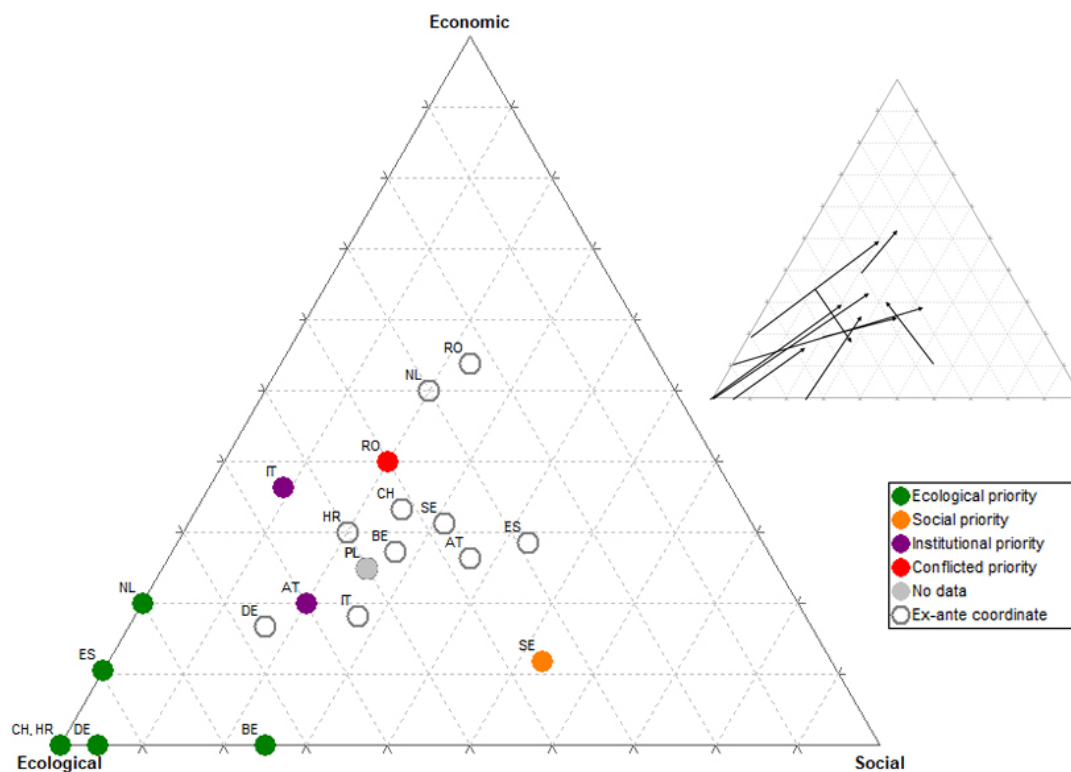
The first additional dimension is called **institutional sustainability**. It aims to assess whether each intervention actually gave response to the needs and concerns of the different involved stakeholders. Without proper correlation between the ambitions set by the interventions and the demands of land-use management stakeholders, any initiative will, in all likelihood, be bound for failure. Either it will be lacking justification, financial resources or will even face active opposition from negatively affected stakeholders. Conversely, a clear agreement between institutional and non-institutional stakeholders on the priorities that the instrument should pursue and, equally important, the transposition of these demands into provisions within the corresponding intervention, will increase its institutional sustainability capital, the likelihood of implementation and, ultimately, the opportunity for the realization of its goals.

The second additional dimension is temporal. **Temporal sustainability** will be greater when an intervention is deployed and developed at the right time, when the issue it addresses requires it and it has gathered sufficient support. Conversely, interventions that are prematurely born without having secured the necessary resources, public approval for implementation or, at the other extreme, are negligently delayed, will see their temporal sustainability eroded.

The results of the comparative analysis of pre-intervention drivers reveal that, as a general rule, what the 100+ interviewed stakeholders overwhelmingly expected and demanded from the 11 studied land-use interventions was action towards ecological goals, in most cases as a reactive response to tackle perceived environmental sustainability problems (Figure 3.2). In the most extreme cases of CH-CantonAargau and HR-Coastal, the reported motivations for the interventions were entirely environmental, with DE-30ha almost in the same situation.

Four cases deserve special attention due to their particularities, with none of them constituting a complete exception to the aforementioned bias for ecological goals. The AT-Vorarlberg and IT-BassaRomagna interventions fit the pattern in the sense that, among the three sustainability dimensions, most interviewees ascribed greater importance to ecological sustainability aims but, overall, the greatest number of demands postulated by interviewees were institutional in nature (e.g. coordination, coherence, integrated vision, etc.). Like these two cases, the RO-Constanta intervention was also expected to mainly deliver institutional improvements but the demands inscribed in the sustainability triangle were varied and even contradictory. For instance, Romanian stakeholders requested, with similar intensity, the encouragement of urban growth for economic purposes and the containment of urban growth for conservation purposes. While there is an almost perfect equilibrium between the three faces of sustainability, it cannot be defended that a consistent demand for integrated planning existed in RO-Constanta. In the case of SE-Stockholm, a majority of stakeholder demands were socially oriented, albeit with a strong ecological component, as a wide consensus had manifested itself that the most pressing issue for the intervention was to address was the provision of housing through an urban densification strategy.

Figure 3.2: Ternary plot of ex-post sustainability analysis



The large figure (left) depicts (1) the indicative position of the issue that were expected to be addressed, measured as the sum of all values from all interviewees for each case study and (2) an indicative location of the ex-ante character of each case study intervention (empty circles) across the three dimensions of sustainability. The colours indicate the dominant character of the demands in each case. The accompanying ternary plot (top right) indicates the distance between (1) and (2) in each case study, indicating the degree to which expectations and needs matched the actual content of the intervention.

The alignment between the wishes and expectations from stakeholders and the provisions normatively formulated by the interventions themselves is remarkably poor. Figure 3.2 presents this gap in striking visual form for each case study. The figure reproduces on a ternary diagram the position in the sustainability triangle that each intervention was determined to occupy in the previous section, that is, according to the actual dispositions and character of each case study (empty circles). However, it also adds the position that each case study should occupy according to the stakeholder criteria and prioritization (filled circles). While the colour distinguishes the different character that stakeholders would, on average, have expected, the accompanying arrow diagram illustrates how far all interventions are removed from this point, in most cases from the ecological sustainability vertex towards a more central position (but notice IT-BassaRomagna and RO-Constanta). This suggests that, even in situations where a broad range of stakeholders demands, unanimously or by wide agreement, an intervention that prioritizes the ecological dimension of land-use sustainability, the institutions in charge of promoting and designing them often intervene to incorporate a broader range of objectives, making them more balanced and bringing them closer to what would be designated as integrated planning. While this decision, in itself, cannot be considered neither good or bad practice, it may offer certain advantages or disadvantages depending on the reasoning behind it. We can consider four likely motives for this:

1. **Integrative.** It might signal a desire on the part of the responsible authority to use the momentum among stakeholders for an ecologically oriented intervention to tackle broader, more ambitious targets. Here economic and social equity goals are linked to ecologically sustainable land-use practices. In some cases, the narrative of the intervention shifted, thanks to this integrative approach, from being a mere reaction to a certain environmental problem of excessive land consumption into an exciting holistic vision for the future of the affected area, making it a more attractive and engaging project. As long as these expanded ambitions are matched by the necessary resources, these strategies could synergistically maximize the benefits of the intervention in all sustainability dimensions. Conversely, if they are underfunded or unrealistic, they might erode the credibility and political capital of the promoting parties.
2. **Inclusive.** It might signal a desire on the part of the responsible authority to be inclusive of all stakeholders, regardless of their interests or capacity to be heard. This could either reflect good democratic practice on the part of the promoter or an instrumental step to gain the support of otherwise opposed groups among the public. This strategy could produce a backlash if the additional economic and social equity goals are given insufficient energy and resources.
3. **Tokenistic.** It might signal a desire on the part of the responsible authority to employ sustainability rhetoric without ever intending to go beyond paying lip service to the three sustainability dimensions. This is a risky strategy, as authorities might be held to account for failing to deliver on their many promises.
4. **Financial.** It might signal a desire on the part of the responsible authority to implement interventions within a balanced public budget; ideally, such measures should pay for themselves. In many Western countries the legitimation of environmentally and socially oriented plans, policies and programs and their approval is conditional on demonstrating a positive cost/benefit score. The incorporation of new objectives could be an instrumental strategy to secure funding and support. This strategy also carries the risk of disappointing the original proponents if the intervention's sustainability becomes compromised.

The case studies provide indications of the first three approaches and, in some specific cases, different stakeholders suggested a combination of reasons. In general, institutional stakeholders favoured the integrative explanation, whereas critical non-institutional stakeholders leaned towards the second and, occasionally, third explanations. These two latter reasons, in addition with the fourth, or a combination of the three, would be consistent with the observation formulated in section 3.1, namely, that economic and, especially, social priorities seemed to display, in our analysis, a lower level of focus and detail than ecologically-oriented dispositions.

A large distance between the formal goals of any intervention and the reality of the (mostly ecological) problems or concerns that trigger it according to stakeholders, could seriously undermine implementation due to the potential eruption of conflicts between stakeholders and the public administration. Nevertheless, the empirical evidence suggests that conflict was largely diverted in the case studies and that, in apparent contradiction with their own perceptions, the consulted stakeholders overwhelmingly supported the interventions (Table 3.1). Most interventions attracted only minor criticisms, most notably in ES-Valencia where some polarization was observed among stakeholder groups, and in RO-Constanta institutional stakeholders were practically left on their own to defend the current spatial planning provisions in the region of Constanta.

Table 3.1: Average stakeholder-reported agreement with the goals of the intervention

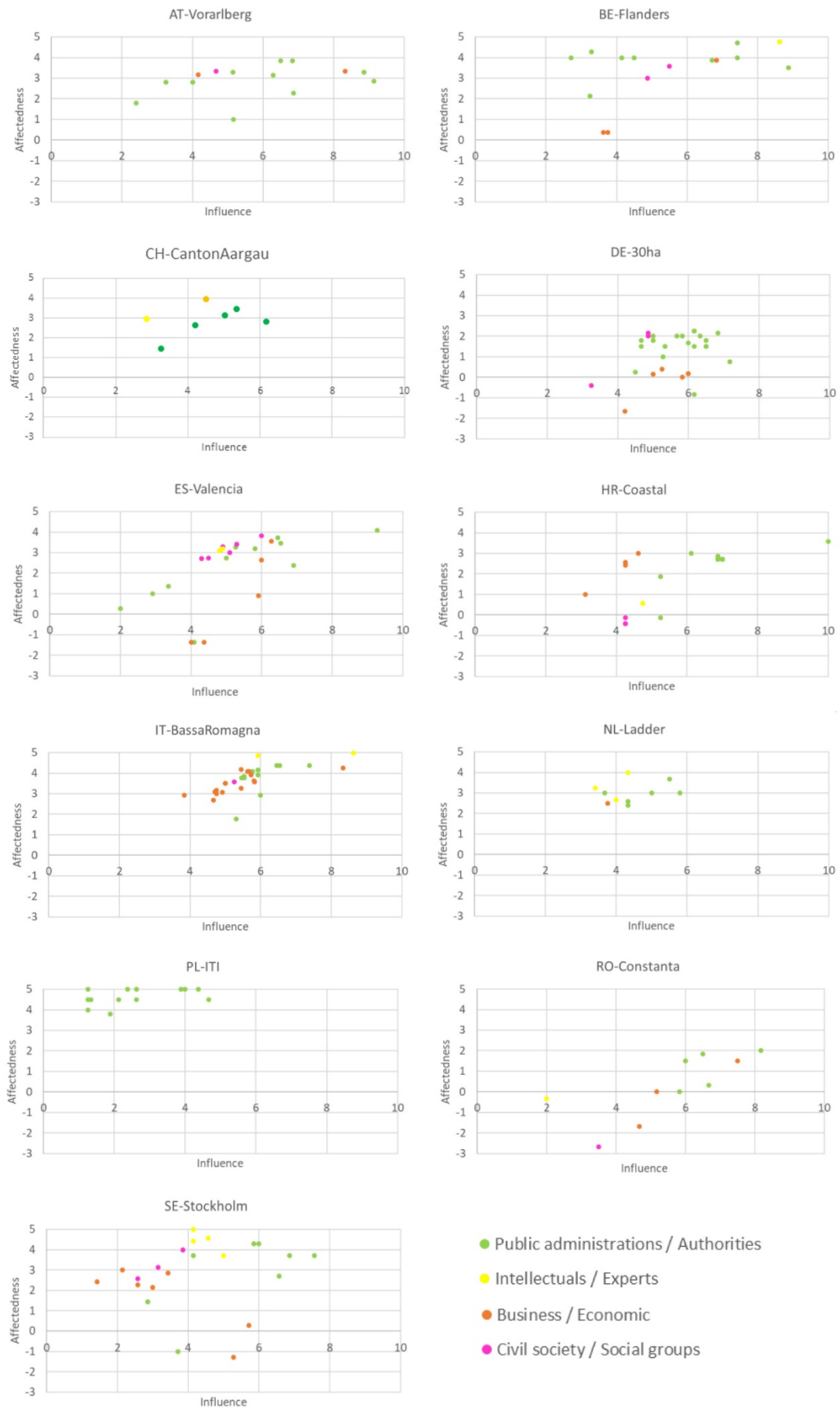
High	AT-Vorarlberg, BE-Flanders, CH-CantonAargau, DE-30ha, HR-Coastal, IT-BassaRomagna, NL-Ladder, PL-ITI, SE-Stockholm
Medium	ES-Valencia
Low	RO-Constanta

This finding suggests that, in most cases, either the respondents wholeheartedly agreed with a more integrated approach to land-use management and the taking into consideration complementary economic and social equity concerns, interests and groups; or they sensed and accepted that the politically correct discourse of comprehensive action is the symbolic price that must be paid to make progress possible. Regardless of the motive, the findings show that it is possible (and in fact most sampled interventions succeeded in doing this) to design and implement land-use sustainability actions that address predominantly ecological concerns through the formal adoption of more integrated discourses and instruments. However, as the more contentious cases also show, securing wide support for the intervention and agreement around its baseline goals remains an important prerequisite for institutional sustainability. While the partial misalignment between normative aspirations of the interventions and stakeholder priorities might not affect the level of support, whether this configuration has any impact on the delivery of results or not will be explored in the subsequent section. It should be expected, however, that in cases like RO-Constanta and, to a lesser extent ES-Valencia, where a significant proportion of stakeholders did not agree with the intentions of the interventions, the judgements on their results ought to be more critical.

In contrast with the generally positive reception of how land-use sustainability was approached by administrations, most stakeholders in all case studies (except in SE-Stockholm) complained, in hindsight, that the interventions did not get their timing right. This negative assessment of temporal sustainability is most acute in cases like DE-30ha, ES-Valencia and HR-Coastal, where interventions were judged to have arrived too late; and in BE-Flanders and RO-Constanta, where most interviewees complained that the respective spatial planning systems were not updated on time. Delays were moderate or disputed by most stakeholders in CH-CantonAargau, IT-BassaRomagna and NL-Ladder, whereas in AT-Vorarlberg some interviewees complained that the intervention should have ended earlier, as it was not being properly implemented in its latest stages, thus reducing its effectiveness. Across all cases, there is a tendency for decision makers, officials and other stakeholders in the political sphere to either approve or express only moderate criticism about timing, whereas non-institutional stakeholders are harsher in their criticism.

It is worth pointing out that the timing of any intervention largely depends on decisions made by the public administration. Unlike the content and actions of the intervention, which will be the result of a combination of political interest, human resources committed, public participation, lobbying and other factors that make the final output somewhat unpredictable, public authorities control the timeline for implementation (even though it may be argued that, in cases like AT-Vorarlberg, CH-CantonAargau, and ES-Valencia, civic pressure also played a role in configuring the scheduling of each intervention). The stakeholder mapping diagrams and affectedness/influence plots obtained across all case studies visually confirm what was also recorded throughout the interviews: that the public administration was the lead actor in all cases (Figure 3.3).

Figure 3.3: Affectedness/influence plots by sector



The results on temporal sustainability therefore suggest that public authorities tend to be slow in detecting or giving adequate consideration to land-use sustainability challenges in almost all territories and are insufficiently proactive in implementing early responses or adapting those in place.

Corrective action could be initiated in all cases afflicted with this weakness in the form of streamlining decision-making processes, strengthening land-use change monitoring and effective public participation programs that facilitate constant communication between administrations and stakeholders closely involved with land-use change dynamics or capable of perceiving them in the field.

Decisionmakers should be reassured by the finding that most stakeholders in most cases approved of the measures put into place, once they were put into place. Therefore, it is likely that timely action on addressing land-use sustainability challenges hold far greater potential advantages than costs. The current context of climate emergency, as declared by the European Parliament and several other institutions in recent months, can be considered an additional call on the urgency of fast-tracking planning efforts that address land-use sustainability goals.

3.3 Ex-post sustainability assessment

Two data sources provide evidence for assessing the ex-post sustainability performance of the interventions: land-use change maps and graphs on one hand, and feedback from the involved stakeholders on the other. The following subsections present the results following the three-dimensional conceptualization of sustainability adopted in the SUPER project, with land-use changes mainly being treated in subsection 3.3.2, devoted to ecological sustainability. As it will be revealed, most the interventions' effects are difficult to ascribe to a single dimension, as their effects usually become expressed in varying forms in all three dimensions.

3.3.1 Economic

It has been described in section 3.1 how only two out of the 11 studied interventions focussed on economic priorities and, even in these cases, they were paired with social and, mostly, land conservation concerns. In none of the cases was this decision denounced by stakeholders, as shown in section 3.2, because most of them perceived economic goals as secondary or, in certain cases, not even relevant – even when steps were taken to introduce economic goals in the intervention. It is not surprising, then, that most interviewees, in all study cases except RO-Constanta, struggled to find objective and reliable indicators of positive or negative impacts on the economy and economic sustainability. In the RO-Constanta case study, most of the feedback concerning economic issues pointed to the success of the planning system in promoting economic activity, land development, incomes,

and, in particular, tourism. Few references were made to the sustainability dimension of this economic growth and, when they were indeed made, it was largely to point out that this had not been sufficiently addressed or absent. The question posed to interviewees was further hampered by the fact that none of the interventions had put in place or conducted assessment or monitoring schemes able to register economic effects.

Under these conditions, stakeholders were only able to estimate, on the basis of intuition, the economic effects of the relevant intervention or, at best, suggested proxy indicators. With these limitations in mind, most of the reported impact was assessed as positive. The following points summarize the predominant patterns:

- An optimized distribution of land uses and an efficient use of land (through redevelopment, regeneration, etc.) were seen as generating indirect economic gains in the form of reduced need for costly private transport modes, creating proximity for citizens and businesses, creating synergetic areas of industrial and innovative specialization, improving supply/demand balance by facilitating the conversion of offices into homes vice-versa, marketing opportunities, and even tax optimization opportunities. All these improvements point to private and public financial savings, while also limiting the consumption of open land, thus adding environmental benefits. Interestingly, advantages of this type were more frequently cited in case studies from western, northern and central European countries: AT-Vorarlberg, BE-Flanders, DE-30ha, NL-Ladder and SE-Stockholm.
- For companies and investors in advanced economies, the quantity and quality of green infrastructure, public services and housing opportunities are deemed valuable assets in a city/territory for attracting skilful and talented workers. Businesses and workers in some global sectors (IT, finance, etc.) that based their decisions in this frame viewed land-use strategies capable of delivering these ingredients favourably. This rationale was predominantly reported by stakeholders almost matching the geographical pattern of the previous point: AT-Vorarlberg, BE-Flanders, NL-Ladder, RO-Constanta and SE-Stockholm.
- Priority economic development sectors can be directly supported by land-use interventions. In the cases of AT-Vorarlberg and BE-Flanders, the respective instruments foresaw the provision of well-located business parks for both larger and small and medium-sized private enterprises; in RO-Constanta tourism-related development was privileged against other sectors in spatial planning; and traditional agricultural activities were specifically backed and rural tourism encouraged in ES-Valencia and HR-Coastal as a way of generating additional incomes for social groups that help provide public goods that are often non-remunerated (e.g. food security, cultural-landscape management, biodiversity preservation).
- A recognition of the intrinsic value of open space contributes to its conservation. Complementing the regulation-based protection of open, non-built-up areas, interventions in CH-CantonAargau, ES-Valencia and HR-Coastal support the continuation of competitive traditional rural activities as a way to increase the inherent value of agricultural land and, in this way, protect it from urban conversion. In ES-Valencia, even the property development sector admitted that new opportunities opened

up to them as a result, as the views over the traditional landscape offered by some properties will allow them to be sold at a premium.

- A similar approach has been observed in AT-Vorarlberg, BE-Flanders, DE-30ha and SE-Stockholm regarding the advantages of preserving green spaces for their use value. In DE-30ha, for instance, increasing the value of open space accelerated the incorporation of just-in-time and work-from-home schemes in some companies, as the increased cost of the remaining developable pushed CEOs to cut costs in otherwise planned storage facilities and office buildings. Whereas the single action of prohibiting the conversion of agricultural or natural land covers to artificial uses traditionally faces opposition from farmers and other groups with development expectations, the articulation of proposals that link protection to a constructive discourse that values these spaces for their functions and benefits is, as the evidence suggests, less contested. In fact, there are indications that, even in the case of RO-Constanta, the paradigm of greenfield development as the main form of extracting value is increasingly contested due to the externalized environmental and social costs.
- Governance innovations can contribute towards a more equitable distribution of economic costs and benefits with respect to land-use interventions. Experiences in AT-Vorarlberg and IT-BassaRomagna signify a shift in the economic culture, from being driven by a competitive urge among municipalities to attract economic activity and employment to the detriment of other areas, to a more cooperative approach that not only guarantees a fairer distribution of public costs and tax revenue, but is built on the premise that activities should be located in optimal locations according to the three dimensions of sustainability. Therefore, the advantages of this approach are not just economic and institutional, but also ecological and social.

The case studies also revealed negative impacts of the interventions on economic sustainability. The SE-Stockholm intervention was judged as successful in providing an attractive city to invest and live in, but, for this reason, demand for housing rose sharply over the last years. Prices have become so high that lower and middle-income groups can no longer afford to live in Stockholm and must move to the metropolitan area, which is deemed as detrimental to ecological and social welfare. Similar fears were reported by interviewed stakeholders in CH-CantonAargau, but more time is needed to assess whether this fear is justified. In the case of BE-Flanders, the state-sponsored provision of business parks greatly exceeded the actual demand, and these complexes often remain empty. Doubts about the optimal allocation of land for development were also expressed by a minority of stakeholders in AT-Vorarlberg and IT-BassaRomagna, suggesting political motives were behind this. In RO-Constanta, concerns about the distributive justice of the tourism sector were expressed by several groups, with some stakeholders in IT-BassaRomagna expressing similar worries. In NL-Ladder, the bureaucracy of complying with the intervention and the risks generated by the potential legal challenges were decried by the development sector and some municipalities. They viewed the intervention as an increased planning burden requiring the commitment of personnel that would otherwise be freed or assigned to more productive tasks.

Overall, the findings in this subsection support the contention that land-use interventions, if adequately implemented, are recognized by stakeholders as contributing to long-term economic sustainability and that their performance worked through institutional and other indirect means rather than boosting economic performance in the short term. In contrast to preconceptions that tie pro-environmental land-use planning instruments to undesirable economic impacts, the results reveal that the studied interventions are overwhelmingly (but not unanimously) praised for having been implemented without significant damage to the economy. Furthermore, in many cases the benefits in terms of long-term economic sustainability are perceived to exceed the costs. Moreover, shortcomings could be addressed by the introduction of preventive and corrective measures. These findings may reassure concerned decisionmakers and can be interpreted as an invitation for public authorities to be proactive in promoting land-use sustainability.

3.3.2 Ecological

The effects of the **interventions** on the ecological dimension of sustainability can be classified, according to the collected data, into three main categories.

- **Active open space conservation.** The conservation of open space is one of the most tangible results that any land-use instrument may achieve and, therefore, many consulted stakeholders referred to data and indicators attesting to this achievement in their areas. In some cases (AT-Vorarlberg, BE-Flanders, CH-CantonAargau, ES-Valencia, HR-Coastal and SE-Stockholm), the spatial delineation of areas to be protected from development by the intervention offered objective evidence of the impact on ecological sustainability while, in other instances (IT-BassaRomagna and, in addition in the cases of CH-CantonAargau and ES-Valencia), the proof came in the form of de-zoned extensions. Even when it is difficult to translate the surface area of preserved open space into sustainability gains, the direction of the change was indisputable. In other cases, the estimation of the quantity of land that had been spared development by the intervention had to rely on the expertise and critical assessment of the interviewees. By this standard, also the interventions in DE-30ha and NL-Ladder were widely regarded as success stories. In DE-30ha, this assessment was supported by data displaying the deceleration of daily land-use conversion, whereas, in NL-Ladder, public officials could point to development initiatives that had been denied planning permission due to the intervention. The case of BE-Flanders also unearthed some shadows of the intervention in the ecological dimension, as the Flemish ecological network, introduced in 2003, is, 17 years later, still being delineated. In RO-Constanta, there was widespread dissatisfaction with the spatial planning system's inability to effectively protect green infrastructure around Constanta, how the rate of land development was well above the pace of population growth and how tracts of the Black Sea coast and parts of the Danube delta with outstanding ecological value were being threatened.
- **Indirect environmental conservation.** For interventions mainly focusing on urban settings, ecological sustainability was reportedly fostered by delivering indirect environmental advantages via sustainable urban development and mobility. One of the strongest points of the interventions in AT-Vorarlberg, BE-Flanders, CH-CantonAargau, IT-BassaRomagna, NL-Ladder, SE-Stockholm and some municipalities in RO-Constanta

is their success, by using a variety of instruments, in concentrating growth in or nearby pre-existing developed areas, thus promoting compactness. Densification, infill development, re-development, brownfield development and growth around transportation hubs all helped minimize the need for open land conversion and, in the opinion of the stakeholders, made more efficient use of natural resources. The other factor that indirectly helped streamline ecological performance were mobility improvements. In the previous subsection this was highlighted as an economic advantage, due to time and fuel savings, less reliance on private means of transportation, etc. but it is obvious that these benefits concurrently fulfil environmental gains, with lower emissions, healthier lifestyles via active mobility and greater contact of people with nature, energy efficiency of railroad transportation against road movement, etc. These benefits were signalled in the cases of AT-Vorarlberg, BE-Flanders, ES-Valencia, IT-BassaRomagna and SE-Stockholm.

- **Environmental culture and awareness.** Intangible as they may be, cultural change and environmental awareness were found to have intensified among stakeholders and the rest of society thanks to the pedagogic and demonstrative effects of the respective interventions in all 11 case studies. Results indicate that, in AT-Vorarlberg, the process alerted participants to the scarcity of remaining open land, in BE-Flanders it raised the level of ambition of conservation goals, in CH-CantonAargau it made lower tiers of the administration co-responsible for environmental protection, in DE-30ha it raised awareness among the political class, in ES-Valencia it revived an appreciation for the traditional landscape, in HR-Coastal it emphasized the public interest of long-term conservation of coastal areas, in IT-BassaRomagna it forged a desire for territorial resilience, in NL-Ladder it helped convince private stakeholders of the need for sustainable growth, in RO-Constanta it sparked a reaction by environmental movements and in SE-Stockholm it vindicated a culture that sees environmental improvement as a precondition for socioeconomic development.

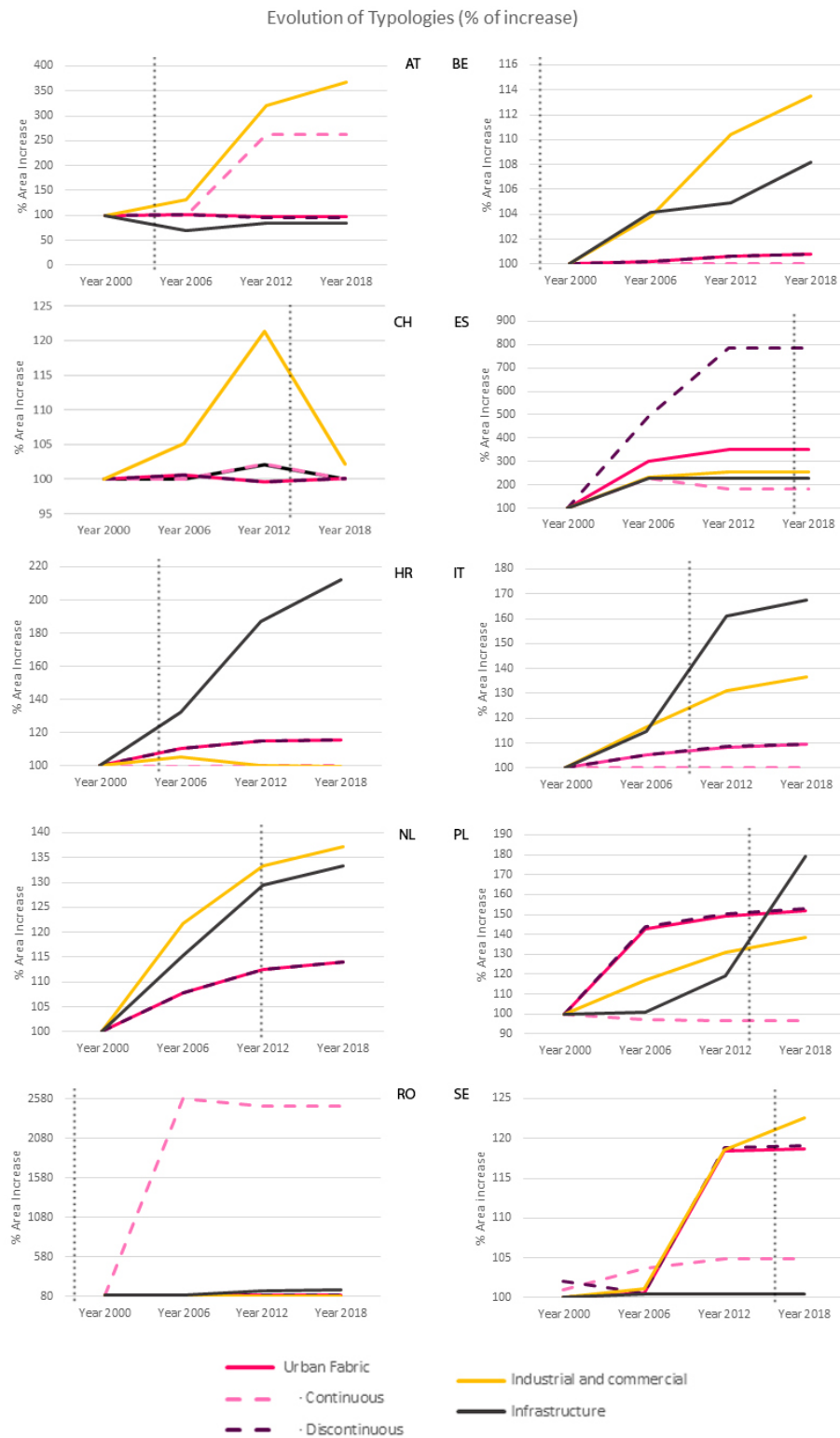
Based on these results, it would seem that most interventions were a resounding success in slowing unsustainable land-use transformations. However, the case studies also revealed two opposite indications:

- **Intensity and permanence of positive impacts.** Opinions on whether the ecological sustainability achievements were temporal or structural were rather mixed among interviewees in most study cases, as were opinions on the significance of the effects of the intervention on land-use sustainability. For instance, in AT-Vorarlberg, some interviewees admitted that most open land conservation would have occurred regardless of the intervention, thanks to the implementation of the Natura 2000 network. In BE-Flanders and HR-Coastal there are indications of relaxation or 'flexibilization' of certain restrictions. In DE-30ha it was widely recognized that, despite the observed deceleration in daily land-take, the 30-ha goal had not been met. In the case of ES-Valencia, many expressed concerns at the fact that the plan left infrastructure planning out of its scope and this was likely to generate conflict and increase environmental impacts in the near future. In the case of NL-Ladder, many plans regarded developments below the cut-off threshold for the intervention, therefore not being affected by it. Across several case studies, but perhaps especially RO-Constanta, political changes were identified as a potential source of concern, as steps taken towards ecological sustainability would be at risk of being reversed.

Quantitative data versus qualitative experience: When the impressions from interviewed stakeholders compared to the maps, tables and plots quantifying the evolution of land cover over time in the respective territories, it is difficult to establish a strong correlation between the qualitative and quantitative data (

- Figure 3.4). Even when taking into consideration that the interventions were remarkably different in character, the fact they apply to singular territories and that some were separated by more than 20 years in their application, it is difficult to find empirical evidence for the broadly positive feedback received in relation to the ecological dimension of sustainability. What the land-use trends depict in most cases is how, in spite of land-use interventions, the main drivers of land transformation are likely to be more accurately related to sectoral policies and wider economic cycles than the interventions themselves. In fact, some interviewees in ES-Valencia, IT-BassaRomagna and NL-Ladder (where the data seems to match most closely) argued that the impacts of the global financial crisis of 2008 and the concomitant arrest in land development activity had made any possible evaluation of the impact generated by the respective interventions on land-use change rates a futile undertaking.

Figure 3.4: Relative land-use change in selected case studies.



The year of introduction of the interventions indicated by the vertical dotted line. Notice how difficult it is to discern the impact of the interventions on land-use change behaviours from other more influential dynamics. Source: CLC

The apparent contradiction between qualitative interview-based data and quantitative remote sensing-based data does not necessarily put into question the reliability of the sources; it simply reflects that all the ecological advancements brought by the so-called successful interventions did not eradicate undesirable land-use changes or, in many instances, even change the trajectory of development. One would be tempted to conclude that land-use planning efforts so far were ineffective and should be stepped up if they are to constitute a significant deterrent to the unfolding environmental crisis, or that perhaps completely different measures are needed. Still, it is important to raise the contrapositive question: how would the quantitative data look like if the intervention had never been implemented? The answer is, of course, unknowable. Yet this is precisely where the qualitative interview data help us: the positive assessment of the stakeholders regarding the impacts suggests that without the intervention, developments would have been even more unsustainable.

Moreover, the intangible outputs detected throughout this analysis indicate that land-use interventions tend to reinforce public support for sustainability-oriented action. While legal instruments, targeted programs and coercive regulations have demonstrated their effectiveness in several cases, the most promising results in terms of ecological sustainability and temporal stability seem to come from cases that rely on the formulation of well-defined long-term strategies that can or have seized the opportunity to form broad coalitions.

3.3.3 Social equity

The social equity impacts of the interventions are generally the least visible and least reported by stakeholders across all case studies. This might validate the hypothesis that social goals in the interventions might be rhetorical or pro-forma add-ons to interventions which do not share the same level of ambition that economic and, particularly, environmental priorities do. Alternatively, it is also possible that social impacts are secondary to or side-effects of the primary concerns addressed in other areas. Indeed, some indications in the cases BE-Flanders, CH-CantonAargau, ES-Valencia, HR-Coastal, NL-Ladder and RO-Constanta support this contention.

With respect to the social equity goals set by the respective interventions (see section 3.1), the most visible outputs that ought to be assessed ex-post are the suitable availability of affordable/social housing, creation or maintenance of diverse communities and, finally, improved quality of life. Stakeholder assessments of these fields suggest that only some of the more affluent economies have so far been able to significantly advance these goals, and even in such cases, the results are often mixed.

The experience in SE-Stockholm is particularly significant, because the housing shortage was one of the main concerns that triggered the one intervention in the sample that put social goals slightly ahead of all other dimensions. Even though social housing projects and new housing estates were developed in accordance to the strategy guidelines and were delivered

on time, success in the economic and ecological goals of making the city attractive for investment with widespread availability of urban green infrastructure resulted in a housing cost increase rather than a decrease. This was attributed to open space restrictions that limited the supply of land for development, increased demand among high-income corporate workers and did nothing to solve the mismatch between the type of upscale developments favoured by local governments and developers and the affordable housing demanded by low and middle-income families. In BE-Flanders the development of social housing triggered by the intervention did not meet the total demand and a vulnerable population remains in a precarious situation. In AT-Vorarlberg the intervention might have made social exclusion problems more visible, but some actors rightly warn that the development of new social housing stock does not address root causes. Stakeholders in DE-30ha openly admitted that the apparently inevitable consequence of development restrictions must be an increase in housing prices and a subsequent exclusion of part of the population. Based on experience, they also warn that relaxing urban affordable housing policies can lead to development moving outwards towards smaller settlements, which does not benefit those most in need.

Regarding social diversity in the communities, BE-Flanders and DE-30ha suggest that increasing urban densities might facilitate or even force a greater mixture, whereas the SE-Stockholm experience indicates that, unless housing affordability is addressed, segregation issues will remain unsolved, or even exacerbated. Exclusion or push effects triggered by gentrification processes displacing groups were reported in several cases: AT-Vorarlberg, BE-Flanders, DE-30ha, RO-Constanta and SE-Stockholm.

In spite of the shortcomings of the interventions for specific social groups, overall, the vast majority of stakeholders considered that the environmental and economic improvements brought by many interventions had contributed to improving the quality of life for most people, either by increasing recreational opportunities, contributing to the walkable and cyclable city model, providing social services, facilitating contact with nature or maintaining the vitality of the social fabric in urban centres. Finally, the interventions were seen as useful instruments to maintain local identity and social cohesion in AT-Vorarlberg, DE-30ha, ES-Valencia and HR-Coastal.

The ex-post assessment of social equity sustainability of the sampled interventions generally follows the same pattern observed in the previous sections of this report, that is, the social equity dimension remains underattended, with uncertain and mixed results being frequently reported. These shortcomings could be partially remedied by giving more attention to social targets and impacts, but it is also undeniable that the avoidance of the segregating effects of containment interventions requires, in addition to bold statements, the commitment of considerable financial resources and institutional support (see section 3.3.3). In addition, this research has been unable to reveal or produce straightforward and universal answers to balancing the ecological and social equity dimensions. Nevertheless, it has also been shown that, in the end, greater investment in mitigative action such as social housing production may

be a small price to pay to harvest the many benefits that sustainable land-use interventions can have on the quality of life and social cohesion of local communities. Communication strategies should capitalize on these advantages to muster public support and increase stakeholder engagement, as a first step to deliver on the promises of social equity sustainability that are often generically pursued but scarcely materialized.

3.4 Balance and conclusion

The assessment of how land-use sustainability was addressed in the studied interventions and their final results, as assessed by a wide range of involved stakeholder groups, has revealed important insights into how land-use decisions are made in different contexts and the performance of resulting practices in economic, ecological and social terms.

An intimate relationship exists, of course, between the land-use change dynamics that an intervention addresses and the shape of that intervention. The vast majority of case studies reveal land-use planning and management instruments being introduced by public authorities to pursue, first and foremost, goals predominantly belonging to the ecological dimension of sustainability. This is the case even in the more traditionally liberal societies. On one hand, this finding suggests that land-use tools offer great potential to contribute towards the success of EU policy on land take, because they are entrusted to do so on the ground. On the other hand, it signals that these instruments are not frequently considered for delivering economic and social benefits. At the same time, these findings cast doubt over the doctrine in sustainability science dictating that all three basic dimensions (the three Es or Ps) must be granted similar care and attention in policies, planning and programmes. While adhering to this principle can undoubtedly be beneficial, it can also push decisionmakers, according to our data, towards the construction of instruments that deviate from their primary objective.

Strikingly, a misalignment was observed between the stated goals of the interventions and the actual priorities as identified by the different stakeholders (Figure 3.2). It is likely that decisionmakers find it beneficial to frame interventions within the principles of sustainability theory. In fact, it has been shown that this framing secured advantages, for instance, by using economic optimization strategies to guide decisions on the spatial allocation of new land uses or by flaunting the social benefits that the intervention could produce. An additional advantage of this approach is that it makes the links between the three dimensions of sustainability more explicit, indicating that fixing an environmental problem can fix economic and social shortcomings as well. Importantly, the evidence shows us that the comprehensive approach does not seem to erode the support from stakeholders, so it must be concluded that it strengthens the institutional sustainability of interventions in general. However, announcing a highly integrated approach can be risky if agendas or limited resources would only allow for narrow lines of action. The comparative analysis of case studies reveals that, in some cases, interventions had been designed to pursue a comprehensive approach to achieve sustainable

land uses, whereas in a minority of cases the commitment with this pathway was mostly rhetorical.

Even where interventions genuinely pursued a delivery of benefits across all dimensions of sustainability, the assessment of their post-hoc performance still reveals mixed results. None of the interventions exceeded expectations, and the ones that delivered on promises only attained some of their goals (however incommensurably these may have been normatively set) and, in all cases, a majority of contacted stakeholders, including public authorities, conceded that it was difficult to measure tangible results in the economic and, especially, social equity dimensions. This output suggests assessment instruments like the Territorial Impact Assessment, Integrated Assessment or Social Impact Assessment have an important role to play to gauge the effects of land-use interventions on several dimensions.

Still, by and large, land-use interventions were considered successful in delivering tangible direct and indirect land conservation outcomes while supporting some intertwined economic and social benefits in terms of a cost-efficient distribution of land uses and activities, a reduced need for costly, polluting and inconvenient private means of transportation and general health and quality of life improvements. Undeniably, and with few exceptions, the analysed practices fell short in their ambitions of boosting economic performance, achieving an equitable distribution of opportunities and tackling affordable housing shortages and segregation issues in urban areas. Some of these shortfalls stem from a lack of adequate resources, deficiencies in coordination and insufficient mitigation measures. In spite of these shortcomings, which are not perceived as insurmountable, most of the interventions enjoyed a broad level of support.

One of the takeaways of this research is the important role played by planning culture in the attainment of sustainable development. The mere practice of designing and implementing the interventions has reportedly raised the level of awareness on ecological and social issues related with land use and, in some specific cases, contributed in transforming how planning is done. For instance, by fostering a spirit of territorial cooperation to replace competitive behaviour and increasing demands for more binding instruments. These enhancements strengthen institutional sustainability. The ascertainment that practice calls for more practice offers encouraging signs that land-use interventions could be extended to maximize the benefits of land conservation. Empirical results from the analysis of remotely-sensed land-use change data in the study areas demonstrate that, so far, the effects of the interventions on urbanization and land-use dynamics are imperceptible and dwarfed by other more influential forces, like sectoral policies and economic cycles. Given the ambitious EU targets on land take, policymakers should be reassured and encouraged that adopting more proactive stance in the early introduction and sustained implementation of interventions tends to produce the best overall results on all dimensions of sustainability.

4 Transforming our planning and development culture

To greater or lesser degree, all case study interventions transformed the way in which land-use planning is perceived and practised, both among institutional stakeholders and the general public. This suggests that the interventions can and do affect urbanization and land-use practices. Both the successful and the less successful experiences offer valuable lessons in this regard. The transformations observed in the planning and development culture fall into two general categories: a change in mentality and innovative instruments and practices. These will be discussed in turn.

4.1 Interventions as catalysts for cultural change

The transformation of the planning and development culture in the studied territories was not an explicit goal of any of the addressed interventions, but many stakeholders recognized that it arrived as a by-product from the experience. Of course, the intensity and direction of cultural changes induced by the interventions varies across cases, as it does the judgement it receives from different stakeholders in different locations.

Sticking with your planning tradition is not always a bad thing

The case of SE-Stockholm is deemed by local stakeholders as the least transformational, as a wide consensus exists on the fact that the intervention was simply an application of the pre-existing demands of an environmentally-concerned society and a mere continuation of previous strategies. It is clear that, in this case, culture and practice stasis guarantee advancement towards sustainable land-use. Nevertheless, existing shortcomings of the strategy related with the satisfaction of social demands (section 3.3.3.), like affordable housing, suggest that, even in this case, there is room for improvement and a re-assessment of some aspects might improve existing practices. It may be argued that the case of CH-CantonAargau also reflects remarkable cultural stability in the sense that public participation and decision-making through referendums was followed, building on the Swiss political tradition. Given that the active involvement of citizens helped generate widespread awareness of the need for urbanization controls, other territories might wish to consider the Swiss example.

Breaking with planning conventions can also pay off

In all other cases, the departure from conventional principles and orthodox actions is more evident. One of the most common changes was the abandonment of competitive individualistic decision-making in land development in favour of cooperative strategies involving particular combinations of public administrations, institutional stakeholders and private interest groups as well as common citizens. The shift from a leader-based tradition

towards a more open decision-making process was a fundamental pillar in the cases of AT-Vorarlberg, ES-Valencia and IT-BassaRomagna. Instrumental in the success of the initiatives in AT-Vorarlberg, ES-Valencia and IT-BassaRomagna was an appeal to strengthening the common identity of the involved territorial units. It might be worth noticing that, while such appeal facilitated the coordination of neighbouring municipalities in all three cases, the move could also be seen as a deterrent to greater or future integration of these territories in wider-scale strategies, and also as a risk of abandoning local-scale competition, only to be more competitive against other areas or regions. Notwithstanding, the experience in AT-Vorarlberg became a model in which other Alpine territories mirrored to articulate similarly conjunct strategies.

Other fundamental changes in the way of approaching spatial policy and planning that were regarded as remarkable successes by interviewed stakeholders were observed in BE-Flanders and ES-Valencia. In BE-Flanders, the intervention helped to cement an economic transition from a model based on the growth of a highly land-consumptive industrial sector towards a greater tertiary land-efficient economy. The intervention is deemed by one stakeholder as responsible for gaining the favour of mayors that were initially fearful and opposed to the containment approach. The plan in ES-Valencia is illustrative of a similar shift, from a planning tradition based on a strongly urban-centric regulative approach imposed by closed administrative compartments with little communication between them and strong ties to political interests to a comprehensive approach involving several administrative departments of different administrations coupled with an ambitious public participation effort. While this must also be considered a positive development, and indeed local stakeholders overwhelmingly support it, it might also be the reason behind the extraordinary amount of time (some 17 years) that the plan required to come to fruition. This observation, also backed up with the cases of BE-Flanders, CH-CantonAargau, DE-30ha, IT-BassaRomagna and RO-Constanta, can be used as a reminder that significant cultural change is often slow, certainly slower than political cycles, and the European and planning and development culture is no exception to this rule.

When things do not go according to plan: an opportunity to learn

Still in regards to spatial planning culture, two case studies deserve special attention. The NL-Ladder represented a significant departure from the Dutch spatial planning tradition at least in two aspects. First, it was an attempt to regulate by forcing developers and municipalities to justify their plans in terms of sustainable urbanization. It was expected that this soft approach would mitigate inter-municipal and inter-provincial competition while raising consciousness on the need to preserve open land. Stakeholders recognized some degree of success from this innovation. The second innovative feature of the NL-Ladder was that enforcement was delegated to civil society by allowing plans to be challenged in court for compliance with the intervention. In practice, this was largely judged to be a failure as it caused a proliferation of

litigation and judicialization. This judicialization meant that the grounds on which land development decisions were made had been transferred from the realm of spatial planning to become, instead, a legal matter with little or no connection with land-use considerations. The NL-Ladder case study illustrates how some radical innovations, in this case, incidentally, a move towards a more liberal approach, might not always live up to ideologically-constructed expectations and, indeed, might even be detrimental to land-use sustainability. A prudent approach, of modest incremental innovations partnered with assessment procedures, might be advised to avoid notable setbacks, as experienced in the NL-Ladder case.

In no other case the magnitude of the change in the planning and development culture is as significant as in RO-Constanta. Current practices largely reflect the paradigm that was institutionalized during the democratic transition period of the 1990's. The framework has remained mostly unaltered in the last three decades and is characterized by a devolution of decision-making power to regional and local scales. These administrations, forced to generate their own incomes, find in the promotion of land development an opportunity to sustain their budgets, thus creating suitable conditions for territorial competition to emerge. This is not only a departure from the heavily centralized planning practices of the communist era, but also an inconsistency in comparison with the trends in most other case studies, fostering cooperative relationships to counter unsustainable land take. While the predominant planning and development culture in RO-Constanta remains anchored in a paradigm that is markedly different from the ones elsewhere, it will be shown in subsequent paragraphs that some signs indicate an early dynamic of convergence.

Winning over hearts and minds with planning jargon

Undeniably, all interventions have left a mark in the way the population is aware and often involved in land planning and development processes. According to the data in AT-Vorarlberg, CH-CantonAargau, ES-Valencia, HR-Coastal, IT-BassaRomagna, NL-Ladder and RO-Constanta, this can be observed in the way several stakeholders have internalized rather specialized vocabulary and arguments in their everyday practices and discourses, thus testifying to the influence of the studied schemes in transforming the broader culture. Raising a more critical point, some stakeholders in BE-Flanders, HR-Coastal, NL-Ladder and RO-Constanta notice that the institutional leaders of the interventions also use words and discourses that are sometimes either too technical for most citizens to be engaged or too vague and empty to hold administrations accountable.

The incorporation of words from planning vocabulary in common speech often reflects, according to several interviewees, greater awareness and concern for environmental aspects, a cultural turn most acute among institutional stakeholders. Indeed, the suggestion that the consecution of the intervention had led to increased awareness on the problems of urban sprawl, shrinking open areas and/or the fragmentation of natural areas was formulated by stakeholders in AT-Vorarlberg, CH-CantonAargau, DE-30ha, ES-Valencia, HR-Coastal, IT-

BassaRomagna, NL-Ladder and RO-Constanta, while there are more indirect indications that something similar occurred as well in the remaining cases of BE-Flanders, PL-ITI and SE-Stockholm. While in cases like AT-Vorarlberg, CH-CantonAargau and IT-BassaRomagna the protection of the environment was directly addressed by the interventions, indicating that ecological matters were already a prominent concern, cases like DE-30ha and NL-Ladder focused in promoting the social acceptance of greater built densities among stakeholders as an indirect route to reduce development pressures. Voices demanding a similar environmental turn in development practices in RO-Constanta have been observed to be gaining not only in volume, but also in popularity. While, in this case, it is still difficult to see how sustainability discourses held by some local authorities and social groups translate on the ground, it must be concluded that a cultural change is slowly unfolding. In this, as well as in all other cases, it is likely that a combination of governmental and non-governmental discourses giving visibility to the many faces of the global environmental crisis, combined with local evidence of the effects of unsustainable land-use practices brought to light through the implementation of the interventions, have facilitated the reinforcement of awareness and the advancement of measures. In this sense, it seems a common result of pioneering actions supporting sustainable land-use that they engender demand for further activity.

Enhancing social equity goals: housing security is key

Parallel to greater environmental sensitiveness, a similar cultural shift was observed to affect an important social issue such as affordable and welfare housing needs. While the performance of the interventions addressing social-housing shortages was regarded as uneven (see section 3.3), their implementation granted renewed attention to this issue. Cases like AT-Vorarlberg and SE-Stockholm not only made vulnerable groups more visible and their immediate needs for shelter more prominent in the respective interventions, but they sparked insightful debates over what could be done to eradicate the root causes that caused poverty and social inequality. Similar issues surfaced in BE-Flanders, DE-30ha, IT-BassaRomagna and RO-Constanta, though less centrally.

Making sustainable progress: learning from experience

These findings suggest that even for interventions that do not explicitly pursue land-use sustainability or are not designed in an integrated manner, the interconnections between economic, ecological and social equity dimensions ensure that, in addition to more or less expected tangible results (see section 3.3), there is always a less tangible output: cultural change. As it was shown, this can take many different forms, affects the different dimensions of sustainability differently and is appealing to some stakeholders more than others. Generally, progress has been greater in terms of social advancement and awareness than in terms of inclusion in the political agenda. Nevertheless, invariably across cases, interventions have contributed to the construction of experience, knowledge and, through cultural change,

have set the foundation for subsequent iterations and, hopefully, greater land-use sustainability enhancements.

The weight of context: uneven spatial distribution of spatial cultures

The cross-comparison of case studies reveals the emergence of broad geographical patterns in the magnitude of progress that are worth noticing. In RO-Constanta, land take rates well above the pace of demographic growth are the result of an expansive strategy, as the country relies on the growth of the tourism sector to catch up with other European economies that developed much earlier (sections 3.1.1 and 3.3.2). Current planning regulations and most (but not all) stakeholders are aligned and agree with this trade-off (section 3.3.1). The ES-Valencia, HR-Coastal, IT-BassaRomagna and PL-ITI case studies are illustrative of a recent transition away from a similar growth paradigm that tended to neglect the sustainability dimensions of land development (section 3.1). Several stakeholders in cases like BE-Flanders, CH-CantonAargau, DE-30ha, SE-Stockholm and some in AT-Vorarlberg, under different historical planning traditions, do not consider land-use sustainability a challenge posed by previous growth trends but a requirement for success (sections 3.1 and 3.3). These trends reveal a spatial pattern, roughly corresponding to the scale of the challenge each territory faces in achieving zero land use take: diminishing from east and south to north. Nevertheless, two observations must be made. First, in the case of NL-Ladder, it may be argued that the intervention represented a step back in terms of the holistic consideration of all land-use sustainability dimensions, as the legally-required reports were only sensitive to regional housing demand/supply and focused on the parcel or project scales. Secondly, it is worth noting that none of the cases entirely succeeded in decoupling economic growth from land take, regardless of location, spatial planning tradition or affluence.

4.2 Interventions as innovations

Together with cultural transformations, the implementation of the case study interventions has also left traces of innovation in terms of operationalization of the theoretical principles. In general, case studies illustrate a certain rejection of conventional spatial planning approaches relying on the enactment and compliance of norms and regulations to embrace, instead, more comprehensive and participated interventions that are less binding in character.

A transition from regulation to (regulated) integrated planning

As illustrated in section 3.1 of this annex, this pattern is particularly true of initiatives led by local and regional administrations and less so at upper scales. Whereas in cases like AT-Vorarlberg, BE-Flanders, CH-CantonAargau or SE-Stockholm this is a feature deeply rooted in the planning tradition, it represents a major innovation in the Latin-culture cases of IT-BassaRomagna and ES-Valencia, as noticed by several stakeholders that label it a

'paradigmatic shift' and an incursion into 'uncharted territory' for senior planners. As already presented in section 4.1, the NL-Ladder and RO-Constanta case studies both represent an overt break from regulative traditions in favour of de-centralised and largely liberal decisions on land development.

In spite of the general trend of distancing spatial planning and development from regulatory conventions, at least a basic set of binding norms is deemed essential in many interventions and greater attention to this fact is demanded by stakeholders. The case of IT-BassaRomagna provides an example of ambitious regulatory practice, with nine municipalities committing to the introduction of a common set of land zoning and building norms to support the implementation of the strategy. At the same time, however, the law 20/200 that supported the strategy received criticism for not envisaging mechanisms of flexibility that allow small modifications without having to review the whole initiative. The AT-Vorarlberg intervention also introduced regulatory changes which affected spatial planning laws and funding regulations. This is similar to CH-CantonAargau where the revision of the Swiss Spatial Planning Law led to stricter planning controls, the de-zoning of certain developable areas and the introduction of an innovative value added tax (VAT) on developed/sold building plots to compensate owners whose development rights had been rescinded. The plan in ES-Valencia made a creative use of urbanistic regulations to de-zone extensive areas that had been classified for development, to allow the partial development of certain agricultural parcels and to redistribute land cultivation rights to avoid the existence of fallow parcels. In BE-Flanders, some groups still demand that the same administration that announced the target of stopping land consumption develops the necessary regulations at regional level that this ambitious goal requires. In RO-Constanta, the characteristically laissez-faire approach of current planning regulations at all scales is being increasingly contested by some groups, under the argument that the current system fails to address environmental and social impacts and thus demanding either increased regulation or, at least, compliance with the rules in place.

Earning legitimacy: walk the walk and avoid over-deregulation

Adherence to the dispositions of the intervention has been observed to be a source of legitimation for the public administrations promoting them in the cases of AT-Vorarlberg, CH-CantonAargau and IT-BassaRomagna, whereas a failure to do so in full has resulted in criticism in the cases of HR-Coastal and the aforementioned RO-Constanta. It must not come as a surprise, then, that binding character and juridical security are two contentious issues associated with the interventions. Strategies, programmes and even some aspects of legal devices as tools to guide spatial planning tend to be non-binding instruments, a fact that exposes them to the risks of unsanctioned non-compliance, ad hoc modifications or abandonment on the part of one or more partners, in the case they exist. Instances of such dangers were observed in AT-Vorarlberg, DE-30ha and HR-Coastal, leading to a reduction in

the effectiveness of the interventions and calls from certain stakeholders to strengthen enforcement aspects. The other critical aspect, that of juridical security, was at the forefront of interventions in BE-Flanders and RO-Constanta. In the first case, the new spatial planning regulations established a clearer distribution of rights and duties, something that was duly recognized and welcomed by all interest groups. In RO-Constanta steps were taken towards providing greater security to all administrations, investors, owners and developers with successive legal reforms, but complaints on their insufficiency were still recorded during the interviews. Perhaps the case that best illustrates the damaging effects of lacking juridical security is NL-Ladder, in which poor forethought of the implications of a loosely defined planning instrument led to fierce litigation and the involvement of the judiciary power to settle conflicts.

Ironically, the interventions of NL-Ladder and RO-Constanta, recognizable for being the most aligned with liberal planning principles, are also the ones that collect most criticism for having led to an intensification of bureaucratic workloads. In both cases, the problem seems to stem from the fragmentation of projects and decision-making processes induced by the interventions, which demand public institutions to assess the compliance and suitability of each project submitted and to produce decisions on a case-per-case basis. While these requirements might ensure that each approved development has been scrutinized and is guaranteed to be appropriate, it is also true that, to be operationalized fluidly, they would require the commitment of substantial human resources on the part of the supervising administrations. This, in turn, calls into question the alleged advantages of deregulation and minimal state intervention in planning practice. When dogmatically applied, these principles may increase risks of re-enacting some of the costs and inefficiencies of highly bureaucratic systems. In CH-CantonAargau, the close scrutiny of each proposed development and an assessment of its appropriateness did not lead to similar bottlenecks, perhaps because development limits had been clearly and narrowly defined. In addition, cantons like Aargau implemented systems based on detailed cartography and need projections to optimize the allocation of land use changes.

Dream big and *carpe diem*

As the latter example illustrates, innovative instruments not relying on piecemeal project development but promoting, on the contrary, cooperative action based on a collective vision seem to be more successful overall. The case studies have provided three other valuable examples of this approach. AT-Vorarlberg introduced a financial compensation scheme intended to evenly distribute the costs and benefits of industrial development localized only in certain locations. IT-BassaRomagna also introduced redistributive schemes to compensate the lost revenues of municipalities that contributed to preserve open space. This was one of the measures operationalizing an equalization principle that strived to provide a similar level of public services across all municipalities. The agricultural land bank in ES-Valencia was an

attempt to distribute the use of land in a manner that non-farmer owners and businesses without generation succession could have their lands cultivated (a goal of the plan in itself), while smaller operations and those often led by younger people would have a chance of increasing their viability in the long-term.

Depending on the type of intervention, the instruments put in place in each case study provided an array of other benefits or advantages, sometimes as by-products of their main goals. In the case of HR-Coastal, the intervention allowed to make progress in delineating the maritime domain, administer the approval of ports of all categories, arrange anchorages, promenades and other public spaces and, not least, implement a maritime environmental monitoring program. Similarly, the NL-Ladder facilitated the monitoring of land and housing demand and supply on the part of the authorities. In the cases of AT-Vorarlberg and IT-BassaRomagna, the interventions became platforms on which to promote sustainable mobility in collaboration with service providers, whereas in ES-Valencia biking paths were integrated with the Green Infrastructure. In the case of SE-Stockholm, the intervention was used to adapt cultural heritage, protected buildings and historic districts to newly demanded functions, for instance, through the pedestrianization of certain areas. CH-CantonAargau employed coordination to enhance the coherence of planning, multilevel complex systems thinking, cross-sectoral conceptions, a combination of hard and soft instruments, and engaging both institutional actors and civil society thorough participation and their empowerment.

Working in tandem: subsidiarity and the role of the EU

Another of the dimensions of practice that the diversity of case studies allows to explore is the articulation between different administrative levels. This can be done by 'looking up', at how the EU has affected local practices or by 'looking down', to explore how the subsidiarity principle worked in those cases where it was applied.

Many cases were influenced by the EU, either explicitly because they were born of a communitarian mandate (PL-ITI) or in a less direct way through directives, principles, ideals, etc. Nevertheless, no other case illustrates the capacity of the European project to influence decision-making around spatial planning practices like RO-Constanta. The accession of Romania to the EU was found to have impacted local practices in, at least, three key areas. While the first post-communist decade was characterised by inertias and fears that guaranteed the continuation of top-down decision making, little attention for environmental standards and no obligation for governments to be held accountable for their actions, evidence suggests that all of these practices changed (and are still changing) since the integration. Judging on this RO-Constanta experience, together with those of ES-Valencia and PL-ITI, it is reasonable to conclude that EU decisions might have the greatest effect on local spatial planning practices in countries that have accessed the group in more recent years or receive greater stakes of common funding. Furthermore, it might indicate that the preservation of communitarian standards in public participation, environmental protection and

institutional accountability would be a positive stimulus for new member States eventually joining the union to improve spatial planning procedures and decisions at the level where they ought to be applied.

The case studies do not offer guidance over how to apply the subsidiarity principle in practice, but it is clear that the way in which it is applied, with its features and constraints, has great influence in determining how the different stakeholders will assess the results. The cases of BE-Flanders and NL-Ladder offer examples of implementations of the subsidiarity principle that place a substantial amount of decision-making power in the hands of local administrations in a way that circumvents the influence and subverts the supervisory role of intermediate administrations. This approach can be divisive and generate conflicts or, at least, tensions, as observed in the aforementioned case studies. The case of RO-Constanta has revealed that a dysfunctionality exists. On one hand, regional and local authorities are given prominent spatial planning competences. On the other, they receive scarce financial support from the national budget to support these competences and, furthermore, the central government articulated a national strategy in 2014 granting it the right to make land-use decisions to stimulate economic growth in several regions and metropolitan areas, including the case study one.

Conversely, the experiences of AT-Vorarlberg, CH-CantonAargau and SE-Stockholm demonstrate that it is possible to provide a degree of autonomy to lower-level authorities without generating conflicts or disown certain functions. In the case of AT-Vorarlberg, the state government passed legislation to concede powers for the 29 involved municipalities to set up their financial compensation scheme. In CH-CantonAargau, the revision of the law at the federal level was welcomed by the cantons, which integrated it into their structural plans. The cantonal regions followed suit without losing their authority. In the end, it remained the responsibility of municipal entities to decide on projects and land-use plans. In SE-Stockholm, the city government proposed focus area projects that were largely designed by district-level involved stakeholders, a fact that contributed to their legitimation and success. The unevenness of results in the application of the subsidiarity rule suggest that, more important than subsidiarity itself, it is the need to ensure that its application is consensual, accepted by all involved tiers of the administration and, ideally, by the local communities that ought to benefit from a harmonious relationship as well.

Beyond participation: engagement and empowerment

Many of the studied interventions have reportedly contributed to foster a greater sense of co-responsibility in managing spatial planning, often through robust participation processes. As already mentioned, the case of CH-CantonAargau stands apart, as national-wide referendums were held to approve the intervention. Cases like NL-Ladder and PL-ITI strengthened the ties between different stakeholders involved with the interventions. The ES-Valencia case was lauded by interviewees for having made an effort in developing an

ambitious participation program in parallel to the intervention, with several public hearings, workshops and hundreds of citizens and stakeholders involved. Progress in this area was also recorded in HR-Coastal and in RO-Constanta. In the latter case study, the advancements were partly attributed to the enforcement of EU policy. Nevertheless, these three last cases also received some criticism from certain stakeholders, who complained about the way in which participation processes were conducted, the exclusion of certain groups and the lack of correlation between participation outputs and planning actions.

The cases of AT-Vorarlberg and SE-Stockholm represent best practice in this field, indicating that participation practices benefit from being led by specialised practitioners who are capable of building and promoting constructive interactions. In AT-Vorarlberg, this was achieved by a team of moderators that focused on dialogue-oriented communication (expected to foster greater commitment and permanence compared to discussion-oriented approaches) and by trying specific seat and room arrangements to conduct the activities. In the case of SE-Stockholm, in addition to the involvement of over 500 participants, task teams with specialized staff and key stakeholders were set up to deal with strategic matters.

Win or lose, it is the experience that counts: final lessons

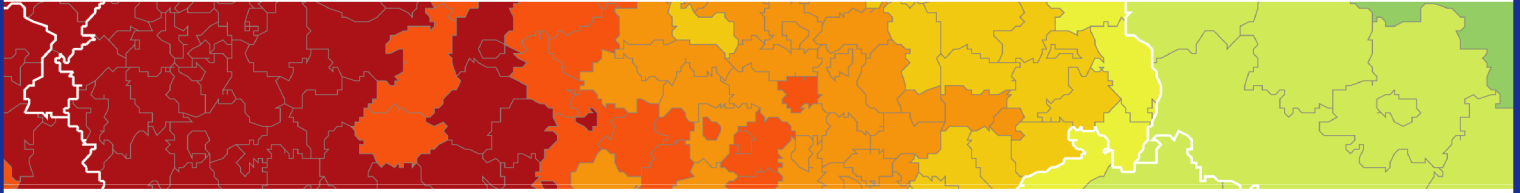
As a concluding remark, it is clear that the studied interventions have left an enduring mark in the planning and development cultures of each territory thanks to lessons learnt from both successes and failures. Nevertheless, it would be daring for planners and decision-makers in other territories to imitate innovations that have worked elsewhere or outrightly reject initiatives that did not produce the desired results without critically assessing the site and time-specific advantages and constraints of each location and each society under the circumstances of each moment in history. As it has been outlined in this section, there is a lot to be gained from a rigorous assessment of financial and human resources that are intended to be devoted to improving land-use sustainability. However, to perfect local practice and decision-making, it is similarly important to understand the fitting of each considered instrument with the local planning tradition and development culture. It must be kept in mind that the values and criteria that guided the interventions analysed as case studies in this project span periods of several years and some of them started in the 1990s, under very different historical circumstances. Furthermore, the views expressed by stakeholders are produced retrospectively. It is likely that because of the imprint that interventions have left in the respective territories and involved stakeholders, even the most successful cases would be conducted differently if they were initiated nowadays. While this observation can be read as a reiteration of the warning against acritical replication of attractive interventions, it also testifies to the value of experience-based learning and is an invitation for planners and decision-makers across Europe to continue sharing their knowledge.

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