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Keywords: local government, strategic thinking, sustainability, Finland

Scandinavian Journal of Public Administration 24(2): 21-41 © Pekka Kettunen, Hanna Heino, Jarkko Rasinkangas, Jussi S. Jauhiainen and School of Public Administration 2020 ISSN: 2001-7405 e-ISSN: 2001-7413

# Addressing Local Sustainability: Strategic Thinking in the Making

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#### Abstract

Local governments are key actors in *sustainable development*. However, comprehensive achievements in relation to *sustainability* remain limited, even though sustainable development has been on the agenda for decades. Achieving sustainability requires future-oriented thinking, proper long-term development strategies, and concrete action. Developing strategy is not enough to ensure achievement, and local governments should therefore engage in *strategic thinking* as a method of promoting sustainability at the local level. Based on data collected through a survey of 113 Finnish municipalities, this research used statistical methods to empirically analyse the extent to which the municipalities employed strategic thinking. The results showed that the municipalities which performed well in various aspects of strategic thinking were also more engaged in sustainability issues than those municipalities that were not strategically oriented.

#### Introduction

Sustainability and sustainable development mean that environmental, social and economic aspects are all taken into account in decision-making (Echebarria et al. 2017). The main aim of sustainable development is to ensure a good life for current and future generations (Kestävä kehitys 2018; United Nations 2020b). Local governments are key actors in adopting and promoting sustainability. The responsibilities of local governments in relation to sustainability challenges, actions and outcomes, as well as communities, is an important factor driving local actions (Heinrichs and Schuster 2017; Ji and Darnall 2018). Sustainability is a global issue and the subject of numerous international and national agreements and goals. The importance of the local level in addressing and achieving sustainability has been recognised in Agenda 21: a non-binding United Nations action plan for sustainability (Echebarria et al. 2017; Heinrichs and

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Schuster 2017). The most recent agreements - the 2030 Agenda for Sustainable Development, 17 sustainable development goals (SDGs), and the Paris Agreement on climate action (United Nations 2020a, b) – were accepted in 2015 at a special United Nations summit. The 2030 Agenda is "a plan of action for people, planet and prosperity" (United Nations 2020b). Its aim is to eradicate poverty, protect the environment and ensure the well-being of all human beings. The Agenda was ratified by 193 countries, which committed to follow the 2030 Agenda for Sustainable Development at national and sub-national levels. International agreements and policies are necessary for tackling sustainability issues, however, they are likely to fail without the support of national and local policies and actions (Heinrichs and Schuster 2017). Local sustainability involves several concepts, environmental sustainability and social equality for example, but also technical issues such as development of renewable energy, reduction of greenhouse gas emissions and recycling of materials (i.e. circular economies). Extensive research has shown that local governments are the central players in the field of sustainable development (Echebarria et al. 2017; Hawkins et al. 2016).

Some local governments are more committed to sustainability than others, yet many of their sustainability practices have been condemned as merely symbolic (Hawkins et al. 2016). Nevertheless, achieving sustainability ultimately depends on local actions and effective local governance (Baumgartner and Korhonen, 2010; Heinrichs and Schuster 2017). Previous studies have suggested a host of factors influencing whether local governments are engaged in sustainable development practices or not (see Evans et al. 2005; Hawkins et al. 2016; Swann and Deslatte 2019), including local financial and administrative capacity, stakeholder involvement and networks, local sustainability priorities, local population size and local development strategies. Swann and Deslatte (2019) argue that the most predictive factors for sustainability behaviour are local population size, population change, local development strategies and sustainability capacity. However, as Zeemering (2018) suggests, local sustainable development requires stakeholder engagement, capacity development and strategic thinking (Zeemering 2018). Heinrichs and Schuster's (2017: 540) review of the academic literature and practice-oriented manuals identified five prerequisites for institutionalising sustainability within an administration framework: administrative understanding of sustainability, structural and procedural factors, management instruments, organisational culture and capacity, as well as style of interaction with external actors.

We argue that local government strategies offer a means of addressing and studying local sustainability (Echebarria et al. 2017). Swann and Deslatte (2019) and Zeemering (2018) recognise the importance of strategies and strategic thinking for achieving sustainability, involving the setting of long-term sustainability goals, ensuring broad local participation through sustainability governance, and capacity building to support sustainability through effective and committed actions. A long-term vision, stakeholder participation and understanding of the context are vital for strategic thinking that contributes to sustainable development (Ji and Darnall 2018; Rahman 2016; Zeemering 2018). Significant prerequisites for achieving sustainability – i.e. the well-being of

people and the environment – are future-oriented thinking, appropriate long-term development strategies and concrete actions (Daffara 2011; Rahman 2016; Ravetz and Miles 2016).

Local development strategies may serve as indicators of whether and how sustainability has been institutionalised in local government and the degree to which local authorities are committed to engaging in sustainability (Baumgartner and Korhonen 2010; Heinrichs and Schuster 2017; Zeemering 2018). In addition to overall development strategies, local governments may have separate sustainable development strategies (SDSs). These two types of strategies can coexist and, to be effective, they must properly anticipate the future, based on an analysis of the likely and desirable changes that a municipality will face over the long-term (Joyce 2000; Mulgan 2009). Achieving sustainability involves taking action in the present towards future objectives, but the development of a good strategy also requires strategic thinking, which has been poorly addressed in previous research on sustainability at the local level (Baumgartner and Korhonen 2010; Zeemering 2018). This paper therefore aims to promote and advance sustainable development in municipalities.

Strategic thinking is a method of ensuring that all the relevant actors and stakeholders understand and commit to a common vision and work towards common goals (Baumgartner and Korhonen 2010; Zeemering 2018). Strategic thinking involves stakeholders, adopts a long-term perspective on, and understanding of, the context, and prevents problem displacement, which often occurs with issues of sustainable development (Baumgartner and Korhonen 2010). The expression 'problem displacement' means that connections between different mechanisms or systems are neglected. When an existing (e.g. economic) problem is tackled within a specific system it might cause new (e.g. social) problem(s) elsewhere in other systems or subsystems. Strategic thinking is important in gaining a broad understanding of sustainability, in order to prepare and implement sustainable plans in collaboration with other actors while engaging them in anticipating future sustainable development (Baumgartner and Korhonen 2010; Zeemering 2018). Strategic planning can be understood as strategic thinking that has partially become routine (Bryson et al. 2010). Strategic thinking increases organisational learning and knowledge management and, ultimately, benefits sustainable development (Bryson 2010; Bryson et al. 2010; Ravetz and Miles 2016; Swann and Deslatte 2019; Zeemering 2018).

The purpose of our research was to study the extent to which local governments engage in strategic thinking and determine whether it contributes to sustainable development. Earlier research has provided a number of alternative explanations for local government involvement, which combine actor-centred and mechanistic approaches. We examined how local governments addressed sustainability strategically, what kind of sustainability they prioritised, the duration of strategic plans, who participated in local development strategy formulation, and how knowledge was used to support strategies.

The empirical data for this article was drawn from the survey responses of 113 municipalities of various sizes in Finland. Finland is an example of a country with an advanced economy, a relatively high rate of urbanisation, and broad societal and political agreement on the importance of sustainability (Kestävä kehitys 2018). However, there is room for diverse sustainability policies and actions at the local level in municipalities. This study provided new insights into strategic planning for sustainability at the local level by examining the extent to which local governments have taken the crucial step of moving from strategy formulation to engaging in strategic thinking.

In this paper, we first discuss the concept of strategic thinking in detail and explain the framework that we applied to the survey and the analysis. We define the concept of sustainable development, then introduce the Finnish local government structure and local government's role in sustainable development. In the next section, we describe the methodology used for the study. Thereafter, we explain the empirical analysis of the data collected from a survey of Finnish municipalities, distinguishing between those that had SDSs and those that did not, and subsequently examine whether the former were more likely to have a broad understanding of sustainability, a long-term planning perspective, a participatory approach to strategy formulation, and active data gathering as a prerequisite for understanding local sustainability risks and opportunities. The conclusions summarise the findings and discuss theoretical and methodological insights, together with possible avenues for future study.

#### The theoretical framework

#### Strategic thinking and its four elements

The main concept underpinning the research is strategic thinking, which we discuss here in detail. Strategic thinking is a method of looking deeply into the future in order to identify the vision and goals of an organisation, understanding the aims and effects of current decisions and practices, and avoiding possible pitfalls (Baumgartner and Korhonen 2010; Bryson 2010; Bryson et al. 2010; Ravetz and Miles 2016; Zeemering 2018). Strategic thinking includes thinking about the context, the possibility of change, and what is required to support such change (Bryson 2010). Strategic thinking is more than a strategic planning process, although the planning process can advance strategic thinking if it is properly facilitated (Bryson 2010; Bryson et al. 2010).

How is strategic thinking manifested? We argue that local governments behave strategically when they: (1) have a broad understanding of sustainability, (2) make long-term plans, (3) invite stakeholders to discuss strategy formulation, and (4) collect and process relevant information. We shall now look more closely at these four elements.

Firstly, strategic thinking includes understanding the context and content of sustainable development related to organisational change and clarifying the mission (Baumgartner and Korhonen 2010; Bryson 2010). Without an understanding of sustainability, the governance of sustainability cannot succeed. A local development strategy must address all the relevant development issues, offering a platform for a broad understanding of sustainability and its different dimensions. Since the early 1970s, environmental (i.e. ecological) sustainability has been a recognised dimension of sustainability, but much later, the social and economic dimensions to a lesser degree (Soini and Birkeland 2014). These different dimensions should be balanced in local development strategies, because the prioritisation of a single sustainability dimension could undermine 24

the other dimensions, making it difficult and expensive to achieve comprehensive sustainability (Hawkins et al. 2016). To successfully implement strategies and policies, it is necessary to understand the socio-economic content and context that they affect (Baumgartner and Korhonen 2010). Ji and Darnall (2018: 154–152) claim that some local governments focus narrowly on those sustainability issues that ensure economic benefits, thus exploiting sustainability for their own ends.

Hawkings et al. (2016) similarly state that the difficult financial situation of many local governments seems to limit sustainability achievements. In addition, a perpetual challenge is how flexibly the term "sustainability" is defined and used (Redclift 2005). Heinrichs and Schuster (2017) argue that, instead of focusing on one dimension of sustainability or creating a separate strategy, sustainability should be introduced into local administration as an integrative and transversal element. A broad understanding of sustainability facilitates crosssectional operations with long-term perspectives; therefore, it is important to discover how sustainability is understood by local governments and how they prioritise its different dimensions (Hawkins et al. 2016; Heinrichs and Schuster 2017).

Secondly, a long temporal scope is necessary for sustainable development. In a recent study, Zeemering (2018) argues that strategic planning is a prerequisite for achieving sustainability; hence, local governments need long-term sustainability strategies to manage organisational processes towards sustainability. Strategic thinking is also a method of considering the long-term future and possible future developments (Bryson 2010; Ravetz and Miles 2016). Johansson (2019) argues that strategic management is future-oriented. Strategies aim for a future that is not immediately achievable, but guide organisations towards future goals.

Local development strategy formulation involves making choices that, to the greatest extent possible, anticipate the future (such as by analysing the likely and desired changes for a municipality over the long term) (Joyce 2000; Mulgan 2009). Local development strategy formulation often fails to address all the relevant development challenges and to incorporate the understanding that global megatrends influence the local level (Daffara 2011; Ravetz and Miles 2016); therefore, it is much easier for local governments to address short-term issues and react to current problems although, to achieve broad sustainability, a longterm vision and related actions are required.

Local political election cycles in Finland are usually of four years' duration, often inducing local politicians to concentrate on issues that they can address within such a timeframe. It is hard to achieve long-term benefits through short-term investments (Jacobs 2016; Jacobs and Matthews 2012); thus, a long-term perspective is required for both strategies and sustainability. Sustainability is a long-term concern, since sustainability challenges (e.g. environmental problems) cannot be solved quickly; therefore, local development strategies must be aligned with future visions (images and concepts of desired future states) decades in advance. Visions should guide local urban planning and decision-making; a temporal scope of a few decades, for example, falls short of ensuring the adequate growth of urban infrastructure. Effective local development strategies are simultaneously predictive and concrete: they have a long-term

vision that identifies required changes in current practices and outlines the necessary steps to reach short- and long-term targets. Looking to the future, collecting sound evidence for required policy changes, and acting on their implications are the key aspects of sustainability-oriented local development strategies.

Thirdly, stakeholder engagement is vital for implementing effective sustainability strategies (Zeemering 2018) and strategic thinking requires stakeholder participation (Bryson et al. 2010: Zeemering 2018). A similar observation was made by Evans et al. (2005), who argue that participatory governance with a broad spectrum of participants is a precondition for achieving local sustainability. Value creation, stakeholder engagement, and canability development are necessary components of this process of pursuing locallyembedded sustainability (Laszlo and Zhexembayeva 2011; Zeemering 2018). By value creation. Zeemering (2018) means the collaboration and co-learning between local sustainability-related stakeholders, which improves their strategic thinking skills, and the provision of sustainable local services, to realise the immediate and long-term social, economic, and environmental benefits that add value. Such cooperation between diverse stakeholders provides local governments with an opportunity to steer, coordinate, and influence other actors and their capacity to participate in sustainability-related issues. An important element of involving stakeholders in collective strategic thinking (Baumgartner and Korhonen 2010; Bryson 2010; Bryson et al. 2010; Zeemering 2018) is the resulting increase in knowledge and learning (Bryson et al. 2010).

According to Bryson (2010), the need for strategic thinking in local governments will increase over time and, together with strategical planning, will become the typical way of knowing and learning. Local governance deals with multi-layered policy-making and its local implementation. Public authorities, such as local governments, have to deal with the private sector and civil society to accomplish their sustainability-related tasks, since all these actors are important and necessary for the formulation of a sustainability strategy (Evans et al. 2005; Hill and Hupe 2014; Pierre 2009; Rhodes 2010; Zeemering 2018). Open and broad participation is crucial for developing long-term sustainability goals and implementing sustainability strategies through immediate action with engaged stakeholders (Hofstad and Torfing 2015; Rahman 2016; Zeemering 2018). Collaboration with different stakeholders increases the sharing of knowledge, the identification of problems, and the creation of ideas and innovative solutions through best-practice mechanisms or common development projects (Hofstad and Torfing 2015). Stakeholder participation enables collective strategic thinking and learning, and is central to the creation of new knowledge to underpin sustainable and equitable local development strategies (Rahman 2016). Collectively-produced knowledge is connected to the ability to understand and achieve sustainability goals (Bryson et al. 2010).

Finally, strategic thinking involves gathering data to enable local governments to assess current risks and opportunities and discuss desired future directions. Knowledge gathering benefits the understanding of current circumstances, which is the basis for strategic thinking, planning, and novel practices (Ravetz and Miles 2016). However, uncertainties are inevitable in the strategy building process (Jabareen 2013: 224). The anticipation of future

developments requires the systematic collection of relevant data for understanding present issues and how new developments will affect local government. Analysing and anticipating future events calls for more creative thinking and knowledge-based actions by local authorities (Ravetz and Miles 2016). Co-creative, participatory foresight and processes can be utilised to tackle these challenges (Ravetz and Miles 2016) and to create knowledge to support decision-making. Local, future-oriented knowledge, combined with strategic thinking and planning, helps municipalities to deal with future challenges. Strategic thinking further develops the future-oriented knowledge that enables local governments and decision-makers to choose appropriate policy options for better sustainability (Habegger 2010; Wilkinson 2016).

With the help of these four elements, we analysed the characteristics of strategic thinking in Finnish municipalities. We identified some overlap between the dimensions (e.g. the participation of stakeholders as means of providing information), but decided to analyse them separately and discuss the overlap in the conclusions.

#### Sustainable development and Finnish local government

This section discusses the concept of sustainable development and provides background information about sustainable development in a Finnish context. In addition, it discusses the relationship between the national and local levels of government.

#### The concept of sustainable development

Sustainable development is global, regional, and local development that aims for societal change. The concept of sustainable development has evolved from environmental concerns to a three-dimensional concept that includes economic, environmental, and social systems (Echebarria et al. 2017). Sustainable development is considered to be a macro-system comprising those three systems and their interactive processes. Echebarria et al. (2017) define the three systems as follows:

"(1) the environmental system, oriented to the conservation of resources as a basic support for life and human activities; (2) the socio-cultural system, with an orientation to distributive equity, supplying socio-cultural services and managing through participation; and (3) the economic system, geared toward efficiency in the use of resources and toward innovation, and supported by sound public finances."

In 2015, the 2030 Agenda for Sustainable Development and 17 SDGs were adopted at a special United Nations summit (United Nations 2020). The Agenda aims to eradicate poverty and achieve sustainable development worldwide by the year 2030, and public administration organisations are mandated to contribute to the realisation of the SDGs. Finland, which is a member of the European Union (EU), is among the countries that ratified the Agenda and it has ambitious aims for achieving sustainable development and the SDGs. The European Commission wants to play an active role in sustainability processes and commit to the implementation of the Agenda as "a life of dignity for all within the

planet's limits" (European Commission 2020). The EU treaties recognise the economic, social, and environmental dimensions of sustainability.

In Finland, the national framework encompasses the ecological, economic, social, and cultural dimensions of sustainability. In the national context, the different dimensions are defined as follows. The ecological dimension addresses the conservation of biodiversity and functional ecosystems and the need to adapt human actions to the capacity of nature. Economic sustainability refers to balanced growth as a precondition for society's vital functions, which is essential for social sustainability. Social and cultural sustainability means ensuring the well-being of humans and the transfer of well-being between generations (Kestävä kehitys 2018). These four dimensions are used as the basis for the questionnaire that we distributed to the municipalities.

#### The case of Finland

In general, the broad national scope for Finland is "a prosperous Finland with global responsibility for sustainability and the carrying capacity of nature" (Kestävä kehitys 2018). Sustainable development indicators show that, in general. Finland is performing well in different fields of sustainable development (SDG 2018). In contrast to many other countries, the state of the environment is usually healthy and the country is a leader according to all but a few economic and social indicators. Although Finland is considered to be a model country for sustainable development in many respects, Häikiö (2014) argues that sustainable development has not been thoroughly institutionalised in the political decisionmaking processes and practices of all its inhabitants. Sustainability in Finland is often associated with environmental issues, but in the late 2010s, the Finnish national government launched programmes to foster recycling and a circular economy, thus indicating the importance of the economic aspects of sustainability.

Despite Finland being a unitary country in terms of government, the autonomy of local governments is guaranteed by the Constitution; hence, local governments are relatively empowered to make decisions regarding local development (Ladner et al. 2015; Lidström 1999). A wide range of activities (e.g. in the social services, the health sector, and education) are highly regulated at the national level, but sustainable development as a broad concept is substantially less regulated, even though several types of policy within the sustainability field (such as social policies) are highly regulated. The economy is a crucial factor in decisions regarding local development, since local governments have many obligatory tasks. Häikiö (2014) argues that little attention is paid to environmental issues in local political decision-making in Finland. The most recent approach is to convince organisations to voluntarily commit to following sustainability practices (Kestävä kehitys 2018), in the belief that this voluntary participation will promote a broader societal transition towards sustainability. Nevertheless, to be successful, this tool requires adequate resources for the long-term coordination and continuous development of the commitment process (Lyytimäki et al. 2019).

Most Finnish municipalities are relatively small, with fewer than 10,000 inhabitants. This poses a challenge in obtaining the resources and competencies to address sustainability issues, because small municipalities have less tax

income and fewer personnel than larger ones, but have the same obligations as large municipalities. The lack of resources could be balanced by involvement with broader national. European, or global sustainability networks. Participation in such networks could drive municipalities' more active engagement in sustainable development (Swann and Deslatte 2019): however, their participation in these networks is limited. Although national networks, such as the HINKU Forum (a network of carbon neutral municipalities), established in 2013, support municipalities in becoming carbon neutral in their activities, only 12% of Finnish municipalities (39/311) belonged to this Forum in 2018 (HINKU 2019). Similarly, in 2018, only 12 Finnish municipalities were members of the European Covenant of Mayors network, which brings together local governments that want to commit to achieving the EU's climate and energy goals. This number is small, although the member municipalities represent more than 2 million inhabitants (42% of the total population of the country) (Covenant of Mayors 2018). A lack of adequate resources is a common key factor impeding participation in such networks, especially for small municipalities. Apparently, small municipalities in Finland prefer to join national sustainability-related networks, while large municipalities favour international networks (Covenant of Mayors 2018; HINKU 2019).

#### Material and Methods

To evaluate how strategic thinking is perceived locally with regard to sustainability-related issues, we conducted a survey. The theoretical framework described previously was used to formulate questions covering the elements of strategic thinking. The survey questions investigated types of local government strategies, the timeframes of strategies, participation and knowledge utilisation in strategy formulation, and the prioritisation of sustainability. Local development strategies are mandatory, but municipalities may have separate SDSs. In Finland, the municipalities have considerable autonomy regarding local development issues and are thus able to establish preferences in policy-making. In addition, the whole country is performing well according to sustainability indicators, as stated previously. These factors led us to conclude that municipalities in Finland are relevant organisations for studying how sustainability is addressed at local levels.

An electronic questionnaire was sent via email, in the spring of 2017, to all 311 Finnish municipalities. The questionnaire consisted of 25 closed and 7 open questions. The questionnaire was directed to the people in municipalities who were responsible for local development or had perception on strategic leadership. In the case of the smallest municipalities the survey was sent to mayors. Recipients were asked to forward the questionnaire to the correct person if they were unable to answer the questions. Several reminders were sent before closing the survey. A total of 113 municipalities (36%) replied, accounting for 45% of the national population. The sample contained municipalities from all the Finnish regions, representing cities, towns, and rural communities of different sizes, including some with diminishing populations and others with growing populations, and some performing well economically while others faced

economic development challenges (Table 1). Overall, the sample was representative of the range of Finnish municipalities.

To analyse the survey results, our main methods were descriptive statistical analysis and cross tabulation using SPSS software (version 25.0). The Pearson's chi-square test was used to determine whether there was a statistical significant difference between groups. First, we used two background variables—the population size and population change of a municipality (see Swann and Deslatte 2019)—to detect possible differences in answers between different types of municipalities. Next, we explored factors that explained sustainability strategy formulation in municipalities. Finally, the local sustainability plan or strategy was used as a background variable to analyse whether municipalities with specific SDSs differed from other municipalities in their sustainability governance, in relation to different elements of strategic thinking: understanding the concept of sustainability, a long timeframe, active stakeholder participation, and broad knowledge gathering.

Table 1: characteristics of respondent municipalities and all the municipalities in Finland in 2017 (Statistics Finland 2019).

				Ir	nhabitants			Populati	on change
Municipalities	N	>100000		20001- 50000			<5000	growing	declining
Sample	113	5	8	15	21	27	37	24	89
Finland	311	9	12	34	43	80	133	83	228

#### **Results and Discussion**

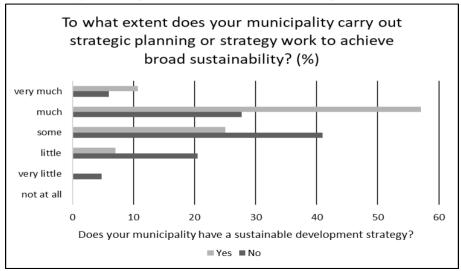
### The relationship between sustainability strategies and sustainability governance

Municipalities were asked whether they had a separate plan or strategy for sustainable development. One out of four responding municipalities (28/311; 25%) stated that they had separate SDSs, despite such a strategy not being compulsory according to the national legislation.

If a municipality did not have a separate SDS, it did not necessarily mean that the municipality was not addressing sustainability in its development. Sustainability may be embedded in several policy fields, or even integrated into the compulsory local development strategy. According to Zeemering (2018), the integration of sustainability into all relevant development strategies and plans would be the most effective option for addressing sustainability in municipalities; therefore, the respondents were asked about the extent to which the local development strategy of each municipality focused on sustainability. The results showed that, in general, the local governments in Finland addressed sustainability, since all the respondents claimed that the municipal strategy included sustainability at some level.

However, when municipalities with separate SDSs were compared with municipalities that lacked them, regarding the extent to which they addressed sustainability, a notable variation was found. Our results showed that Finnish municipalities with separate SDSs were more engaged with sustainability issues than those without such separate SDSs (Figure 1). More than two out of five municipalities (42%) responded that they carried out "much" or "very much" strategy-related work to achieve broad sustainability. There was a positive correlation (p = .029) between municipalities that had separate SDSs and those municipalities that conducted strategy-related work to achieve broad sustainability. Of the municipalities with separate SDSs, 57% indicated that they conducted "much", and 10% that they conducted "very much", strategy-related work to achieve broad sustainability. Of the other municipalities, fewer indicated that they carried out "much" (28%) or "very much" (6%) strategy-related work to achieve broad sustainability. Figure 1 shows that municipalities with separate SDSs were more dedicated to achieving broad sustainability than other municipalities. A sustainability strategy may help local governments to focus on the topic and manage organisational processes towards achieving sustainability (Zeemering 2018).

*Figure 1: strategic planning and/or strategy-related work to achieve broad sustainability in municipalities that had, or did not have, separate SDSs.* 



#### Understanding sustainability: sustainability priorities in municipalities

The municipalities were asked to indicate which dimensions of sustainability they emphasised in sustainable development, if they did so, to determine how responding municipalities understood sustainability. The respondents placed four (social, ecological, economic, and cultural) dimensions of sustainability (the same dimensions mentioned in the national sustainable development guide; Kestävä kehitys 2018) in their order of importance (see Table 2). The questionnaire did not define or exemplify these dimensions. In general, six out of seven municipalities (86%) listed economic sustainability as the most important dimension of sustainability. More than two out of three municipalities (70%) placed social sustainability in second place and half (49%) placed ecological sustainability in third place. Cultural sustainability was placed fourth by half of the municipalities (55%). Table 2 compares the two groups of municipalities (those with SDSs and those without) with regard to their selection of the order of importance of the sustainability dimensions. The selection order is presented as percentages for each dimension for each of the two groups. The Table shows that there were no major differences in this respect between municipalities with or without SDSs.

The responding municipalities saw economic sustainability as the basis for all other activities in the municipalities. According to the respondents, without economic sustainability, other dimensions of sustainability cannot be achieved. Such answers indicated challenges at the local level in maintaining long-term economic stability and provided evidence of an economic perspective on local development and sustainability (see also Häikiö 2014). A similar indication was found at the national level: the national sustainable development web page (Kestävä kehitys 2018) states that a "sustainable economy may help to tackle the forthcoming challenges, like social and healthcare costs due to the aging of the population." In recent years, many Finnish municipalities have struggled to balance their budgets. Facing tight economic constraints, most local authorities have subordinated ecological, social, and cultural sustainability to economic sustainability. Heinrichs and Schuster (2017) emphasised how economic resources are seen as crucial for sustainability policy-making.

Social sustainability clearly fell into second place. For the respondents, social sustainability referred to the wellbeing of local inhabitants and the important role local governments play in ensuring it. In Finland, the Local Government Act (2015) states that local governments are responsible for the well-being of their inhabitants. Social issues are therefore unquestionably the legal responsibility of local authorities and associated problems are therefore placed on local governments' agendas.

The third place of ecological sustainability might have related to timescales. Whereas negative changes in economic and social sustainability are immediately evident locally in the activities of local governments, ecological sustainability is a longer-term issue in which broad changes only become apparent after years. Only one respondent claimed the ecological dimension of sustainability to be the most important and considered it to be a positive factor for the municipality. In general, the municipalities with separate SDSs ranked ecological sustainability higher than did the municipalities without such strategies.

Finally, cultural sustainability received a low ranking compared to the other types of sustainability, perhaps because this aspect of sustainability was not as clear to the respondents as economic, ecological, and social sustainability. In the responses, cultural sustainability referred to the local culture, historical background, and identity of local inhabitants. The responding municipalities did not disregard the importance of culture, but its challenges seemed to be less recognisable than those of the economy, social issues, and the environment. Addressing Local Sustainability: Strategic Thinking in the Making

without separe	ne s.	D33.	•													
Sustainable development dimension	E	cono	mic			Soc	cial			Ecol	logica	al		Cu	ltural	
Order of importance	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
With SDS (%)	82	18	0	0	18	64	14	4	4	25	57	14	0	14	25	61
Without SDS (%)	87	11	1	1	18	72	8	1	1	29	48	22	1	17	29	53

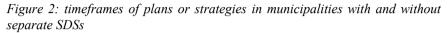
Table 2: sustainability dimensions placed in order of importance (1 = "most important", 4 = "least important") over the long term in municipalities with or without separate SDSs.

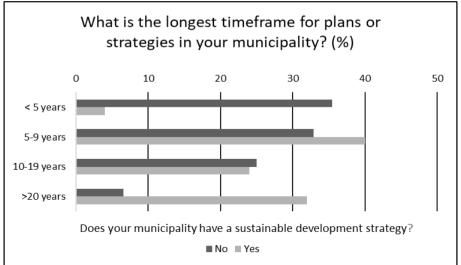
The results showed that the complexity of sustainable development might be poorly understood in Finnish municipalities and that prioritising the economic dimension of sustainability could potentially hamper attempts to achieve comprehensive sustainability (Hawkins et al. 2016). As argued by Baumgartner and Korhonen (2010), individual sustainability problems might then be solved in isolation, causing problem displacement (i.e. solving a single economic problem can cause a social problem elsewhere since the systems are interconnected).

The recent focus of environmental sustainability has shifted to narrower, more technical topics than previously, such as the promotion of carbon-free emissions and circular economies. These are also examples of how environmental sustainability has increasingly become connected to economic issues, not only in local development strategies, but also in national and international policies. In increasingly technology-driven societies, sustainable development may be seen as too vague a concept to lead to specific measures, stepwise strategies, and concrete actions (Häikiö 2014).

#### Timeframes of municipal strategies

Next, we analysed the timeframes of local development strategies and related municipal plans, with longer time spans indicating the strategic thinking of local governments (Bryson et al. 2010; Ravetz and Miles 2016; Zeemering 2018). Figure 2 presents the timeframes of municipal strategies for the two groups of municipalities (those with or without SDSs). In general, 35% of the responding municipalities had timeframes of five to nine years as their longest timeframes for development strategies or plans and 13% had timeframes of over 20 years. Of the municipalities with separate SDSs, 32% had strategies that exceeded 20 years, whereas such an extended timeframe was unusual (only 6%) for municipalities without specific SDSs (Figure 2). There was a clear statistical difference (p = .001) between municipalities that had separate SDSs and those that did not, suggesting that the proper consideration of sustainability is associated with long-term strategies in Finnish municipalities: the municipalities that act and plan for sustainability also look further into the future. On the other hand, this might also be an indication that strategic thinking influences the treatment of sustainability-related issues in municipalities.





Local governments often face challenges when addressing long-term development issues. The political election cycle emphasises issues that can be managed within a few years and, as stated previously, it is difficult to achieve long-term benefits with short-term investments (Jacobs 2016; Jacobs and Matthews 2012). The longer the timeframe, the more uncertainties affect development, and the more the municipal decision-makers need to analyse critical development and environmental factors and make choices concerning the desired development of the municipality. A proper recognition of long-term strategic issues is still rare in Finnish municipal development; for example, most municipalities (86%) foresee that immigration will increase substantially over the coming 10 years, but fewer municipalities (67%) consider the potential impacts of immigration in their local development strategies (Heino and Jauhiainen 2020).

#### Stakeholder participation in municipal strategy formulation

Stakeholder participation is a central component of strategic thinking, which simultaneously benefits capacity development and actual strategy formulation (Bryson et al. 2010; Ravetz and Miles 2016; Zeemering 2018). According to Evans et al. (2005), local strategies improve when more actors participate, since broad participation enhances the knowledge base for strategy formulation. The Finnish legislative system does not demand broad participation in the creation of local development strategies. Strategies are approved by elected municipal councils; hence, there is at least indirect participation by the local inhabitants regarding the final versions of strategies, but the survey results suggested that broad participation is rare in local strategy formulation in Finnish municipalities. Figure 3 provides an overview of the participants actively involved in the strategy formulation process. Strategic planning is mostly conducted at the top administrative levels of municipalities, with mayors, municipal executive boards

and councils, and responsible officials being seen as the main actors in the strategy formulation. Other, lower-ranked municipal staff and local inhabitants only rarely participate in this process. Such top-down strategy creation might exclude important factors that influence the future and are relevant to sustainability.



*Figure 3: participation in local development strategy formulation.* 

In general, the actors participating in local development strategy formulation were found to be similar in municipalities both with and without separate SDSs. The only statistically significant difference was that the key municipal officials and other municipal personnel were more engaged with the strategy formulation in the municipalities that had separate SDSs (p = .031). This suggested that addressing sustainability comprehensively in a separate SDS demands the interaction of a variety of experts within a municipality, at least some of whom are then mobilised for local development strategy formulation. However, the primary strategic actors (municipal councils and executive boards) and the key stakeholders (civic organisations, inhabitants, and enterprises) were less involved in local development strategy formulation.

#### Knowledge gathering for municipal strategies

Lastly, we analysed the connections between existing SDSs and knowledge gathering for municipal strategies in Finland. The results showed that municipalities with separate SDSs collected information more systematically to support local development strategies than did municipalities without such strategies. Table 3 compares the summary statistics for the two groups of municipalities. Of those that had separate SDSs, 59% stated that they collected "much" or "very much" information to support strategy formulation; for the other group without SDS, this number was 40%.

%	Without SDS	With SDS	Total
Very much	5	11	6
Much	35	48	39
Some	38	22	34
Little	16	15	16
Very little	2	0	2
Not at all	4	4	4

Table 3: the extent to which municipalities collected systematic information to support strategic planning—a comparison of municipalities with and without separate SDSs.

These results supported the idea presented in the research framework: that active knowledge gathering is connected with strategic thinking and strategy formulation. Comprehensive information is needed to understand local circumstances, build new future-oriented knowledge, and identify different policy options for decision-making in municipalities (Habegger 2010; Ravetz and Miles 2016; Wilkinson 2016). Large municipalities have more resources to allocate to knowledge gathering, causing no surprise that they do it more frequently. The connection between knowledge gathering and sustainability strategy suggests that knowledge gathering is beneficial for sustainability governance, which aligns with our framework.

Overall, those municipalities that had specific SDSs showed evidence of strategic thinking in some respects, by having long development timeframes and gathering strategy-related data. However, they were similar to the other municipalities when it came to a broad understanding of sustainable development and inviting stakeholders to participate. We shall proceed to discuss these findings and implications in more detail.

#### Conclusions

In this article, we studied strategic thinking and sustainable development in local governments (municipalities) in Finland. We assumed that strategic thinking is a way to enhance sustainable development and focused on four elements of strategic thinking (a broad understanding of sustainability, a long timeframe, stakeholder involvement, and data gathering: Zeemering 2018) that made it possible to analyse how strategic thinking manifests in sustainable development at local levels. In detail, the analysis compared two groups of municipalities: those that had distinct SDSs (25%) and those that did not (75%). The results showed that the elements of strategic thinking are often consistent with an increased local engagement with sustainable development.

The main result was that strategic plans reflect local differences in dealing with sustainability-related issues: the local governments with SDS documents worked with longer timeframes and tended to emphasise the gathering of futureoriented data. With regard to the two other elements—a broad understanding of sustainability and involving stakeholders in strategy formulation processesthere were no consistent differences between the two groups, which can be explained in the following ways.

First, a sound local economy is a prerequisite for local municipal activities. The survey respondents interpreted economic sustainability as a steady economy in the municipality, rather than economic solutions that acknowledge sustainability. However, the ecological, economic, social, and cultural dimensions of sustainability need to go hand in hand to achieve broad sustainability locally. The local authorities in Finland face and solve many practical day-to-day development issues that lead to the prioritisation of economic sustainability: there was thus a conflict between the local and nonlocal dimensions of the sustainability agenda. The local economic necessities in Finland appeared to hamper engagement with the broader sustainability agenda promoted by many international and national frameworks and stakeholders (see also Häikiö 2014); however, at the national level, information about sustainable development asserts that economic sustainability is vital for many functions of society (Kestävä kehitys 2018). This indicates a similar understanding of economic sustainability at the national and local levels, and the results supported earlier studies claiming that local government plans and programmes for sustainability often focus on reducing economic costs (Ji and Darnall 2018).

Secondly, the broad involvement of stakeholders in strategy formulation was not considered very important by municipalities in Finland, irrespective of whether they had SDSs or not. Participation was on the agenda, but local governments did not seem keen to open up decision-making processes. Nevertheless, sustainability needs to address a broad spectrum of local activities. and all relevant actors should be involved in the good local governance of sustainability. The local development strategies in Finland are, for most municipalities, still a top-down exercise with limited public participation. Such a practice creates challenges for the integration of sustainability in local development strategies. The top-level municipal experts and political decisionmakers cannot grasp all the sustainability perspectives and interests of nongovernment organisations and interested local inhabitants. Stakeholder participation also contributes to knowledge sharing and innovation (Hofstad and Torfing 2015); thus, wider participation would benefit the strategic thinking and strategic sustainability dimension of municipalities, enabling them to implement sustainability strategies in practice (Bryson 2010; Rahman 2016; Zeemering 2018). However, the lack of stakeholder participation might also be an economic issue. Wider participation requires greater investment in order to solicit the opinions and win the engagement of many different stakeholders, and the four elements of strategic thinking overlap; for example, participation can be seen as a means of providing information, as well as informing local decision-makers about the different aspects of sustainability.

Following the 2030 Agenda for Sustainable Development and the Paris Agreement, the Government of Finland initiated several development programmes and new legislative processes. Municipalities are often the executors of these sustainability measures, because municipalities operate in a broad field of policies. However, this broadness might obscure fundamental sustainability issues. Operations that concentrate on a single issue at a time hamper consideration of the whole picture of sustainability, which might have

influenced the respondents' answers. SDGs are embedded in several municipal tasks, perhaps meaning that the macro level of sustainable development (Echebarria et al. 2017) is only partially perceived. However, since local governments in Finland already work on all dimensions of sustainability, SDGs do not represent extra work for municipalities. Sustainable development is a framework for comprehensively considering and developing municipal operations.

Local governments are central players in sustainable development, and the argument elaborated in this paper is that the existence, timeframe, process, and quality of strategic thinking is a good potential indicator of local governments' involvement in sustainability. After all, sustainability involves a long timeframe, extends to future generations, and requires the anticipation of contextual risks and opportunities. A number of institutional factors nevertheless work against such an approach. As in most countries, local councillors are elected for a relatively short period of time (four years in Finland), which may prevent elected councillors' from focusing on issues that extend beyond their actual term of office. Furthermore, participation is not a priority for the Finnish municipalities, meaning that, beyond elections, participatory mechanisms are underdeveloped (Lidström et al. 2016).

The contribution of this study was to confirm that strategic thinking is beneficial to the consideration of sustainability-related issues in municipalities (i.e. at a local government level). Strategic thinking is a means to take a longterm perspective on development; focus on changes, risks, and opportunities in the environment; solicit the views of different stakeholders, within and beyond the municipal administration; and understand that sustainability is not limited to the environment, but has relevance for all municipal sectors. Strategic thinking goes beyond simple strategy formulation (Bryson 2010; Bryson et al. 2010). Creating a strategy document may fulfil an obligation, but it does not enable local governments to advance sustainability. However, a sustainability strategy may help local governments to focus on the topic of sustainable development and manage organisational processes towards achieving sustainability (Zeemering 2018).

This article suggests that it would be beneficial to address sustainability in local governments in more depth. It would be useful to discover whether a long timeframe for development affects daily decision-making, how future-oriented data is utilised in daily municipal routines, and whether such data would facilitate the achievement of better sustainability. Sustainability is a general term that can be interpreted in many ways. Strategic goals afford the possibility of placing concrete sustainability issues on the agenda; for example, changing the cars used by the municipality into electric cars to reduce greenhouse gas emissions, or introducing initiatives to enhance recycling. Besides being global agreements, SDGs are also concrete sustainability targets for municipalities; thus, future studies should investigate how strategically municipalities think about and address SDGs.

#### Acknowledgements

This research was supported by the Strategic Research Council at the Academy of Finland under grant number 303617 URMI.

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