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An approach to involve municipal leaders into strategic decision-making for sustainability—A case study

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In a previous study we tested a model for implementation of methodological support for cross-sectoral collaboration for strategic transition toward sustainability. To make the model viable long-term, practitioners emphasized the importance to recruit and engage leaders into the process upfront, however, this was also the key missing element according to the ten municipalities and regions in the action research project. Nevertheless, if addressed sufficiently, active leadership could favor other needed support, such as capacity building and merging with ongoing work. Therefore, this study aimed to design, test and evaluate an approach to better involve leaders into strategic decision-making for sustainability early on in the collaboration processes. The approach evolved as an in-depth study in one of the municipalities. A pre-assessment based on semi-structured interviews and desktop review was compiled and presented back to municipal top management during a session that included a focus group discussion to capture the leaders' feedback on the assessment as well as advice on how to make the implementation model viable long-term. Results gave that the leaders reached a good understanding of the implementation model and how current practice in the municipality related or could be related to it. As an indicator of spurred engagement and hence, a successful result, one outcome from the session was a strategic decision to carry out a thorough sustainability analysis according to the methodology that the model is supposed to implement. This work is ongoing. In addition, support for alignment with existing management systems was asked for. An evaluation of the approach itself was positive, however, pointed at the extensive work needed for the assessment. Alternative ways, such as self-assessment or peer-assessment was discussed. Forthcoming research will test and further refine the applied approach of this study to enhance strategic decision-making for sustainability while also considering the role of academia in municipal practices for sustainability.

KEYWORDS

strategic sustainable development, municipalities and regions, involving leaders, capacity building for sustainability, explorative case study

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Introduction

This explorative case study was part of an action research project that aimed to investigate how practitioners in local and regional governments can be sufficiently supported to enhance cross-sectoral municipal and regional strategic work for sustainability. The research project included testing of a preliminary model for long-term implementation of the Framework for Strategic Sustainable Development (FSSD) (Broman and Robert, 2017; Robert et al., 2017), which was assumed to provide the desired support with focus on local and regional governments' roles to guide the needed transitions (United Nations Resolution 70/1, 09/15; Köhler et al., 2019). However, learnings from the 4 years of action research with seven Swedish municipalities, two Swedish regions and one Finnish region pointed at needs for additional support to assist the implementation, primarily to make the model viable also after introductions and sessions facilitated by the research team (Wälitalo et al., 2020). Specifically, three supports were called for:

- 1. ways to link previous and ongoing work to the implementation model,
- 2. education and capacity building for applying the model, and
- advice for how to recruit leaders, upfront, into the implementation process.

With few exceptions, the latter aspect was seen as the key missing element amongst the studied municipalities and regions as active leadership would mean better conditions and resources to carry out training, build capacity and cultivate interest in connecting previous and ongoing work with methodology for strategic sustainable development. In this study, "leaders" refer to the administrative top management and politicians within a local or regional government.

Given that sustainability transitions have been a topic of growing interest, specifically since the early 90's (see e.g., Barrutia et al., 2015), approaches and methods to address the challenge continuously grow in numbers (de Jong et al., 2015; Vogel et al., 2019) and with them identification of barriers and enablers for the endeavor (Burch, 2010; Biesbroek et al., 2013; Ekstrom and Moser, 2014). Indeed, scholars have emphasized lack of active leaders as an considerable impediment (Measham et al., 2011; Dale et al., 2020) and correspondingly, how political will and commitment is a crucial factor for institutional capacity for sustainability transitions (Evans et al., 2005; Bai et al., 2010).

Comparing transition management and LA21, Wittmayer et al. (2016) display and discuss the differences, and similarities, of the two approaches. The authors conclude that individuals that drive sustainability processes need mandate to do so. That is, despite who initiates them (such as strategists in the local government or actors from other societal sectors) they "...need to keep a connection with the incumbent regime" (Wittmayer et al., 2016, p. 950), i.e., decision-makers in local government.

Arguably, to keep transformation work up and running, local government leaders must be well-informed, and interested, in the processes and their purpose. In the field of behavioral change, Michie et al. (2011) developed a comprehensive and coherent framework based on previous frameworks of behavioral change interventions and concluded that in order to create motivation for change, capability and opportunity to do so is vital. Supported by this framework, we argue that capability in terms of individual knowledge and skills to engage in transitions toward sustainability are often present from several different directions in the geographical context of a municipality or region. For example, citizen initiatives such as "Transition Towns" (Transition Network, 2022) or "Fridays for future" (Fridays for Future, 2022) and NGO's such as the World Wildlife Fund (WWF, 2022) and partnerships (Frantzeskaki et al., 2014). However, while such capability provides needed motivation and initial behavioral change, the opportunity to make important, long-lasting, transformation leaps is defined as "all the factors that lie outside the individual that make the behavior possible or prompt it" (Michie et al., 2011, p. 4). In a municipal or regional context, this undoubtedly includes that decision-making, guidelines, regulation, etcetera are in line with principles of sustainability, regardless of policy area. In consequence, to create opportunity for a wider municipal or regional sustainability transformation, local and regional government leaders must be motivated to act accordingly.

From the perspective of Local Agenda 21 (LA21) initiatives, Evans and Theobald (2003) reported on the need for "political prioritization of LA21, and the associated processes of guidance, co-ordination and support" (Evans and Theobald, 2003, p. 793) which are in line with the other two called for supports (linking previous and ongoing work and education and capacity building) initially presented in this paper. Further, Evans and Theobald (2003) discussed the advantage of dialogue to complement evaluation of progress in work for sustainable development. Still, while literature clearly points toward the importance of engaging local government leaders into crosssectoral sustainability transition making, less is found of how this can be done concretely in practice. This exploratory single case study is therefore primarily inspired by forward-looking research agendas. In an outlook toward 2030, ICLEI, through the Resilient Cities Congress series, provides several considerations among which an increased need for research-informed policymaking processes is one (ICLEI, 2019). A query of this potential practical impact by academia is also raised by Köhler et al. (2019) as well Evans (2019) from expressing the potential for "new forms of urban governance to create more sustainable cities" as one of three themes of particular interest (Evans, 2019, p. 2).

Through participation in the larger ongoing action research project (Wälitalo et al., 2020), one municipality offered to work more closely with the research team to consider how to proceed

in addressing the identified support needs and thus potentially make the implementation model viable in the long-term. From experiencing the lack of committed leadership, our research question was how to better create engagement among leaders and involve them early on into strategic decision-making for sustainability. The aim of this study was therefore to design, test and evaluate an approach where we propose that if the leaders could see how the model could help improve the municipality's economy by bridging existing gaps in strategic decision-making for sustainability, how previous and on-going work could rather easily be aligned with the model, and if they could be brought in to complement such an alignment-assessment, they would be intrigued and positive to staying involved also in the further work. Also knowing that it is usually only possible to get little time with top leaders initially, we realized that the interaction needs to be well-prepared and efficient. We therefore designed an approach including a pre-assessment followed by a 2-h focus group discussion with the leaders and evaluated this approach.

In this study we based the pre-assessment on data from early interviews in the action research project and existing municipal documents. The assessment included some particularly important elements of the implementation model, such as integration of a full scope of sustainability with other aspects of governance, clarity of visions in a sustainability context, relatedness of visions with ongoing projects, and structures for cooperation across sectors (Wälitalo et al., 2020).

Methods

In the following, the FSSD (Broman and Robert, 2017) and the preliminary model for its long-term cross-sectoral implementation (Robert et al., 2017; Wälitalo et al., 2020) are briefly presented as it was applied as a lens for the assessment of previous work in the municipality. This is followed by a description of the specific municipality and the assessment procedure. Last, a description of the preparation and set up of the focus group discussion is provided.

The FSSD and a model for its long-term cross-sectoral implementation

Three of the main features of the FSSD were essential in this study (Broman and Robèrt, 2017, p. 20):

• A funnel metaphor facilitating a systemic view of the dynamics behind civilization's sustainability challenge and how this will, inevitably, influence all organizations and their practices, thus making sustainability relevant to leaders. The in-leaning wall of the funnel represents the systematic decline of capacity for ecosystems and social systems to sustain civilization as we know it. This is for

as long as we continue to lose more and more fertile land, healthy marine systems and fisheries, biodiversity, purity of ecosystems, and climate stability. And, not the least important of all the losses, trust between people, leaders and institutions at a time when we need it the most. The funnel metaphor leads to an anticipation of subsequent and inevitable changes of future markets and political demands, all to create a "self-benefit drive" to be proactive toward the opening of the funnel. This leads to the next main feature; how is that opening defined? We need boundary conditions for re-design to tackle the myriad impacts along the funnel wall upstream in cause-effect chains, at the root of problems where comprehension is as great as it gets.

- A principled definition of sustainability designed as boundary conditions for backcasting planning and redesign toward sustainability. Any goal complying with these boundary conditions is sustainable, and any goal not complying with these boundary conditions is not sustainable. For the boundary conditions to be useful for backcasting planning and redesign toward sustainability, they should be: (i) Necessary, but not more to avoid imposing unnecessary re-strictions and to avoid confusion over elements that may be debatable; (ii) Sufficient, to avoid gaps in the thinking, that is, to allow elaboration into second and higher orders of principles from a complete base; (iii) General, to be applicable on any arena, at any scale, by any member in a team and all stakeholders, regardless of field of expertise, to allow for cross-sectoral collaboration; (iv) Concrete, to actually guide problem solving and innovation, that is, redesign through stepby-step approaches in real life; and (v) Non-overlapping, to enable comprehension and facilitate development of indicators for monitoring of progress.
- An operational procedure, ABCD, for creative multistakeholder co-creation of strategic transitions toward goals modeled in the above way: A (elaborating visions within the boundary conditions of sustainability), B (identifying current strengths and challenges in context of the vision), C (identifying possible measures to approach the vision in light of the challenges and strengths) and D (prioritizing the possible measures into step-wise transitions where each action can serve as platform for the next).

Thirty years of applying and refining the FSSD within many and varying organizations, sectors and countries, including municipalities and regions (for references see Broman and Robert, 2017), have distinguished a number of municipalities to be relatively more systematic in aligning theory with practice. Based on these experiences, a preliminary and ideal model for long-term cross-sectoral implementation of the FSSD was designed (Robert et al., 2017). A simplified version of the implementation model is presented in Figure 1. Based on an



overall ABCD procedure including a societal vision, (A), framed by basic sustainability principles, experts and stakeholders from different sectors and operations draw conclusions, applying the ABCD procedure of the FSSD. The respective ideas regarding challenges and assets (B), opportunities (C), and prioritized steps (D) in each sector are compared across the sectors and stakeholder groups. This leads to modeled and coordinated solutions from numerous meetings within and across sectors – big and small, formal, and informal, planned as well as spontaneous. Thus, Figure 1 denotes the logic of sector-interdependencies to inform effective cooperation across disciplines and sectors, but it does not suggest to always organize big formal meetings.

The long-term implementation model explicitly stresses the importance of iterative cross-sectoral learning by doing and sharing, that is, the contents under the respective A, B, C, and D checkpoints are allowed to influence each other iteratively and dynamically as the strategic plans unfold. The ABCD procedure allows separate planning for specific operations and sectors and to iteratively, during its use, develop the overall cross-sector vision (A). This planning methodology is inherently big-picture strategic, so it is important that relevant decisions-makers are made active part of the cross-sectoral iterative learning and co-creation (Broman and Robèrt, 2017).

To assess the municipality's current work for sustainability, the implementation model with its basic parts was used as a lens. The hope was that reflections on the assessment could promote the involvement of essential actors and sectors in effective cooperative processes and enable formal as well as informal structures and habits for collaboration.

The municipality of Hudiksvall

The municipality taking part in this study was Hudiksvall, situated in the middle of Sweden toward the Gulf of Bothnia. The municipality has ~37,500 inhabitants and a population density of eight inhabitants per km² (average for European countries being 112 inhabitants/km²). The municipal administration has 3,700 employees and leaders are in this study considered to be both managers and strategists from the administrative lead and the political government. Seven leaders took part in the focus group discussion, out of which three were specifically invited since they were interviewed regarding the municipality's sustainability work which represented one part of the assessment procedure. The interviewees participating were the municipal director (being the municipality's highest senior official and head of all other administrative leaders); the head of strategy and administrative structure, and a politician being the chair of a parliamentary group for democracy and quality (that aims to improve the quality of municipal services from a citizen and human rights perspective) (Hudiksvalls kommun, 2020b). In addition, another politician being the chair of a steering group for ecological sustainability and three strategists with responsibility for ecological sustainability, social sustainability,

and quality issues, respectively, participated in the focus group discussion.

The assessment based on the FSSD implementation model

To gain an understanding of the degree to which current sustainability work aligned with the FSSD implementation model, data from interviews and document analysis was used. The assessment was designed to be comprehensive enough to spark dialogue of strengths and weaknesses of ongoing work in relation to the FSSD implementation model, however, not too detailed for time reasons and to not get derailed from the overall picture. Our assumption was that the leaders interviewed should have knowledge about the intention and extent of the existing strategic work for sustainability. With the purpose to initiate the focus group discussion, a rating of how the municipality complied with each element of the model was done by applying the scale "low - medium - high compliance". The scale was made as simple as possible to indicate researchers' assessment but at the same time to encourage the participants in the focus group discussion to adjust the assessment based on their deeper knowledge of the municipality. Researchers' assessment was based on the implementation model, based on 30 years of experience of best practices of FSSD applications. Low compliance was set if there was no or little evidence in existing work that could be referred to the implementation model, medium compliance was set if there were some structures in place and/or knowledge related to the model, and high compliance was defined as of clear descriptions and examples of having a common planning procedure for sustainability that was aligned with the implementation model.

Semi-structured interviews

The interview data was gathered from semi-structured interviews conducted early in the action research project. Appropriately for this study, the interview data regarding the municipality of Hudiksvall had a strong leadership perspective since interviewees were performed with the three leaders described above. The purpose at the point of the interviews (2015–2016) was to gain insight into how people within the municipal organization generally understood the concept of sustainability, as a foundation for the action research project. The assessment procedure presented here on the other hand aimed to find strengths and weaknesses of current work directly in relation to the FSSD implementation model. Thus, the same interview data was utilized, however analyzed to align with the purpose of this study. Overall questions for the analysis were:

- Is there knowledge of the full scope of the sustainability challenge and the self-benefit of competent proactivity? (addressing the funnel metaphor).
- Is sustainability defined and is the definition communicated? Does the municipality apply any definition of sustainability to inform visions for backcasting planning and redesign for sustainability? (addressing boundary conditions and their application).
- Does sustainability as a concept guide daily work and orientation of new actions within the organization, for example, through the existence of meetings across sectors where sustainability is integrated with the municipal governance at large? If so, is an ABCD type procedure applied then? (addressing the intention as visualized by the FSSD implementation model).
- Is a common planning procedure (such as the ABCD procedure) in place and applied across sectors and disciplines, also outside of the municipal organization amongst its stakeholder groups? (addressing the intention as visualized by the FSSD implementation model).
- Are all relevant actors and sectors actively involved in processes for sustainability? (addressing the intention as visualized by the FSSD implementation model).

Document analysis

The document analysis was done by searching the municipality's website to find trace of written, visual, or recorded material or documents that showed alignment with elements of the implementation model. The review was focused on municipality-wide descriptions and documents (plans, policies, programs, strategies) (Hudiksvalls kommun, 2020a) since it was expected that these documents and description should have the information we were searching for, if it existed. The accuracy of this assumption was confirmed with key contacts having roles as strategists for ecological and social sustainability issues in the municipality. They had also been key contacts during the long-term collaboration within the whole action research project (Wälitalo et al., 2020). Example documents were the overall vision and goals, the municipality's comprehensive plan, the government operational plan and the strategy for environmental work. In addition, the municipality's overall control process was studied to find descriptions related to what the FSSD implementation model describes as required elements for strategic transitions toward sustainability. The same questions as in the interviews were used for this analysis. Excel was used to systematically go through documents and descriptions and to take notes in relation to the questions.

Preparation and set up of focus group discussion

To prepare for the focus group discussion, results from the interviews and desktop analysis were compiled to be presented back to the leader representatives of the municipality during a physical meeting. The session was planned and designed in collaboration with key contacts. and designed to take only 2h as it is often difficult to access top leaders for more than so. It took place on May 27th, 2019, with the seven leaders as described above. During the session, large parts of the assessment results were presented orally, and PowerPoint slides were used to capture main points and to display the overall assessment in terms of "low - medium - high compliance". The purpose was for participants to provide feedback on the assessment and to spark dialogue in the focus group around strengths and weaknesses of on-going work in relation to the FSSD implementation model. Additionally, the purpose was to identify and discuss gaps in capacity and thus ask the leaders for advice regarding specific capacity building needs going forward. Notes were taken during the meeting. By the end of the session, all participants were also asked to fill in a survey to capture thoughts on the structure, content, and purpose of the tested approach.

Results and analysis

In this section, results from assessing strengths and weaknesses in relation to elements of the FSSD implementation model (represented by the questions for analysis) are provided as this formed the basis for the subsequent focus group discussion. Thereafter, the survey result from evaluating the tested approach is presented and analyzed. Reflections of the whole approach is given in the discussion.

Assessment in relation to elements of the FSSD implementation model

Is there knowledge of the scope of the sustainability challenge and the self-benefit of competent proactivity?

Interviewees stated specific ecological and social "problems" but without making it clear if they perceived the problems as being aspects of the systematic decline of ecological and social systems and their potential to sustain civilization. Examples of the diversity of items mentioned were transports, mining, low levels of education and poor integration, but also structural problems regarding governance. For example, current structures for decision-making were not seen as optimal to deal with the scope of complex and many times experienced as distance sustainability challenges, and this contributed to a feeling of powerlessness. One interviewee said that there are often too many matters on the agenda and too little time to get acquainted with them. Still, the municipal director expressed that "... sustainability work, if you see it as social, economic, and ecological, has to do with survival. There are no alternatives as I see it, we have to work with the issue" (Interviewee B, 2016). Thus, there were clear signs of understanding among interviewees that the sustainability challenge is complex and composed of myriad symptoms that are severe and need attention in governance. However, it was also clear that the previous models applied involved little about the systemic nature of the challenge, nor the dynamics of the interrelated systematic decline of sectors that are essential for survival of civilization, such as energy, transport, forestry, agriculture, material flows, etcetera, nor the self-benefit of competent proactivity, that is, tackling the myriad challenges strategically upstream in causeeffect chains allowed by clear definitions and guidelines.

The document analysis confirmed the above. Though the readings imply that there existed individuals with strategic sustainable development knowledge within the administration, it was not convincing that this knowledge was spread amongst staff, nor that it was put at use in connection with the local municipal challenges. Documents presented descriptions of the sustainability challenge in general terms, such as the ecological, social and economic dimensions of sustainable development from the "triple bottom line" model (Elkington, 1998). Documents also contained statements of some specific environmental and social problems in the local community, but without clear relationships to the systemic or strategic character of the problem areas.

Assessment: Low to medium compliance

Is sustainability defined and is the definition communicated? Does the municipality apply any definition of sustainability to inform visions for backcasting planning and redesign for sustainability?

The direct question of whether the municipality has a clearly stated definition of sustainability gave vague answers from two of the interviewees. The third leader interviewed did point toward the municipality being an eco-municipality (SEKOM, n.d.) and that they have adopted the FSSD sustainability principles. However, the interviewee also stated that this definition was not clearly communicated and therefore known only by a limited number of employees. That is, formally the municipality had defined sustainability, but if not communicated and applied in any implementation model this is of little practical use and significance.

The document analysis confirmed the adoption of the FSSD sustainability principles as they were described on the webpage. Additionally, and supplementing the interviews that were performed in 2016, the document analysis gave that a political decision has been taken that the definition must be considered in all decisions. To that end, a checklist and a template for sustainability assessment have been published on the website (Hudiksvalls kommun, 2022). Arguably, there are

conditions in place to communicate and apply the sustainability definition for planning in municipal operations. Still, there are no clear signs of results from such planning, nor any evidence that the implementation model of the sustainability principles had been applied.

Assessment: medium compliance

Does sustainability as a concept guide daily work and orientation of new actions within the organization, for example, through the existence of meetings across sectors where sustainability is integrated with the municipal governance at large? If so, is an ABCD type procedure applied then?

Considering the sub-parts of the ABCD procedure, the municipality's vision (A) is clearly communicated on the website and contains a short vision statement, three overall goals and four value words (safety, openness, participation, and equality). In addition, "everyone's equal value" is the municipality's fundamental value. However, in what the municipality had deemed as important components for a vision of success, there were gaps in relation to the FSSD implementation model. Core purpose and sustainability principles were missing. The interview results, on the other hand, indicate that the municipality's purpose is implicit. For example, interviewee B (2016) said that their starting point is to understand...

"... what a municipality is for. A municipality is supposed to support and ensure that our citizens have it as good as possible, one might say. And that there are not too big social distortions. That is really the main task, which is also the core of the concept of sustainability, I think, that people are not excluded from society, we will try to work to get all people onboard, to participate in community-building. This also applies to the ecological sustainability efforts. If we want to be a municipality where people want to live and work, then we must also be attractive from an [ecological sustainability] perspective".

In terms of assessing current reality (B) in relation to the vision, this was mainly addressed at the website through general key figures and indicators that are monitored on a yearly basis. For example, the Swedish Eco-municipality network's green key indicators (Sveriges Ekokommuner, 2020) and indicators linked to the overall goal "Attractive and sustainable living" and the operational goal "Contribute to ecological, economic and social sustainability" are presented in the municipality's annual report (Löthstam, 2019).

In terms of finding innovative and creative solutions (C), this was based on the notion of generating creative tensions between the vision and various aspects of the current baseline. Here, many specific examples were provided instead of insights of how such measures were developed in co-creation and related to overall visions.

The document analysis confirmed the above. Also, although the website presented some plans to deal with different focus areas, specific ways of generating creative solutions based on visions and applied across sectors were not found. Still, interview comments also addressed that much more could be done and that closer collaboration with associations and non-profit organizations would be valuable.

While much can be related to the different parts of the ABCD procedure, there is no clear evidence as to how sustainability as a concept concretely guides daily work and orientation of new actions within the organization, nor how a longerterm implementation process would look like. Nevertheless, a good ambition within the municipal administration seems to be a relatively recent development of standardized templates for raised service matters, as brought up by one interviewee. However, this template or procedure is not yet to be found in public documents. One question in that template is, according to one interviewee, if sustainability issues have been considered for the specific matter (that is to be scrutinized by using the template). So far, however, a plain "yes" can be a typical and accepted answer according to one interviewee. A change in attitude regarding sustainability issues can be discerned by interviewees, which will likely lead to more strategic decisions.

Assessment: low to medium compliance

Is a common planning procedure (such as the ABCD procedure) in place and applied across sectors and disciplines, also outside of the municipal organization amongst its stakeholder groups?

Nothing specific could be found, nor was said, about a common planning procedure used across sectors and disciplines, nor could we observe any norms or infrastructures for cross-sectoral cooperation of any kind.

Structures for both formal and informal collaboration seem to be in place and have a long history given how the municipality operates to fulfill its task. Nevertheless, no specific, common meeting routines were mentioned that could support comparisons between different stakeholders and sectors so that values and preferences get weighted against each other and against a (sustainable) vision of success.

Assessment: low compliance

Are all relevant actors and sectors actively involved in processes for sustainability?

Few answers were related to this element but referred mainly to current organizational structures and processes rather than to assure cohesive creativity for sustainability across groups of experts and stakeholders, taking off from a planning attempt or focus area.

Assessment: low compliance

Evaluation of the tested approach

The assessment outlined above was presented back to interviewees, and to the extended group of both leaders and civil servants. During the session, PowerPoint slides conveyed the results of the assessment through key phrases and quotes in combination with an oral presentation based on the above presented results. The focus group discussion ended with an open dialogue of both the content of the assessment and the approach to invite to open dialogue around the result and how to proceed. As a final step, the seven participants completed a survey. The result is presented in Table 1 supplemented with example comments from participants. The reasoning around the result is developed in the discussion section below.

Discussion and conclusion

In this study, we have investigated how to better create engagement among leaders and involve them early on in strategic work to achieve effective transitions toward sustainability. The developed approach (see Figure 2) was based on needs for further support for long-term implementation of the FSSD, noted in previous action research (Robèrt et al., 2017; Wälitalo et al., 2020) and inspired by future outlooks (ICLEI, 2019) and research agendas (Evans, 2019; Köhler et al., 2019). This exploratory single case study is clearly one out of many possible responds of how to encourage active leadership from local government as expressed as a challenge by many scholars (e.g., Bai et al., 2010; Measham et al., 2011; Dale et al., 2020). Nevertheless, the single-case study is important in transitions research (Köhler et al., 2019) as it forms the basis for comparative approaches.

The approach was designed to engage and involve leaders in dialogue for them to better understand the implementation model in relation to the concrete context of the municipality, thus also reflecting the need to acknowledge on-going work. To that end, it was initially worrisome that it might be difficult to display the somewhat harsh assessment (as also noted by, for example, Evans and Theobald, 2003). However, participants generally agreed with the assessment and expressed that it was almost too "kind". In general, the low to medium compliance with the implementation model, was highly endorsed by the leaders.

So, did we expect to find a high level of compliance? The above result should be seen in light of the analysis being based on an "ideal" model for cross-sectoral implementation of the FSSD, informed by some "best-practice" municipalities sampled during decades (Broman and Robèrt, 2017; Robèrt et al., 2017). This perspective was also conveyed during the focus group session. At this time in the FSSD developments, it is natural that the compliance is low. It is also natural that needs for additional support, and possibly modifications of the implementation model itself, surface.

An increased understanding and appreciation of the implementation model was verified during the focus group discussion, partly considering the fruitful discussions that followed the presentation of the assessment, and partly reflecting upon the survey results. The set-up was generally appreciated by the participants. A second intent with the designed approach was to ask the leaders to reflect upon specific capacity building needs going forward to support them in continued application of the implementation model. While the assessment in itself provides opportunities to go back and identify capacity building needs at any time, the prompt reflection during the session led to interesting discussions regarding the municipality's steering systems and how to move forward to better include both leaders and other people in understanding and appreciating the model and its purpose. Specifically, how existing management systems and the implementation model could be integrated was expressed as a capacity gap and support was asked for. This is in line with previous expressed needs by participants in the action research project (point one in the introduction) as well as an often-mentioned challenge and enabler in scholarly literature (e.g., Ling et al., 2009). The need to link previous and ongoing work to the implementation model has also been a subject for follow-up meetings between researchers and the municipality's key contacts.

Despite the time constraints of only 2 h, and the extensive results to present and discuss, the survey results conveyed an overall positive experience of the approach. Indeed, the relatively few participants and validity treat in terms of reactivity (that people say what they think you would like to hear) (Maxwell, 2013) should be considered as a limitation. Nevertheless, reflecting on the survey results in combination with notes taken and, specifically, succeeding events have supported the evaluation and indicate the increased understanding and engagement. As an example, the municipal manager gave approval of conducting a comprehensive sustainability baseline analysis of the geographic municipality (which is an important part of the operational procedure of the FSSD). Such analysis was initiated and pursued during the fall 2019 and has since then been extended to an extensive systematic planning process, including idea generation workshops and meticulous design of a prioritization scheme. The latter has been presented to the city council and commended in May 2022. These are indications of a spurred engagement among the leaders, supporting our hypothesis the leaders would be intrigued by the suggested approach and motivated for continued involvement throughout the work.

Alternative options for the assessment were brought up, considering ways to perform the assessment and leader dialogue independently, and possibly also without support from researchers, such as the self-assessment procedure within the LASALA project (Evans and Theobald, 2003). Examples of alternatives discussed were peer-reviewing between municipalities, a survey reaching more people in the organization, and internal self-assessment. Such alternatives could be ways to continue involving leaders in implementation processes. Specifically, since municipal organizations tend to be both large and sprawling this is an important aspect. However, it was stressed that the initial assessment is perceived as complicated and hence that it would be difficult to pursue without support from an expert.

One important and general consideration to be made is if the assessment would be initiated in the first place if it was not proposed by an external party to the municipal

TABLE 1	Survey results from	evaluating the designed and	l tested approach.
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Survey question		Mean (scale 1-	5) Comments	Comments	
. Did you und	lerstand the purpose of today's focus	group 3.8			
iscussions in a	a clear way?				
Did you exp	erience the assessment (about the	3.6	More time for the session wou	Id have allowed for a more in-depth,	
unicipality) a	s helpful to get a better grip on strer	ngths and	hence clearer presentation of	results.	
aknesses in 1	relation to the implementation mode	2]?			
How well do	es the assessment agree with your o	wn 4			
rception of tl	he municipality's strategic sustainabi	lity work?			
Do the elem	ents of the implementation model tl	hat the 4.2			
alysis was ba	sed on (involving stakeholders,				
derstanding	the sustainability challenge, clear su	stainable			
ion etc.) seer	n reasonable according to you?				
The purpose	of the assessment and focus group	4.6	I have not been part of this wo	een part of this work before, but want to continue the	
cussions was	s to concretize your municipality's al	ignment	work, however, developing the	e support to be clearer and a tool to	
h the FSSD i	implementation model. Is there, bas	ed on	implement in our steering sys	tem.	
ur experienc	e, any development potential and fu	ture	The discussion on steering an	d management was really good, as we	
our experience		ture	0	d management was really good, as we nd how to do that in the best way.	
*		Presentation of assessment results	0	d management was really good, as well nd how to do that in the best way.	
*	Assessment of SSD work based on the FSSD implementation model In this study:	Presentation of assessment results In this study:	Dialogue and follow up on results In this study:	Follow up and continuous work In this study:	
*	Assessment of SSD work based on the FSSD implementation model In this study: Performed by researchers through semi-structured	Presentation of assessment results	the importance of follow-up a Dialogue and follow up on results	Follow up and continuous work	
*	Assessment of SSD work based on the FSSD implementation model In this study: Performed by researchers through semi-structured interviews and document	Presentation of assessment results In this study: Oral presentation by	Dialogue and follow up a Dialogue and follow up on results In this study: Focus group discussion led by researchers Prompted dialogue on how	Follow up and continuous work In this study: Facilitated through the	
*	Assessment of SSD work based on the FSSD implementation model In this study: Performed by researchers through semi-structured	Presentation of assessment results In this study: Oral presentation by researchers to municipal leaders	Dialogue and follow up a Dialogue and follow up on results In this study: Focus group discussion led by researchers Prompted dialogue on how to move forward	Follow up and continuous work In this study: Facilitated through the continued research project Forthcoming research: Development of supporting	
*	Assessment of SSD work based on the FSSD implementation model In this study: Performed by researchers through semi-structured interviews and document analysis <u>Alternatives discussed:</u> Internal self-assessment	Presentation of assessment results In this study: Oral presentation by researchers to municipal leaders <u>Alternatives discussed:</u> Internal presentation and	Dialogue and follow-up a Dialogue and follow up on results In this study: Focus group discussion led by researchers Prompted dialogue on how to move forward Alternatives discussed: Internal presentation and	Follow up and continuous work In this study: Facilitated through the continued research project Forthcoming research: Development of supporting guidelines to perform iterative procedures	
*	Assessment of SSD work based on the FSSD implementation model In this study: Performed by researchers through semi-structured interviews and document analysis <u>Alternatives discussed:</u> Internal self-assessment Survey to reach more people	Presentation of assessment results In this study: Oral presentation by researchers to municipal leaders <u>Alternatives discussed:</u> Internal presentation and dialogue event	the importance of follow-up a Dialogue and follow up on results In this study: Focus group discussion led by researchers Prompted dialogue on how to move forward Alternatives discussed: Internal presentation and dialogue event	Follow up and continuous work In this study: Facilitated through the continued research project Forthcoming research: Development of supporting guidelines to perform	
*	Assessment of SSD work based on the FSSD implementation model In this study: Performed by researchers through semi-structured interviews and document analysis <u>Alternatives discussed:</u> Internal self-assessment	Presentation of assessment results In this study: Oral presentation by researchers to municipal leaders <u>Alternatives discussed:</u> Internal presentation and	Dialogue and follow-up a Dialogue and follow up on results In this study: Focus group discussion led by researchers Prompted dialogue on how to move forward Alternatives discussed: Internal presentation and	Follow up and continuous work In this study: Facilitated through the continued research project Forthcoming research: Development of supporting guidelines to perform iterative procedures Exploring alternative ways of	

organization as in the case of our research project? Arguably, the complexity of both the challenge and assessment simply suggest no. Nevertheless, given the positive outcome and widely expressed need to address leaders' active engagement, this query relates back to above referred to research agendas (Evans, 2019; Köhler et al., 2019). Such as if, and if so, how researchers could be part of transition initiatives in a practical and balanced way (Köhler et al., 2019) and exploring innovative methods and research approaches to do so (Evans, 2019). We will consider this balance in coming work and investigate how the approach works with internal experts as facilitators. However, also acknowledging the fact of urgency in transitions for sustainability and what role academia could and should play (Köhler et al., 2019). Nevertheless, with proper supporting guidelines, alternative ways of performing the approach could be possible. Another Swedish municipality has already signed up to try to perform the assessment of the municipality's on-going work through a survey in combination with internal expertise performing the document analysis from the perspective of the FSSD implementation model. We are now planning to test other, more independent, ways of performing the suggested approach, report back to the municipalities already applying the implementation model on our findings and test the implementation model plus the additional support outlined in this study in more municipalities.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. Written informed consent for participation was not required for this study in accordance with the national legislation and the institutional requirements.

Author contributions

LW and K-HR: conceptualization and methodology. LW: data collection and writing—original draft preparation. LW, K-HR, and GB: analysis. LW, K-HR, and GB: review and editing. All authors have read and agreed to the published version of the manuscript.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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