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AN EXPLORATION OF COMMUNITY ENGAGEMENT AND PARTICIPATION IN THE LOW CARBON CITY (LCC) INITIATIVE: CASE STUDY OF MAJLIS BANDARAYA SHAH ALAM

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Abstract

This research paper examines the state of community awareness and participation in the Low Carbon City (LCC) initiative by the Majlis Bandaraya Shah Alam (MBSA). The study aimed to explore the level of understanding, awareness, and involvement of the community in the low carbon city initiative, and to identify the factors that influence community participation. The study employed a qualitative approach where focus group discussions involving key stakeholders were conducted, and subsequently, thematically analysed. The findings suggest that the level of community awareness and participation in the low carbon city initiatives in Shah Alam is relatively low. Factors such as participation and information-sharing methods, and a lack of collaboration between stakeholders were identified as barriers to community participation. The study recommends that MBSA prioritises community engagement and education, including best practices, to increase community awareness and participation. In addition, the methods for participation and information sharing should be tailored to the target group. The findings also suggested continuous discussion and engagement among the stakeholders, especially between the communities and the local authority, can promote active participation in the LCC initiatives among the communities in Shah Alam.

Keywords: Community participation, low carbon city, carbon reduction, climate change, Majlis Bandaraya Shah Alam

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INTRODUCTION

In response to the growing threat of climate change, and the need for sustainable development, many cities worldwide have developed Low Carbon City (LCC) initiatives. These efforts attempt to minimise carbon emissions, enhance energy efficiency, and stimulate the use of renewable energy sources. In recent years, the city of Shah Alam, through its city council called the Majlis Bandaraya Shah Alam (MBSA), has adopted its own LCC initiatives with the purpose of establishing a sustainable and low carbon urban environment through various strategies, including energy-efficient buildings, green transportation, and green communities.

In spite of its potential benefits, it is yet to be determined how participative the community has been in the LCC initiative. As with such sustainable development initiatives, community engagement and participation are critical factors in their success. With active community participation, the LCC initiative will be able to achieve its goals. Therefore, the aims of this study were (1) to explore the level of understanding, awareness, and involvement of the community in the low carbon city initiative, and (2) to identify the factors that influence community participation.

This paper reviews the relevant literature on carbon reduction, low carbon cities, and community participation. Thereafter, it describes the methodology used to collect and analyse the data, whereby the Focus Group Discussion was the primary method for collecting data involving various key stakeholders. The results of the study are then presented and discussed, followed by the conclusion. Overall, this study sought to contribute to the understanding of community engagement and participation in implementing low carbon city initiatives, hence providing insights and recommendations for improving the effectiveness of the LCC initiative by MBSA.

CARBON REDUCTION, LOW CARBON CITY AND COMMUNITY PARTICIPATION

Low Carbon City (LCC) initiatives have increasingly gained attention in recent years as a response to climate change and urbanisation challenges. The United Nations (UN) has recognised the importance of reducing greenhouse gas (GHG) emissions, and improving energy efficiency in cities, and has called for cities to take action on climate change (United Nations, 2022).

In addition, LCC initiatives also provide benefits, such as improved air quality, reduced traffic congestion, and increased green spaces, which then improve the quality of life for communities, and enhance the economic competitiveness of cities (Wu et al., 2022; Su et al., 2013). These also contribute to achieving carbon reduction, which is the ultimate goal of LCCs in the first place, for which community participation is crucial. Community engagement and

participation in these LCC initiatives, which encompass a range of activities and levels of engagement, from information sharing to decision making, can enhance their effectiveness and sustainability, and promote social inclusivity. Nevertheless, Arnstein (1969) depicted community participation as a ladder that benefits only certain stakeholders and community segments with more considerable influence.

Conceptually, community participation helps the decision makers to make better decisions by incorporating the community's experiential knowledge into the process (OECD, 2017). Furthermore, it promotes the democratisation of the decision making by considering the interests of various stakeholders, thus resolving conflicts.

Several studies have shown the positive effects of community participation in achieving carbon reduction, and LCC goals. For example, studies in Bangkok demonstrated the prominent role of community participation in successful low carbon city initiatives and programmes (Leknoi et al., 2022; Leknoi, 2019). Another study in China suggested that communities are essential in reducing carbon emissions (Liu et al., 2021). A sense of ownership among the communities should be encouraged whilst supervision by the authorities is also important to guide the community towards sustainability.

However, the effectiveness of community participation in achieving carbon reduction and LCC goals depends on various factors, such as the level of community engagement, the quality of communication and collaboration, the institutional and political contexts, and the availability of resources and support.

Besides that, psychological factors have been discussed as contributors influencing an individual's willingness to participate in low carbon initiatives. Apparently, more environmentally conscious people are more likely to participate (Wu et al., 2022). This can be associated with the habitual preferences and behaviours displayed by individuals with better awareness and attitudes towards a sustainable environment. Even with this, several researchers argued that there is a gap between awareness, and the willingness to take action. While most people are aware of climate change and low carbon consumption, they are unwilling to modify their behaviour and lifestyle (Ding et al., 2018; Howarth, 2017; Mei et al., 2017).

In addition, social factors like communication and the relationship with relevant agencies and among community members potentially hinder participation levels within the community. Their perception of carbon reduction and sustainability, and trust in government agencies play an essential role in influencing the communities' willingness to participate. In other words, those with a strong sense of community, and a good relationship with these agencies are more likely to engage in collective action for the benefit of the community (Wu et al., 2022; Samaddar et al., 2019).

Institutional openness and responsiveness to community input and feedback can affect the perceived legitimacy and effectiveness of low carbon initiatives, and thus influence community participation (Guo & Wang, 2023). Community participation may be influenced by the degree to which institutions seek to engage the community in the planning, implementation, and evaluation of the implementation of LCCs.

Meanwhile, situational factors, including government policies and social media, can contribute to an individual's behaviour and perception towards low carbon programmes and initiatives. The existence of policies that give incentives to the communities and other stakeholders will affect the communities' awareness, and willingness to participate. Moreover, the role of social media and technology potentially enhances the promotion of the LCC initiative, thus leading to social change in the community (Vavaenesh et al., 2022; Cheng et al., 2021).

Therefore, understanding the complex and dynamic factors that influence community participation in low carbon initiatives, henceforth the LCC goal, is essential for developing effective strategies. Policymakers are able to design LCC initiatives and programmes that are more inclusive, and tailored to the target group by considering the individual, social, institutional, and contextual factors that influence community participation.

SHAH ALAM LOW CARBON CITY JOURNEY

Background of Low Carbon City Initiatives in Malaysia

In response to the climate change, the Malaysian government's commitment to sustainable development, and a 40% reduction in carbon emissions by 2020 is the root of the country's low carbon city (LCC) projects. The National Green Technology Policy (NGTP), launched by the government in 2009, aims to advance green technology, and sustainable development. With the encouragement of the NGTP, LCCs were highlighted as one of the major sectors for green technology development (Ministry of Energy, Green Technology and Water, 2017).

In order to address this, the Malaysian government, through the Ministry of Energy, Green Technology, and Water (KeTTHA), developed and launched the Low Carbon Cities Framework (LCCF) in 2012, a guideline for cities to develop low carbon strategies and initiatives. The LCCF promotes energy efficiency, sustainable mobility, waste management, and the use of renewable energy sources as a comprehensive strategy for cities to decrease their carbon footprint (Ministry of Energy, Green Technology, and Water, 2017).

The LCCF connects government policy to the numerous green-city rating methods on the market. Given the government's commitment to decreasing carbon emissions, this framework assists stakeholders in cities and townships in identifying their objectives, and developing action plans to reduce carbon

emissions. The framework has been specially designed to concentrate on tactics and actions that may be implemented to lower carbon emissions.

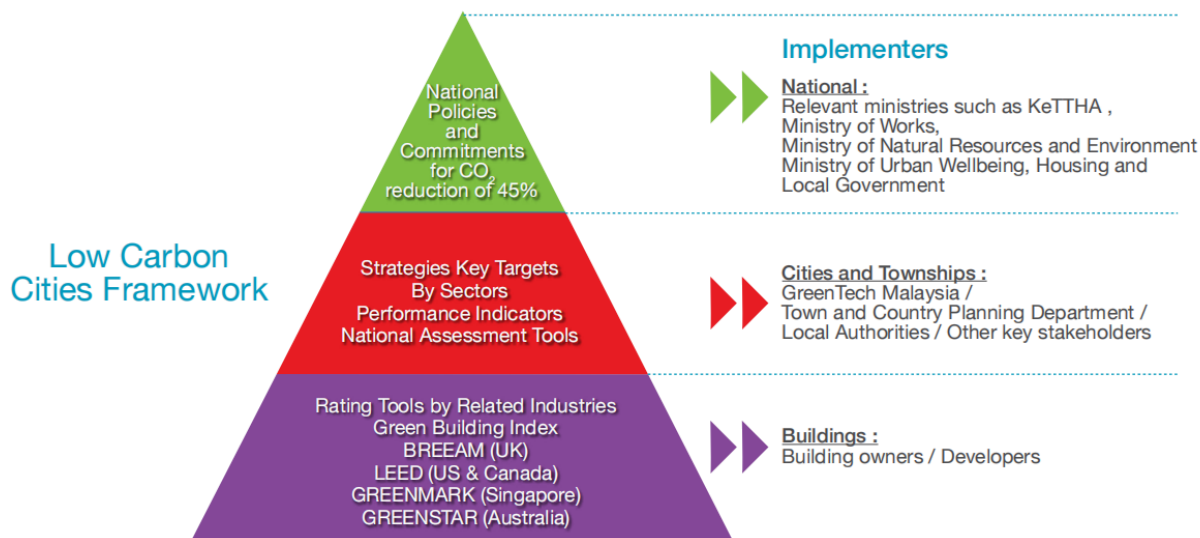


Figure 1: LCCF in Relation to National Policies and Rating Tools
(Source: Ministry of Energy, Green Technology and Water, 2017)

Since the launch of the LCC initiative, several cities have embarked on LCC development projects and initiatives. For example, Shah Alam has developed the Shah Alam Low Carbon City Action Plan (SALCCAP) 2017-2030, which aims to achieve an absolute greenhouse gas (GHG) emission reduction of 45% by 2030 (Majlis Bandaraya Shah Alam, 2021). This initiative was further built upon with the Shah Alam Low Carbon City Action Plan 2035 in 2021.

Overall, the low carbon city initiatives in Malaysia aim to promote sustainable urban development, and reduce carbon emissions to mitigate the impact of climate change while ensuring economic growth and development.

The Low Carbon City Initiatives by MBSA

Majlis Bandaraya Shah Alam (MBSA) is one of the local authorities in Malaysia that has taken proactive steps towards becoming a low carbon city. The initiative is part of the government's commitment to reducing carbon emissions under the Low Carbon Cities Framework (LCCF) launched in 2012. The LCCF aims to help cities in Malaysia transition towards a low carbon economy, and build resilience against the impacts of climate change.

MBSA's low carbon city initiatives started with the development of the Shah Alam Low Carbon City Action Plan (SALCCAP) 2017-2030 in 2017, which outlined a roadmap for sustainable development, and carbon reduction in

the city. The SALCCAP, which is based on five (5) thrusts, namely Green Solid Waste Management, Efficient and Effective Use of Energy and Water Resources, Efficient Public Transportation and Mobility Services, Integrating Nature in the Built Environment, and Green Technology Oriented City Administration and Management, provided a blueprint for MBSA's low carbon city initiatives, and helped to guide the implementation of various programmes and policies (Majlis Bandaraya Shah Alam & Universiti Teknologi MARA, 2021).

In 2015, MBSA entered a collaboration with the Ministry of Energy, Green Technology & Water (KeTTHA), Malaysia Green Technology Corporation (GreenTech), and the Malaysian Institute of Planners (MIP) to implement the Low Carbon City Framework (LCCF) in Shah Alam. The first LCCF project implemented was at the city centre of Shah Alam (Seksyen 14), a pilot project covering an area of 395 acres. Following this implementation, MBSA was awarded the "Diamond Recognition" at the International Green Exposition Malaysia (IGEM) 2018 for being the pioneer of the "City Based Approach" in Malaysia (Majlis Bandaraya Shah Alam & Universiti Teknologi MARA, 2021). The latest recognition received by MBSA following their commitment towards making Shah Alam more sustainable and less carbon was during the Low Carbon City 2030 Challenge (LCC2030C), where MBSA was granted 25 awards (MGTC, n.d).

Some of the low carbon city initiatives implemented by MBSA to reduce its carbon footprint and promote sustainable development include (Majlis Bandaraya Shah Alam, 2017):

- a. Sustainable transportation: MBSA has promoted eco-friendly transportation options by setting up a bicycle-sharing system, installing bicycle lanes, and offering free shuttle bus services. This encourages people to reduce their use of private vehicles, and thus opt for sustainable transportation.
- b. Waste reduction and recycling: MBSA has implemented several waste reduction and recycling programmes, such as "Zero Waste", and community recycling programmes, to encourage residents to separate and recycle their waste. These programmes also aim to reduce food waste, and organic compost waste.
- c. Renewable energy: MBSA has installed solar panels on its buildings, including the MBSA headquarters, community halls, and public libraries, to generate renewable energy, and reduce their dependence on grid electricity.
- d. Greenery in the city: MBSA has launched several tree planting programmes, such as the "Shah Alam Trees for Life" programme, to increase green areas and infrastructures in the city, and reduce carbon emissions.
- e. Community participation: MBSA has initiated programmes such as *Pertandingan Laman Komuniti Shah Alam*, urban farming, and green

initiatives at the pre-school level, to educate and engage the community on environmental issues, and encourage them to take action.

Table 1: Programs and activities organised by MBSA

Sectoral	Programs and Activities
Urban Environment	<ul style="list-style-type: none"> i. Trees for life ii. Tree Planting Program iii. Landscape competition iv. Shah Alam Orchid Show v. Community Green Initiative like urban farming, <i>Pertandingan Laman Komuniti Shah Alam</i> and <i>Laman Mini Zon Bersih</i> vi. Green Earth program that focuses on collaboration with all primary school in Shah Alam and residents’ associations
Urban Transportation	<ul style="list-style-type: none"> i. ‘Smart Selangor Bus’ is a free bus service ii. Promoting micro-mobility through bike-sharing and e-scooter sharing iii. Providing supporting infrastructure like bike lane alignment, particularly at the first and last mile of public transport iv. Car-free Day
Urban Infrastructure	<ul style="list-style-type: none"> i. Zero Waste Program ii. Community and School Recycling Program iii. Neighbourhood Recycling Centre iv. Composting of waste from market and landscape v. Waste separation from source
Green Community	<ul style="list-style-type: none"> i. Urban farming ii. <i>Pertandingan Laman Komuniti Shah Alam</i> iii. <i>Mini Zon Bersih</i> iv. Green Earth program with all primary schools in Shah Alam and residents associations v. Green initiative for pre-schools

Source: Majlis Bandaraya Shah Alam (2017)

Overall, MBSA’s low carbon city initiatives demonstrate its commitment to promoting sustainable development, and reducing carbon emissions in its jurisdiction. By implementing these initiatives, MBSA aims to create a more liveable, sustainable, and resilient city for its residents.

RESEARCH METHODOLOGY

This study employed a qualitative approach to assess community engagement and participation in the Low Carbon City (LCC) Initiative implemented by Majlis Bandaraya Shah Alam (MBSA). It involved the collection of primary data, with emphasis on the focus group discussion (FGD) approach to gather qualitative data on the low carbon city initiatives that MBSA implemented. The FGD involved nine participants who were selected using purposive sampling based on their

experiential knowledge and involvement in implementing the MBSA’s low carbon city initiatives. These participants included representatives from selected communities, kindergartens, local councillors, and non-government organisations (Table 2).

Table 2: List and Background of Participants

<i>Bengkel Focus Group Discussion Pelan Tindakan Bandar Rendah Karbon</i>		
<i>Thrust: Communication, Education, and Public Awareness</i>		
Date: 15th June 2021		
Total Participants: 9		
ID	Agency	Position
PA1	Komuniti Surau Al-Husna, Seksyen 20 Shah Alam	Chairman
PA2	Taska Sarjana Pintar	Teacher
PA3	Taska Sarjana Pintar	Teacher
PA4	Taska Sarjana Pintar	Teacher
PA5	Persatuan Lestari Alam Malaysia	President
PA6	Persatuan Lestari Alam Malaysia	Committee Member
PA7	Majlis Perwakilan Penduduk Zon 8	Local Councillor
PA8	Majlis Perwakilan Penduduk Zon 22	Local Councillor
PA9	Treat Every Environment Special (TrEES)	Committee Member

The FGD was conducted mainly in Bahasa Malaysia as it is the researchers’ and respondents’ mother tongue with only several English terminologies used. In addition, the sessions were conducted over an online meeting platform due to the COVID-19 pandemic, which disallowed such discussions to be carried out physically. The researchers moderated the discussion, and posed open-ended questions to the participants regarding MBSA’s low carbon city initiatives. The questions were designed to explore the participants’ perceptions of the initiatives, the challenges and opportunities associated with their implementation, and the effectiveness of MBSA’s strategies in reducing carbon emissions.

The FGD was recorded via the online meeting platform, and transcribed using an edited transcription approach, which is described in a later section. The data was then analysed using a thematic analysis approach, which involved identifying patterns and themes in the data, and interpreting their meanings. The study employed Braun and Clarke’s (2006) framework for the analysis process. They had structured thematic analyses into six (6) main steps, to which this study adhered closely to.

Step 1 – Transcribe and familiarise the data: Audio data recorded from the interviews were listened to repeatedly, and transcribed using the edited transcription approach. This meant that the phrases that appeared irrelevant and excessive were omitted while maintaining the text’s essence (Salonga, 2018). The

readability of the document was important to make it appealing. Step 2 – Generate initial codes: At this stage, only data relevant to the research questions were coded, which were in the form of statements. Similarities between the interview responses were highlighted and organised. Transcripts were reviewed several times with new or modified codes updated. Step 3 – Search for themes: All relevant coded data were organised into different themes. A table was used to classify and display the relationships between the themes and codes, which helped in reviewing the level of themes, leading to the emergence of sub-themes. Also, it was possible for the codes to be linked to more than one theme.

Step 4 – Review themes: All themes, sub-themes, and codes were revised and modified to establish coherent connections between them. At this point, the fundamental question was: Does each connection seem relevant? The researchers used the ‘cut and paste’ function in Microsoft Office to reorganise the data in the transcript. Step 5 – Define themes: The main questions asked at this stage were: What are the relations built between the themes and sub-themes? How do these relations attain the research questions? Step 6 – Reporting: The findings were finally reported.

RESULTS AND DISCUSSION

The result of the analysis would highlight the importance of community understanding and education in achieving sustainable practices, including the concept of a low carbon city. As such, assessing the level of understanding and awareness of the community in Shah Alam regarding the low carbon concept and initiative was crucial.

As shown in Table 3, the results indicate that the communities in Shah Alam might have a limited understanding of low carbon, which can hinder their ability to contribute actively [PA1, PA5, PA7, PA8, PA9].

Bagi saya masyarakat masih kurang faham apa konsep rendah karbon, dan mungkin apa yang mereka lakukan sehari-harian secara peribadi ataupun perseorangan, mereka telah mencapai certain objektif, tetapi mereka tidak sedar bahawa itu memberi sumbangan kepada target rendah karbon (Participant PA9).

Therefore, there is a need to educate and raise the awareness of the community of Shah Alam regarding the low carbon concept, and its benefits. Furthermore, the participants emphasised the importance of community involvement in low carbon city projects and initiatives. This was mentioned by most participants (67%), who highlighted the importance of encouraging community participation and engagement in these projects and initiatives to ensure their success [PA1, PA5, PA6, PA7, PA8, PA9].

...apa yang kita lihat sekarang ini ialah bagaimana MBSA educate dan adakan banyak bengkel untuk setiap lapisan komuniti supaya mereka tahu apa hala tuju.

...Bagi saya, low carbon ini, semua masyarakat kena ambil tanggungjawab because when we talk about low carbon, berjalan, semua orang berjalan. That's is some of the component of low carbon (Participant PA5).

Meanwhile, three participants [PA1, PA5, PA9] highlighted the importance of learning from the best practices of those who have successfully implemented this initiative. It was suggested that the community may benefit from others' experience in conducting and handling low carbon city programmes and initiatives, where they might gather a better understanding, and observe the potential benefits the community could gain. However, only two participants [PA5, PA6] suggested the need to educate the community at an early age as part of the effort to accomplish behavioural change among the communities (Table 3).

In relation to the factors that influence the Shah Alam communities' involvement in the low carbon city initiatives, the results of the thematic analysis indicate that both the method of participation, and the method of information sharing are essential when it comes to encouraging their participation (Table 4). Nearly 67% of the participants stated the importance of tailoring the method of participation to the specific target as different segments and target groups might require a different approach that is closely associated with their socio-economic background [PA1, PA5, PA6, PA7, PA8, PA9]. Likewise, six out of nine participants highlighted the importance of effective communication strategies to ensure that important messages and information are easily accessed, and effectively reach the target group (Table 4).

Selalunya masalah yang kita hadapi dalam mencapai objektif ini adalah disebabkan oleh maklumat itu tidak sampai kepada kumpulan sasaran....Jika kumpulan sasaran kita itu kebanyakannya adalah dikalangan golongan muda atau remaja, pendekatannya mungkin berbeza (Participant PA6).

Both those factors are followed by the need for continuous collaboration between stakeholders, especially between the local authorities and communities. More than 50% of the participants agreed that a collaborative approach in the low carbon city initiative would enhance the community's capacity to participate by engaging their interest in the entire process, particularly in the decision making [PA1, PA5, PA7, PA8, PA9].

Kami ajak tadika dan taska yang berada di sekitar komuniti kami untuk bersama dengan jawatankuasa surau dalam membuat kebun komuniti, aktiviti kitar semula, buat baja kompos, buat tenaga solar, bela ikan, pokok-pokok nadir. Bila tengok itu, kita letak nama pada pokok-pokok itu. Jadi, anak-anak tadika faham tentang konsep sampah, konsep kitar semula dan akhirnya dia boleh amalkan di rumah (Participant PA1).

Apart from these factors, a few participants also pointed out other aspects that prospectively affect the capability of the Shah Alam communities to participate. Some participants [PA1, PA5, PA9] believed that the local authorities should provide financial grants, or other resources to encourage the community to engage in the low carbon city initiatives. In other words, local authorities should actively ensure sufficient resources and infrastructures are provided to support the low carbon initiative, and promote community participation in these programmes (Table 4).

Moreover, PA1, PA5, and PA9 highlighted the need to adopt technology in monitoring and managing the process of implementing the low carbon city programmes, including community participation. They believed that it is crucial to have a proper database that can be used to monitor and assess the progress made by the communities and local authorities in executing these initiatives.

Meanwhile, incentives, rewards, and any forms of acknowledgement are fundamental in encouraging the communities to participate in the programmes and initiatives, which ultimately contribute to behavioural change in the communities [PA6, PA7, PA8].

Overall, this study aimed to explore the community's understanding, awareness, and involvement in the low carbon city initiative, and identify the factors influencing community participation. The results indicated that the community in Shah Alam may possess a limited understanding of the low carbon concept, which can hinder their ability to actively participate in the LCC initiatives by either the communities themselves, or the local authorities (Table 3).

Following the FGD, most participants [PA1, PA5, PA6, PA7, PA8, PA9] underlined the importance of community participation in low carbon city projects and initiatives to ensure their success. Meanwhile, several participants also highlighted the importance of learning from the best practices, which can be done by looking at the experiences and current practices of other communities or countries (Table 3).

Nevertheless, the analysis results have identified two prominent factors influencing community participation in low carbon initiatives: participation and information-sharing methods. The main argument by the participants during the

FGD was that appropriate methods for participation and communication that are suited and tailored to specific target groups should be identified instead of utilising generalised methods (Table 4). Table 4 also highlighted the importance of continuous collaboration between stakeholders, especially local authorities and communities, in enhancing the community’s capacity to participate in such initiatives.

In addition, a few other factors that facilitate community participation in low carbon programmes and initiatives were highlighted throughout the discussion, namely, the need for financial grants, or other resources [PA1, PA5, PA9]; technology adoption in monitoring and managing the entire implementation process [PA1, PA5, PA9]; and the importance of incentives and acknowledgements that may thus contribute to positive behavioural change [PA6, PA7, PA8].

Table 3: Level of Understanding and Awareness of Community

Theme	Code (statements)	PA 1	PA 2	PA 3	PA 4	PA 5	PA 6	PA 7	PA 8	PA 9
Importance of community participation	Understanding the importance of community participation in projects and initiatives.	✓				✓	✓	✓	✓	✓
Understanding of the concept	The community still has a limited understanding of the concept of low carbon, which hinders their ability to actively contribute.	✓				✓		✓	✓	✓
Behavioural learning and change	Behavioural change is crucial in achieving sustainable practices. Thus, schools and universities should involve in educating students about sustainability.					✓	✓			
Method of learning	Importance of providing adequate training to the community before implementing a program to ensure the program’s success.				✓		✓			
Capacity building and Mentorship	Community leaders can play a role in guiding and mentoring community members to build their capacity. It is also part of strategies for identifying and nurturing emerging leaders.					✓				✓

Best practices in other communities and countries	Organizing visits to successful community initiatives and programs or observing practices in other countries like Indonesia are the way to encourage communities' interest, hence participation	✓									✓
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The theme that has high impact
 Theme that has moderate impact
 Theme that has low-impact

*Throughout the focus group discussion, both participants PA2 and PA3 faced difficulties in participating due to technical and connectivity issues.

Table 4: Factors Influence Community Participation

Theme	Code (statements)	PA 1	PA 2	PA 3	PA 4	PA 5	PA 6	PA 7	PA 8	PA 9
Method of Participation	Importance of tailoring the approach to the specific community for the effectiveness of the method, and programs.	✓				✓	✓	✓	✓	✓
Promotion of low carbon concept	It is important to instil and promote sustainable development, and practices among urban communities.	✓								
Information sharing and communication	Effective communication strategies are fundamental to ensuring information reaches the intended target group.	✓			✓	✓	✓		✓	✓
Financial and resource	Importance of financial grants to be provided for the successful implementation of community projects.	✓				✓				✓
Collaboration between stakeholders	Importance of collaboration between stakeholders for the implementation of projects aimed at raising awareness and building community capacity.	✓				✓		✓	✓	✓
Technology and data management	Importance of data of low carbon initiative to track progress. Besides, the adoption of technology can facilitate the data management process.	✓				✓				✓
Government's Role and Initiative	Local authorities should play an active role in providing resources and infrastructure to support low carbon initiatives and promote community participation in the program.					✓	✓			✓
Leadership and representation	The success of any initiative depends on effective leadership and communication. Importance to involve community leaders and inform them of government policies and goals.					✓			✓	
Government policies and guidelines	The importance of sustainability-related policies like the New					✓				✓

	Urban Agenda aligns with the community's inspiration.			
Role of social media	Importance of the awareness of low carbon agenda being spread through social media.	✓		
Incentive and benefit	Importance to providing rewards, acknowledgment, and incentives as a means of encouraging positive behavioural change.	✓	✓	✓

The theme that has high impact
 Theme that has moderate impact
 Theme that has low-impact
 *Throughout the focus group discussion, both participants PA2 and PA3 faced difficulties in participating due to technical and connectivity issues.

CONCLUSION

This paper explores the community's current understanding and participation in the LCC initiatives conducted by MBSA. This study also contributes to a better understanding of the factors that influence community participation in the initiatives. The results indicate that the community of Shah Alam might require a better grasp of the low carbon idea to allow them to actively participate in the LCC initiatives, whether initiated by the community, or the local authority. This can be achieved by learning from other communities or countries that have successfully implemented LCC initiatives, hence encouraging changes in the behaviour of the communities towards low carbon practices. The study also revealed two main factors contributing to community participation in the LCC initiatives, namely the method for information sharing and participation. It is essential to have both processes customised according to different community segments, or target groups to ensure greater understanding and participation by the community. Besides that, collaboration between stakeholders was highlighted as a means to enhance the community's capacity to participate in low carbon programmes and initiatives. As a result, it is anticipated that the findings will help MBSA, and potentially other local authorities to be able to address the shortcomings of the current practices, and hence, promote more effective community participation in the LCC initiatives. Subsequently, a few areas can be addressed in the future, including replicating the study using a quantitative research method as, due to its statistical attributes, it may result in different outcomes.

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