International Journal of Ecosystems and Ecology Science (IJEES) **Vol. 15 (1):** 139-150 (2025)
https://doi.org/10.31407/ijees https://doi.org/10.31407/ijees15.1

PUBLIC DEMAND FOR INFORMATION ON GREEN TECHNOLOGIES IN RESIDENTIAL CONSTRUCTION

Elena Osipova[1*], Liudmila Kutyrkina[1], Svetlana Panasenko[1], Vitaly Babarykin[1], Svetlana Badmaeva[1], Alexandra Osipova[1], Natalia Panasenko[1]

[1]Plekhanov Russian University of Economics, 36 Stremyanny lane, Moscow, 117997, Russia;*

[*]Corresponding Author Elena Osipova, e-mail: Osipova.EA@rea.ru;

Received December 2024; Accepted January 2025; Published February 2025;

DOI: https://doi.org/10.31407/ijees15.116

ABSTRACT

The construction of buildings that meet "green" certification standards - confirming their environmental, economic, and social benefits—has become an established global trend. Both "green" construction and "green" certification receive extensive media attention. The adoption of the Russian National Standard (GOST R) for "green" construction of multi-apartment residential buildings in fall 2022 has intensified discussions about its benefits. Positioned as an alternative to internationally recognized foreign private standards, GOST R has the potential to achieve global status, further emphasizing the need for media coverage. Effective communication of the advantages of green construction plays a critical role in fostering public awareness and engagement, particularly in the context of Russia's broader sustainability policies. The Moscow region is one of Russia's leading centers for green construction. Media representation of its advancements is essential for expanding public support. This study analyzes survey responses from 709 residents of the Moscow region, examining their interest in and engagement with information on green construction. The research identifies key differences across four age groups regarding preferred content, communication channels, and information formats. The findings contribute to media and sustainability studies, offering insights into effective public engagement strategies in the context of green construction.

Keywords: sustainable construction, green certification, media representation, public perception, environmental communication, information dissemination, green urban development.

INTRODUCTION

Currently, green construction is developing worldwide, driven by the acceleration of urbanization, technological advancements, and the increasing environmental impact of cities. According to the United Nations, cities and megacities - centers of economic growth that contribute approximately 60% of global GDP - account for about 70% of global carbon emissions and over 60% of resource consumption (United Nations, n.d.). The certification of green buildings plays a crucial role in promoting green construction and facilitating the ESG transition of the global construction industry (Alabuzhin 2021; Guterres, 2020; Semenova, 2023). On September 9, 2022, Rosstandart (the Russian Federal Agency for Technical Regulation and Metrology) approved the National Standard for Green Construction of Multi-Apartment Residential Buildings (GOST R) (Federal Agency for Technical Regulation and

Metrology, 2022), developed by Dom.RF JSC. This standard came into force on November 1, 2022. Paragraph 3.1 of this document defines a green multi-apartment residential building as *"a building that comprehensively minimizes anthropogenic impact on the environment and creates favorable living conditions for people at all stages of the life cycle of a capital construction project, in accordance with the relevant 'green' criteria - environmental, social, and economic."*

Environmental criteria assess the sustainability of construction sites, infrastructure, and surrounding areas; the environmental impact of construction processes, materials, and finishing; and the sustainability of waste disposal practices for both construction and household waste. Social criteria evaluate the safety and convenience of residential premises and infrastructure, including accessibility for individuals with disabilities. Economic criteria measure the resource efficiency of the construction process and the reduction of operating costs for residents, such as electricity and water consumption. Efforts to develop a domestic green certification system began in 2010, but its active advancement was only possible after March 2022, when foreign green standard operators ceased their activities in Russia, leading to the suspension of certification for over 150 projects. These foreign operators primarily include the most influential and internationally recognized private green certification systems - BREEAM and LEED.

According to the 2022 UN report, *"79 countries have their own national certification systems."* However, BREEAM and LEED continue to dominate, particularly in the evaluation of construction projects for international sports, cultural, and business events. Their influence is also expanding within residential real estate certification. For instance, in France, the national standard HQE (Haute Qualité Environnementale) - developed in 1992 by the French NGO ASSOHQE (Association pour la Haute Qualité Environnementale) - has been applied to only 469 projects, whereas BREEAM certification has been used in 3,370 projects. This demonstrates that green certification, along with its associated organizational, promotional, educational, and awareness-raising efforts, serves not only a humanitarian purpose but also business objectives (Kutyrkina, 2023; National PPP Center & DOM.RF, 2022). Given the UN's goal of establishing a global fund for net-zero carbon emissions buildings - both newly constructed and renovated - by 2050, the market for green certification is expected to become increasingly competitive and lucrative (GlobalABC, 2022; Guterres, 2020). As a result, the development of Russian green standardization will take place within an intensely competitive landscape, where media coverage will play a pivotal role in shaping public and industry perceptions of the Russian standard and the benefits of green construction. Effective communication will be essential to ensure that all stakeholders in the construction sector, their partners, and Russian citizens - eventually extending to the Eurasian Economic Union - fully understand and support green initiatives.

Literature Review

A unique feature of media coverage of the "green" transition in construction is the central role played by the World Green Building Council (WorldGBC), an intergovernmental network organization that unites green building councils in more than 70 countries, including Russia and CIS countries (World Green Building Council, n.d.). The WorldGBC has been a key initiator and coordinator of international efforts to advance green construction practices since 1999. The WorldGBC's official objectives include "creating sustainable and decarbonized built environments for all" and "collaborating with businesses, organizations, and governments to achieve the ambitions of the Paris Agreement and the United Nations Sustainable Development Goals (SDGs)." These objectives emphasize the importance of integrating sustainability and decarbonization into construction practices while aligning with global efforts to combat climate change. The Paris Agreement on Climate, adopted in 2015 by 194 parties (United Nations, 2015), sets the ambitious goal of significantly reducing global greenhouse gas emissions. It aims to limit the global temperature increase this century to 2 degrees Celsius, while pursuing efforts to further restrict it to 1.5 degrees Celsius. Sustainable construction is closely tied to four of the 17 Sustainable Development Goals (SDGs) outlined by the United Nations for the period up to 2030:

- Goal 13: Climate Action – Reducing emissions and mitigating climate change.
- Goal 7: Affordable and Clean Energy – Ensuring access to renewable energy sources.
- Goal 11: Sustainable Cities and Communities – Creating environmentally friendly urban spaces.
- Goal 12: Responsible Consumption and Production – Promoting efficient resource use throughout the construction cycle.

These goals underline the critical role of green construction in the global sustainability agenda, emphasizing its environmental, economic, and social dimensions.

Media serves as an important tool in promoting green construction by framing public discourse and highlighting its environmental, economic, and social advantages (Dyachenko, 2016; Ivanter and Kudiarov, 2017; Osipova, 2023; Siddiqui, 2023). Key coordinators of media coverage of green construction and technology adoption focus on setting a climate-focused agenda. Through collaboration with enterprises, organizations, governments, and media outlets, significant initiatives have been undertaken, including:

- Developing recommendations for covering green construction in media.
- Organizing international and national conferences, press events, and special projects.
- Disseminating educational and promotional content about the benefits of green construction.
- These efforts aim to increase public awareness and support for green construction as a solution to climate change and urban sustainability challenges.

While the climate-focused narrative has been instrumental in advancing public awareness of green construction, it has also drawn criticism for its reliance on dramatic and fear-based messaging (Koonin, 2021; Korytny, 2021; Panasenko, 2024; Roginko, 2019). For instance, some researchers argue that media often employ “catastrophic scenarios” and “emotive narratives” to captivate public attention and garner support for the green agenda (Maibach et al., 2008; Radina and Bobkova, 2019; Schneider, 1989). These strategies, while effective in mobilizing action, may oversimplify the complexities of climate issues or create resistance among certain audiences.

Additionally, studies highlight the challenges faced by media in presenting balanced and objective perspectives. Commercial imperatives and journalistic norms often compel media to showcase contrasting viewpoints on green construction, which can dilute the urgency of climate-focused messaging (Kolesnichenko et al., 2017; Nosty, 2009; Osipova et al., 2023). Moreover, the growing influence of public relations and the shift in information sources from scientists to broader stakeholders further complicate the narrative, as noted by Schäfer and Painter (2020).

In the Russian media landscape, significant attention has been given to key developments in green construction, such as the adoption of the GOST R green standard and major industry conferences organized by the Ministry of Construction and Dom.RF. However, studies reveal that green construction remains underrepresented in business media compared to other sectors of the economy, such as artificial intelligence, renewable energy, and smart city technologies (Ilchenko, 2022; Rastorguev, 2022). Despite this, the integration of green technologies into construction is expected to gain increasing media attention, particularly as its connections to high-priority sectors become more apparent (Tolkachev et al., 2023). International studies provide additional insights into audience perceptions of green construction. For example, research by Shen and Li (2023) on green housing in China highlights that public attitudes toward green construction are shaped by knowledge of regulatory frameworks, technological solutions, education levels, and incentives. Positive societal sentiments are largely centered on the environmental, social, and economic benefits of green housing, while concerns primarily revolve around its higher costs. Such findings underscore the importance of tailored media content that addresses public concerns while emphasizing the advantages of green construction. Research emphasizes the significance of positive framing in advancing green innovations. Schäfer and Painter (2020) argue that optimistic narratives highlighting the benefits of green transitions are more effective in fostering public support than fear-based messaging. Media’s role in creating and promoting such narratives is therefore critical in shaping public perceptions and encouraging pro-environmental behaviors. The literature highlights the critical role of media in promoting green construction as part of the global climate agenda. By framing public discourse, fostering awareness, and emphasizing the multifaceted benefits of green construction, media serves as a bridge between technical advancements, policy initiatives, and societal engagement. However, challenges such as balancing objectivity, addressing audience concerns, and overcoming commercial pressures require continued exploration to optimize media’s impact in this domain. Given that the implementation of "green" technologies in residential construction and the evaluation of "green" housing using domestic standards require media support, the aim of the study was to identify the content that generates the greatest audience interest, as well as the most in-demand channels and formats for disseminating information on the adoption of "green" technologies within the framework of the "green" agenda.

MATERIALS AND METHODS

This study is based on an online survey conducted in the Moscow region via Google Forms. Moscow and the Moscow region were selected due to their leading role in Russia’s "green" real estate sector.

According to the 2022 ESG, Decarbonization, and Green Finance Report, Moscow accounted for 8.4 million m² of green construction, and the Moscow region 4 million m², making them key innovation leaders influencing sustainable development across the country.

The survey, titled "Implementation of Green Technologies in Construction in the Moscow Region," was conducted from March to May 2023. The questionnaire introduced respondents to the environmental, social, and economic benefits of green buildings. It included:

- Demographics: Gender, age, education, place of residence, and interest in improving housing sustainability.
- Eligibility: Participants had to reside in or plan to buy/rent property in the Moscow region.
- Survey Distribution: Shared with individuals 17+ years old, mainly students who also invited older participants.

The questionnaire consisted of four sections on various aspects of green construction adoption. One section focused on the demand for green building information, which is analyzed in this study.

After testing and refining, the survey was distributed among university and college students, who further involved older respondents. A total of 709 participants (17–75 years old) took part:

- 53.7% women, 47.3% men
- 85.9% expressed interest in improving their housing sustainability
- Respondents were divided into four age groups based on their real estate plans:
- 17–21 years (223 people): Students or young professionals dependent on parents; potential buyers/renters in the next five years.
- 22–35 years (174 people): Young professionals with independent income, currently seeking housing.
- 36–54 years (209 people): Individuals with stable income, improving housing and supporting children's real estate investments.
- 55+ years (103 people): Homeowners with financial means to upgrade housing and assist children/grandchildren.

Respondents were asked about:

- Preferred green building information
- Preferred channels and formats for obtaining this information
- Semi-closed multiple-choice questions were used, allowing for both predefined and open-ended responses.

RESULTS AND DISCUSSION

Demand for Information on "Green" Construction among Residents of the Moscow Region

In response to the question, *"What information on 'green' construction do residents of the region need?"*, respondents could select one or more options from the following:

- Information on current environmental issues;
- Information on the implementation of "green" technologies in residential construction;
- Information on innovative "green" developments in residential construction.
- Respondents were also allowed to propose their own answers or state that they did not require any information on this topic.

The responses aimed to gauge interest in learning about existing "green" technologies and the future of "green" construction. The inclusion of "current environmental issues" as an option, though not directly linked to "green" construction, was justified by the Russian "green" building standards. These standards include "environmental safety of the territory" as one of the ten assessment categories, along with general criteria such as environmental site requirements, air quality, and proximity to water bodies. Additionally, previous studies have shown that environmental conditions significantly influence housing choices for purchase or rent. For example, the 2020 Yandex Real Estate survey identified the environment as one of the top ten critical factors in housing selection (Yandex Analytics, 2021).

Out of 709 survey participants, only 21 respondents (3%) indicated that they did not require information on ecology or "green" construction. A majority (96.6%) selected between one and three options from the list. Among them, 1.8% provided additional responses, and 0.4% declined the given options and provided their own. Overall, 97% expressed an interest in information related to environmental issues and the development of "green" construction.

Respondents showed the highest interest (67.8%) in information on the implementation of "green" technologies in residential construction, followed by current environmental issues (65.3%) and innovative "green" developments (49.6%). By age group, the highest percentage of respondents disinterested in such information was in Group 4 (55+ years), while the lowest was in Group 1 (17–21 years). However, the difference across age groups was minimal (2.1%), highlighting a consistently high demand for information across all demographics (see Table 1).

Table 1. Demand for information on environmentally safe ("green") technologies in residential construction by age groups.

N	Answer Options	17– 21 years (223 respondents)		22–35 years (174 respondents)		36–54 years (209 respondents)		55+ years (103 respondents)	
		Count	%	Count	%	Count	%	Count	%
1.	Information on current environmental issues	166	74.5	102	58.6	135	64.6	60	58.5
2.	Information on the implementation of "green" technologies in residential construction	140	62.8	130	74.7	141	67.4	71	68.9
3	Information on innovative "green" developments in residential construction	122	54.7	86	49.4	96	45.9	55	53.4
4.	No information needed	4	1.8	6	3.5	7	3.3	4	3.9

An analysis of message content priorities across age groups shows that among the 22–35, 36–54, and 55+ age groups, the most sought-after information (at least 67.4% of respondents) concerns the experience of implementing "green" technologies—specifically, technologies already used by developers in completed and ongoing projects. Additional responses highlighted a strong desire for information on the advantages of "green" buildings, including “honest assessments of their pros and cons” and benefits for buyers. Respondents also expressed interest in how "green" technologies impact the health of residents in these buildings. Furthermore, they emphasized a growing demand for information on the application of "green" technologies in real, ongoing construction projects and properties being considered by potential buyers. This need has become increasingly relevant with advancements in information technology and artificial intelligence. Some critical respondents suggested including developers' names in materials about unsuccessful implementations of "green" technologies. The 17–21 age group prioritized information on current environmental issues, reflecting their strong engagement with environmental concerns. However, in all other groups, at least 58.5% of respondents also deemed this information relevant, indicating a broader interest among buyers and renters in the environmental quality of their housing and its surroundings. Comments frequently highlighted the importance of eco-friendly waste disposal and the absence of landfills near construction sites. Respondents expressed comparatively lower interest in innovative "green" developments in residential construction. However, the youngest (17–21 years, 54.7%) and oldest (55+ years, 53.4%) age groups were the most interested in the "green" future of construction. This interest is linked to the younger generation's anticipation that innovations will become mainstream technologies in the homes they will rent or buy soon. For the older group, interest stems from the growing role of innovations in improving life quality and longevity, as well as the traditional involvement of this group in financially supporting their children and grandchildren in acquiring housing. In the 22–35 and 36–54 age groups, 49.4% and 45.9% of respondents, respectively, showed interest in innovative "green" developments, indicating that nearly half of these groups consider this information relevant. Notably, many respondents expressed a desire to learn specifically about Russian "green" developments in residential construction.

Demand for Information Channels on "Green" Construction among Residents of the Moscow Region

To identify the preferred channels for receiving information on the implementation of "green" technologies, respondents were asked to select one or more options from 11 proposed channels. These included a range of sources, from federal media to blogs and social networks of construction departments and companies. Respondents could also suggest their own options. A total of 99.7% of respondents specified their preferred channels for obtaining information on the topic. Among the overall sample, the most preferred channels were federal media (65.4%) and media outlets specific to Moscow and the Moscow region (60.6%). Conversely, the least preferred channels were blogs of construction associations and forums (25.5%), specialized blogs of construction companies (26.7%), and

social networks of construction associations and forums (31%). As anticipated, preferences for information channels on the adoption of "green" technologies in construction varied by age group (see Table 2).

Table 2. Preferences of residents of the Moscow Region for information channels on the implementation of "green" technologies in residential construction.

N	**Survey Question**	**17– 21 years (223 respondents)**		**22–35 years (174 respondents)**		**36–54 years (209 respondents)**		**55+ years (103 respondents)**	
		Count	%	Count	%	Count	%	Count	%
1.	Official federal media of Russia	162	72.6	107	61.5	135	64.6	65	63.1
2.	Official media of Moscow and the Moscow region	142	63.7	94	54	126	60.3	71	69
3	Government websites of Moscow and the Moscow region	93	41.7	59	33.9	76	36.4	57	55.3
4.	Social media of the governments of Moscow and the Moscow region	115	51.6	84	48.3	77	36.8	39	37.9
5.	Blogs of the governments of Moscow and the Moscow region	85	38.1	66	37.9	48	23	24	23.3
6.	Official websites of construction associations and forums	82	36.8	67	38.5	61	29.2	45	43.7
7.	Social media of construction associations and forums	82	36.8	64	36.8	44	21	29	28.2
8.	Blogs of construction associations and forums	72	32.3	55	31.6	35	16.7	18	17.5
9.	Official websites of construction companies	98	43.9	89	51.1	98	46.9	51	49.5
10.	Social media of construction companies	90	40.4	83	47.7	57	27.3	30	29.1
11.	Blogs of construction companies	70	31.4	51	29.3	48	23	20	19.4
12.	Other	2	0.9	-	-	2 17	0.9 8.1	-	-

In the three age groups of 17–21, 22–35, and 36–54, federal media were identified as the most popular information channels. Media outlets of Moscow and the Moscow Region ranked second in these age groups. In the 55+ age group, the same channels were the most preferred; however, the media of Moscow and the Moscow Region ranked first, while federal media of Russia occupied the second position. This indicates a consistently high demand for federal (at least 61.5%) and Moscow regional (at least 54%) media among respondents across all age groups.

Blogs were the least popular information channels for "green" construction across all age groups (no more than 38.1% of respondents). However, blogs of the governments of Moscow and the Moscow Region were consistently prioritized in all groups, likely due to the expectation of greater reliability from official regional authorities. Respondents aged 17–21 and 22–35 rated blogs of construction associations and forums slightly higher than blogs of construction companies. Conversely, respondents aged 36–54 and 55+ expressed a preference for blogs of construction companies, with blogs of construction associations and forums occupying the lowest positions (16.7% and 17.5%, respectively).

Official websites and social networks were ranked between the most and least popular channels. The difference in preferences for various websites and networks was 34.3%. Government websites of Moscow and the Moscow Region were the preferred information channels among respondents aged 55+ (55.3%), while respondents in other groups prioritized official websites of construction companies (43.9% to 51.1%). Although official websites of construction associations and forums were among the least preferred sources of information on "green" technologies, they were still considered relevant by 43.7% of respondents aged 55+. Social networks were more popular than official websites among respondents aged 17–21 and 22–35. Across all age groups, social networks of the governments of Moscow and the Moscow Region and social networks of construction companies were

consistently preferred, while social networks of construction associations and forums were the least favored. Notably, at least a third of respondents across all age groups preferred to receive information on "green" technologies in construction through multiple channels, including federal and Moscow regional media, official websites, social networks, and blogs. This preference for multi-channel information was particularly evident among respondents aged 17–21 and 55+. Additional suggestions from respondents highlighted independent media, blogs by independent experts, and influencer channels with significant followings as valuable sources of information.

Demand for Formats of Information on "Green" Construction among Residents of the Moscow Region

The final question posed to survey participants concerned their preferred formats for receiving information. Respondents were offered options such as interviews, reviews of residents' opinions from apartments and houses where "green" technologies were implemented in construction or renovation, and special events for potential buyers explaining the advantages and prospective benefits of "green" technologies. To specify the desired content for interviews, participants were offered potential interviewees, including scientists, experts, construction department leadership, and construction company management. In response to the question about preferred formats for receiving information on scientific discoveries and the implementation of "green" technologies in residential construction, 99.7% of respondents selected between three and six options from the provided list, with 0.7% offering additional suggestions. Across the overall sample, the most popular formats were:

Interviews with scientists developing "green" technologies for housing construction (64.6% of respondents);

Interviews with experts assessing the effectiveness of "green" technologies in housing construction (60.4%);

Reviews of opinions from residents of apartments and houses where "green" technologies were implemented (59.1%).

Nearly half of the respondents (46.7%) expressed interest in special events for potential buyers, which explain the advantages and long-term benefits of "green" technologies. The least preferred formats were interviews with construction company management (29.2%) and construction department leadership (27.8%).

The most popular formats across all four age groups were interviews with scientists, reviews of residents' opinions, and interviews with experts. In the 17–21, 36–54, and 55+ age groups, interviews with scientists ranked first (62.1% to 65.9% of respondents). In the 22–35 age group, reviews of residents' opinions were the top choice (66.1%). Interviews with experts, which ranked second in the 36–54 group and third in the remaining groups, were favored by 55.6% to 65.1% of respondents. This demonstrates that more than half of the respondents prefer to receive information "first-hand" from the developers of "green" technologies, as well as from users and professionals who assess their quality, impact on human health, and the environment (Table 3).

Table 3. Demand among Moscow Region residents for formats of information on scientific discoveries and the implementation of "green" technologies in residential construction.

N	Survey Question	17– 21 years (223 respondents)		22–35 years (174 respondents)		36–54 years (209 respondents)		55+ years (103 respondents)	
		Count	%	Count	%	Count	%	Count	%
1.	Interviews with scientists developing "green" technologies in the field of housing construction	147	65.9	106	60.9	139	66.5	64	62.1
2.	Interviews with the leadership of construction departments	57	25.6	53	30.5	57	27.3	30	29.1
3	Interviews with the leadership of construction companies	59	26.5	60	34.5	56	26.8	32	31.1
4.	Interviews with experts evaluating the effectiveness of implementing "green" technologies in housing construction	124	55.6	103	59.2	136	65.1	60	58.2
5.	Reviews of opinions from residents of apartments and houses where "green" technologies were implemented in construction or renovation	125	56	115	66.1	115	55	62	60.2
6.	Special events for potential buyers explaining the advantages and prospective benefits of "green" technologies	110	49.3	97	55.7	86	41.2	41	39.8
7.	Other	-	-	-	-	3	1.4	4	3.9

The greatest differences among age groups were seen in the interest in special events explaining the benefits and prospective advantages of "green" technologies in housing construction. This format, which emphasizes interactivity and participant engagement, was most popular among respondents aged 17–21 and 22–35, ranking slightly below interviews with experts. Although interest in this format was lowest among respondents aged 36–54 and 55+, over one-third of these groups still expressed interest, highlighting its potential appeal across all age categories.
The least popular formats across all groups were interviews with the leadership of construction companies and departments. In the 22–35 group, slightly more than one-third of respondents supported interviews with construction company leaders, while in other groups, this figure ranged from 26.5% to 31.1%. Interviews with construction department leaders showed even lower demand, ranging from 25.6% to 30.5%. This indicates that officials and company leaders lack the expert image perceived by actual and potential housing buyers and renters, are not seen as public figures, and are not associated with innovation in construction.

The study revealed that information on the implementation of "green" technologies in residential construction generates strong interest and is in high demand among most Moscow Region residents (Korytny and Veselova, 2022; Panasenko et al., 2024). Respondents across all age groups expressed interest in learning about current environmental issues, the adoption of "green" technologies, scientific advancements, and the experiences of "green" building residents. They seek scientifically validated, practical insights into the benefits and current advantages of "green" buildings, as well as information on future developments and ongoing research in "green" technologies. This is the part of the process which was named by Rednikova (2023) as “formation of ecologically significant behavior of people”. Concerning Moscow residents, this was also noted by Grigorieva & Nikulshin (2022), who admit that the problem of new 'green' means of transport interests the majority of citizens.

Despite the prevalence of social media, especially among younger respondents, federal and Moscow regional media remain the most trusted channels for disseminating information about "green" construction (Gluch and Stenberg, 2006). Younger audiences, however, also demand innovative information channels and formats, including influencers and bloggers outside the construction sector but knowledgeable about "green" technologies. This coincides with the conclusion drawn by Bekezhanov et al. (2023) and Yessenbayev et al. (2024), who stress that regional authorities contribute the most to green development and other socially significant projects.

The study highlighted the need for construction departments and companies to engage more actively with federal and regional media, influencers, and bloggers. Bogolyubov (2023) and Sergeeva et al. (2023) also noted the connection between the economic sector and the green agenda. Karshalova et al. (2025) and Ilina et al. (2024) studied that green technologies may positively influence tourist sector and hotel business. Thus, the entities, directly involved in implementing and certifying "green" technologies, require strong professional expertise and credibility.

The low interest in information from practitioners across all age groups underscores the lack of emphasis by construction leaders on building an expert reputation in "green" construction and certification. It also reflects insufficient media engagement and the need to generate relevant content to broaden public support for "green" construction. The research also identified age-based differences in information preferences, channels, and formats, which journalists and bloggers can leverage to tailor materials on the adoption of "green" technologies in construction.

CONCLUSION

- The adoption of "green" technologies is now an essential global trend in both urban and rural construction. Advances in scientific discoveries and technological innovations in "green" construction are creating opportunities to expand the number of buildings that are more environmentally friendly, healthier for occupants, socially beneficial, and cost-efficient. In an era of increasing "media saturation," where media images and publications significantly influence public consciousness and decision-making, robust media support is critical to advancing "green" construction. Such support is necessary to expand the network of stakeholders - including academic and educational institutions, construction departments, companies,

material manufacturers, financial institutions, and citizens—who are invested in the development of "green" buildings.

- Given this, scientific discussions must focus on the specifics of contemporary media consumption across different regions of Russia and the Eurasian Economic Union (EAEU), as well as the role of media in promoting awareness of the environmental, social, and economic benefits of "green" buildings. These discussions should also explore effective methods of popularizing Russia's National Standard for green construction of multi-apartment residential buildings (GOST R) and potential adaptations for the EAEU.
- Another critical issue for scientific inquiry is the question of trust in media regarding topics that are both vital to individuals - such as creating healthier cities and regions - and technologically complex. Journalists, bloggers, and other media professionals working in cross-media environments require specialized competencies in "green" construction to utilize professional documents, materials, databases, and expert insights effectively.
- Furthermore, considering the skepticism of some Russian climatologists towards the "green" transition narrative, Russia has the opportunity to position itself as a regional, and possibly global, leader in the "green" agenda. Achieving this requires developing innovative media support strategies informed by successful international practices. Notable examples from China, India, Singapore, and the UAE demonstrate effective collaboration among design, construction, and evaluation stakeholders with media platforms tailored to their audiences. These efforts include leveraging emerging and prospective formats, identifying success factors in multi-platform dissemination, and adapting global best practices.
- However, attaining leadership requires more than just employing existing tools, such as demonstration projects, ratings, rankings, blogs, microblogs, influencers, and specialized training programs for media professionals. It calls for new ideas and synergistic solutions that enable researchers, practitioners, and media professionals to actively engage audiences in a digitized, convergent, cross-media, and transmedia environment. These initiatives should not only inform audiences about the benefits of "green" buildings for health and environmental sustainability but also encourage collaborative participation in the development of "green" construction as a means of fostering corporate and individual responsibility.
- Ultimately, such efforts contribute to improving the ecological, economic, and social conditions of the country and its regions.

REFERENCES

1. Alabuzhin I, (2021). 130 trillionov za uglerodnuyu neytral'nost' [130 trillion for carbon neutrality], Expert 46(1269), 60-68;
2. Bekezhanov DN, Demidov MV, Semenova NV, Gaynetdinova GS, Filippova VP, (2023). Problems of consideration of environmental factors in urban planning as a mechanism for sustainable development. In: Challenges of the Modern Economy (Ed. by Y.G. Buchaev, A.S. Abdulkadyrov, J.V. Ragulina, A.A. Khachaturyan and E.G. Popkova), pp. 49-52. Springer, Cham. http://dx.doi.org/10.1007/978-3-031-29364-1_10;
3. Bogolyubov SA, (2023). Mesto ekologii v proyektakh razvitiya sel'skogo khozyaystva [The place of ecology in agricultural development projects], Sel'skoye khozyaystvo 2, 20-28. https://doi.org/10.7256/2453-8809.2023.2.43704;
4. Dyachenko OV, (2016). Rossiyskiye SMI v sotsial'nykh setyakh Facebook i v "VKontakte": Analiz aktivnosti i informatsionnykh predpochteniy auditoria [Russian media in social networks Facebook and VKontakte: Analysis of activity and audience preferences], Vestnik Moskovskogo Universiteta, Series 10, Journalism 1, 28-45;
5. Federal Agency for Technical Regulation and Metrology, (2022). GOST R 70346-2022 "Zelenyye" standarty. Zdaniya mnogokvartirnyye zhilyye "zelenyye". Metodika otsenki i kriterii proyektirovaniya, stroitel'stva i ekspluatatsii [GOST R 70346-2022 "Green" standards. Multi-apartment residential "green" buildings: Assessment methodology and design, construction, and operation criteria] (approved and put into effect by Order of the Federal Agency for Technical Regulation and Metrology of September 9, 2022, No. 900-st). FGBU "RST", Moscow;

6. GlobalABC, (2022). Vsemirnyy doklad o sostoyanii fonda zdaniy za 2022 g.: Prodvigayas' k effektivnomu i ustoychivomu sektoru stroitel'stva zdaniy i sooruzheniy s nulevym urovnem vybrosov [World status report on the building stock 2022: Progressing towards an efficient and sustainable building sector with net-zero emissions]. Nairobi. Available at: https://globalabc.org/sites/default/files/2022-11/RUSSIAN_Executive%20Summary_Buildings-GSR_0.pdf;
7. Gluch P, Stenberg A-C, (2006). How do trade media influence green building practice? Building Research and Information 34(2), 104-107. https://doi.org/10.1080/09613210500491613
8. Grigorieva O, Nikulshin A. (2022). Electric buses on the streets of Moscow: Experience, problems, prospects, Transportation Research Procedia 63, 670-675. https://doi.org/10.1016/j.trpro.2022.06.061;
9. Guterres A, (2020, December 11). Dostizheniye uglerodnoy neytral'nosti k 2050 godu: Samaya neotlozhnaya global'naya zadacha [Achieving carbon neutrality by 2050: The world's most urgent mission]. Available at: https://www.un.org/sg/ru/content/sg/articles/2020-12-11/carbon-neutrality-2050-the-world%E2%80%99s-most-urgent-mission;
10. Ilchenko DS, (2022). Tematika tekhnologicheskogo razvitiya ekonomiki v rossiyskikh delovykh zhurnalakh v 2017–2021 gg. [Thematic analysis of technological development in Russian business magazines, 2017–2021], Vestnik Moskovskogo Universiteta, Series 10, Journalism 6, 109-129. https://doi.org/10.30547/vestnik.journ.6.2022.109129;
11. Ilina E, Latkin A, Miloradov K, Manteyfel E, Jarrouj G, (2024). Implementation of the concept of green hotel in regional tourism and recreational infrastructure development projects, Journal of Lifestyle and SDGs Review 5(1), e04199. https://doi.org/10.47172/2965-730X.SDGsReview.v5.n01.pe04199;
12. Ivanter A, Kudiarov S, (2017). Skazki parizhskogo lesa [Tales of the Paris Forest], Expert 26(1035), 33-41;
13. Karshalova A, Akpanov A, Tleubaeva S, Belgibayev A, Makhmudov A, Atchabarova A, Zholayeva M, (2025). Development of entrepreneurial activity using the integration of human capital and green technologies to optimize the sustainable development of the territories, Qurhan Academic Journal 4(4), 306-317. https://doi.org/10.48161/qaj.v4n4a1022;
14. Kolesnichenko AV, Vyrkovsky AV, Galkina MY, Obraztsova AYu, Vartanov SA, (2017). Transformatsiya zhurnalistskoy raboty pod vliyaniyem novykh tekhnologiy: Poisk informatsii, zhanry mediatekstov, redaktsionnaya kul'tura [Transformation of journalistic work in response to new technologies: Information search, genres of media texts, editorial culture], Vestnik Moskovskogo Universiteta, Series 10, Journalism 5, 51-71;
15. Koonin SE, (2021). Unsettled: What Climate Science Tells Us, What it doesn't, and Why it Matters. BenBella Books, Dallas;
16. Korytny LM, (2021). Mif o global'nom poteplenii - Tormoz zelenoy ekonomiki [The myth of global warming - A barrier to the green economy]. In: Resursnaya Ekonomika, Izmeneniye Klimata i Ratsional'noye Prirodopol'zovaniye [Resource Economics, Climate Change and Environmental Management]: Proceedings of the XVI International Conference on Resource Economics and Climate Change (Ed. by D.A. Kozyaeva), pp. 86-87. SFU, Krasnoyarsk;
17. Korytny LM, Veselova VN, (2022). Mify i rify klimaticheskoy povestki [Myths and pitfalls of the climate agenda], EKO 7, 8-30. https://doi.org/10.30680/ECO0131-7652-2022-7-8-30;
18. Kutyrkina LV, (2023). PR strategii steykkholderov gradostroitel'nogo protsessa kak faktor izmeneniya ekologicheskoy politiki goroda [PR strategies of urban planning stakeholders as a factor in changing urban environmental policies]. In: Strategicheskiye Kommunikatsii: Teoriya i Praktika [Strategic Communications: Theory and Practice]: Proceedings of the XXVII Russian Scientific and Methodological Conference (Ed. by V.A. Evstafiev), pp. 128-125. Association of Communication Agencies of Russia, Moscow;
19. Maibach EW, Roser-Renouf C, Leiserowitz A, (2008). Communication and marketing as climate change intervention assets: A public health perspective, American Journal of Preventive Medicine 35(5), 488-500. http://dx.doi.org/10.1016/j.amepre.2008.08.016;
20. National PPP Center & DOM.RF, (2022). Ustoychivoye stroitel'stvo zdaniy. Mirovyye trendy i perspektivy dlya Rossii [Sustainable building trends and prospects for Russia]. Available at: https://pppcenter.ru/upload/iblock/770/77011d19679c7aa51be231e171d73e6f.pdf;
21. Nosty BD, (2009). Building climate change in the media, INFOAMERICA_ICR 1, 91-115;
22. Osipova EA, (2023). Kommunikativnaya podderzhka vnedreniya "zelenykh" tekhnologiy v stroitel'stve zhiloy nedvizhimosti v Velikobritanii [Communicative support for the introduction of "green"

tyechnologies in the construction of residential real estate in Great Britain]. In: Reklama, PR i Dizayn v Brend-Kommunikatsiyakh [Advertising, PR, and Design in Brand Communications]: Proceedings of the III International Conference (Ed. by E.A. Osipova, D.V. Fedyunin and E.V. Petushkova), pp. 124-131. Plekhanov Russian University of Economics, Moscow;

23. Osipova EA, Kutyrkina LV, Fedyunin DV, (2023). Advertising and PR support for "green" technology projects in residential construction in Moscow and the Moscow Region, Plekhanov Scientific Bulletin 2(24), 46-55;
24. Panasenko SV, (2024). Aktual'nyye trendy v razvitii korporativnoy sotsial'noy otvetstvennosti [Current trends in corporate social responsibility development]. In: Reklama, PR i Dizayn v Brend-Kommunikatsiyakh [Advertising, PR, and Design in Brand Communications]: Proceedings of the III International Conference (Ed. by E.A. Osipova, D.V. Fedyunin and E.V. Petushkova), pp. 65-69. Plekhanov Russian University of Economics, Moscow;
25. Panasenko SV, Osipova EA, Surai NM, Panasenko NA, (2024). Analiz informatsii o vnedrenii “zelenykh” tekhnologiy v sfere zhiloy nedvizhimosti v kontekste upravleniya ustoychivym razvitiyem rossiyskikh kompaniy [Analysis of information on the introduction of “green” technologies in the field of residential real estate in the context of sustainable development management of Russian companies], Economics. Profession. Business 1, 49-53. https://doi.org/10.14258/epb202407;
26. Radina NK, Bobkova SD, (2019). Mediatizatsiya ekologicheskoy politiki i informatsionnaya konkurentsiya: strategiya rossiyskikh i amerikanskikh SMI v obosnovanii mezhdunarodnykh obyazatel'stv po okhrane atmosfery klimata [Mediatization of environmental policy and information competition: Strategies of Russian and American media in supporting international climate obligations], Vestnik Moskovskogo Universiteta, Series 10, Journalism 3, 120-140;
27. Rastorguev SV, (2022). Resursno-aktornyy analiz v politicheskikh issledovaniyakh [Resource-actor analysis in political studies], Humanities and Social Sciences. Bulletin of the Financial University 12(2), 45-52. https://doi.org/10.26794/2226-7867-2022-12-2-45-52;
28. Rednikova TV, (2023). Aktual'nyye problemy formirovaniya ekologicheski znachimogo povedeniya lyudey na mezhdunarodnom i natsional'nom urovnyakh [Actual problems of formation of ecologically significant behavior of people at the international and national levels], International Law and International Organizations 4, 1-11. https://doi.org/10.7256/2454-0633.2023.4.44200;
29. Roginko SA, (2019). V tsentre mirovoy diskussii: Problemy klimaticheskoy povestki [In the spotlight at the world debate: Climate agenda issues], Contemporary Europe 6, 127-137. https://doi.org/10.15211/soveurope62019127137;
30. Schäfer MS, Painter J, (2020). Climate journalism in a changing media ecosystem: Assessing the production of climate change-related news around the world, Wiley Interdisciplinary Reviews: Climate Change 12(1), e675. https://doi.org/10.1002/wcc.675;
31. Schneider SH, (1989). News plays fast and loose with the facts. Detroit News, 10A. Available at: https://stephenschneider.stanford.edu/Publications/PDF_Papers/DetroitNews.pdf;
32. Semenova V, (2023, March 14). Eksperty nazvali regiony s samym bol'shim ob"yemom zelenogo stroitel'stva [Experts named regions with the highest volume of green construction]. Available at: https://realty.rbc.ru/news/641085d29a79479bd301e0f4;
33. Sergeeva S, Gladilina I, Bluchnikova N, Shichkin I, Kotchev E, Filonova A, (2023). Impact of green fintech solutions on achieving ESG principles, Revista Gestão & Tecnologia 23(1), 335-345;
34. Shen C, Li P, (2023). Green housing on social media in China: A text mining analysis, Building and Environment 237, 110338. https://doi.org/10.1016/j.buildenv.2023.110338;
35. Siddiqui Z, (2023). Power of green journalism in fighting climate change. The Social Talks. Available at: https://thesocialtalks.com/environment/power-of-green-journalism-in-fighting-climate-change/;
36. Tolkachev I, Kotov A, Perepelitsa D, Asyaeva E, Chelukhina N, Zavyalov N, (2023). Principles of the "green" economy in Russia: Current state, comparing with world experience, challenges and prospects, Relações Internacionais do Mundo Atual 2(40), e06295;
37. United Nations, (n.d.). Global goals: Goal 11—Make cities inclusive, safe, resilient, and sustainable. Available at: https://www.un.org/sustainabledevelopment/ru/cities/;
38. United Nations, (2015). Measures to combat climate change: Paris Agreement. Available at: https://www.un.org/ru/climatechange/paris-agreement;
39. World Green Building Council, (n.d.). Official website. Available at: https://worldgbc.org/;

40. Yandex Analytics, (2021, May 20). Kak pokupayut nedvizhimost': Auditoriya, predpochteniya, vybor [How real estate is purchased: Audience, preferences, choice]. Available at: https://yandex.ru/adv/solutions/analytics/pokupateli-nedvizhimosti-v-rossii-issledovanie;
41. Yessenbayev A, Akhmetshin E, Kurikov V, Hajiyev H, Chernova O, Litvinov A, Shichiyakh R, Alkhanov N, (2024). Application of the adaptive approach for forming the concept of an inclusive residential environment in the context of regional differences, Civil Engineering and Architecture 12(5), 3480-3499. https://doi.org/10.13189/cea.2024.120526;