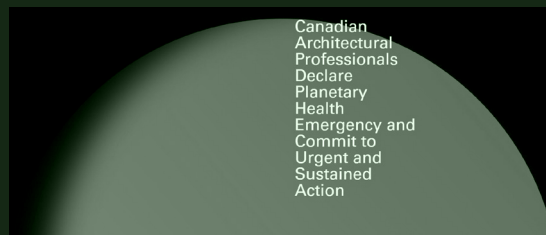


2020 Climate Action Questionnaire

Summary Report



About the Toronto Society of Architects

Established in 1887, the Toronto Society of Architects (TSA) is a non-profit volunteer-led organization dedicated to bringing people together to discuss, learn and explore around our shared passion for the built environment.

We are committed to the betterment of our city and have played an important advocacy role throughout Toronto's history. We do this through a wide range of programs which foster welcoming and inclusive forums for debate and the exchange of ideas, stimulating critical thinking about the design and building issues of our time.

Our public programming is complemented by initiatives supporting the personal growth and professional development of close to 1900 TSA members. Membership is open to everyone and welcomes design professionals, students and the general public.

www.torontosocietyofarchitects.ca

About the Climate Action Questionnaire and this Report

Back in September 2019, the TSA Executive [issued a letter](#) making a commitment to work with our membership to formulate an action plan and identify resources that would enable and support our members, practices and Society to more effectively and collaboratively address the climate emergency. As a first step, we had envisioned a members town hall that would bring members from our Society and key sustainability stakeholders in conversation to work collectively towards identifying tools, strategies and priorities.

Unfortunately, the effects of the pandemic struck Toronto only a few short weeks away from this town hall and we had to re-think our original approach to inform our action plan. This issue was too important and too urgent to wait for a "return to normal" and we were committed to delivering an action plan that was informed by their experiences and perspectives of our members.

On June 23, 2020, and in collaboration with [Architects Declare Canada](#), the TSA launched a jointly formulated Climate Action Questionnaire to better understand the state of our practices today as they relate to issues of sustainability and resiliency. Detailed in nature and broad in scope, the questions were designed to help identify tools, strategies and resources that can inform a shared action plan amongst the architectural community and pinpoint knowledge gaps so that we can build our collective capacity. It was also developed to be answered by practices instead of individuals, looking to spark conversation within studios as they compiled the information required to respond.

The questionnaire was broken into three large categories:

- **Our Work**, focused on the practice of architecture;
- **Our Offices**, focused on business practices and management;
- and **Our Associations**, focused on the role of various regulatory and advocacy bodies.

Answers were collected through an interactive online form as well as a fillable pdf. The questionnaire closed on July 31, 2020. In total **44 studios** practicing across Canada and representing hundreds of architectural professionals answered the call. Firms ranged from one person operations to large studios with hundreds of employees.

The following report summarizes the results of the questionnaire, aggregating responses and looking for common themes and topics. The report's structure parallels that of the questionnaire and summaries are provided at the beginning of each section highlighting key findings.

The TSA would like to extend a huge thank you to all the firms and individuals across Canada who participated in the questionnaire and shared their insights, experiences, concerns and best practices. Your participation will have a direct impact in shaping our Climate Action Plan and informing our programs, initiatives and priorities.

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CLIMATE ACTION EXECUTIVE SUMMARY



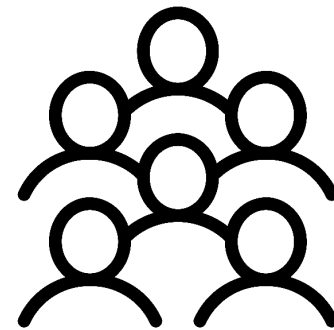
Our Mandate: Education

It was loud and clear that respondents believe that both professional education and public education are key priorities in making meaningful advancements in climate action, and that organizations like the TSA should take the lead on this through accessible, relevant and timely education for both design professionals and their clients.



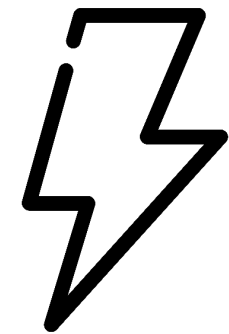
Our Regulators Mandate: Policy

Our regulators are in a unique position to advocate for increased performance standards and policy changes that can lead to a more sustainable future. Regulations should be thought of holistically and increased performance requirements should come hand in hand with financial incentives that help building owners make more sustainable choices.



Public Understanding

Design professionals cannot tackle climate action without buy in from their clients and the general public. Whether it be through financial incentives that make sustainable options more attractive or public education that encourages understanding on this issue, public-focused initiatives are critical to change the building industry.



Beyond Energy Efficiency

While energy efficiency will continue to play an important role in sustainability, design professionals are looking to apply sustainable design principles which extend beyond energy to include resiliency, regeneration, water, air and human capital. Sustainability requires a multi-pronged approach that addresses the many facets of creating healthier, lower impact buildings.

OUR WORK

There are a multitude of approaches to sustainable, resilient, and regenerative design using numerous tools, metrics and processes. This first section focused on understanding what are the current approaches to sustainability used by architects and designers in their projects, identifying predominant areas of focus while highlighting important knowledge gaps in the profession.

What We Learned

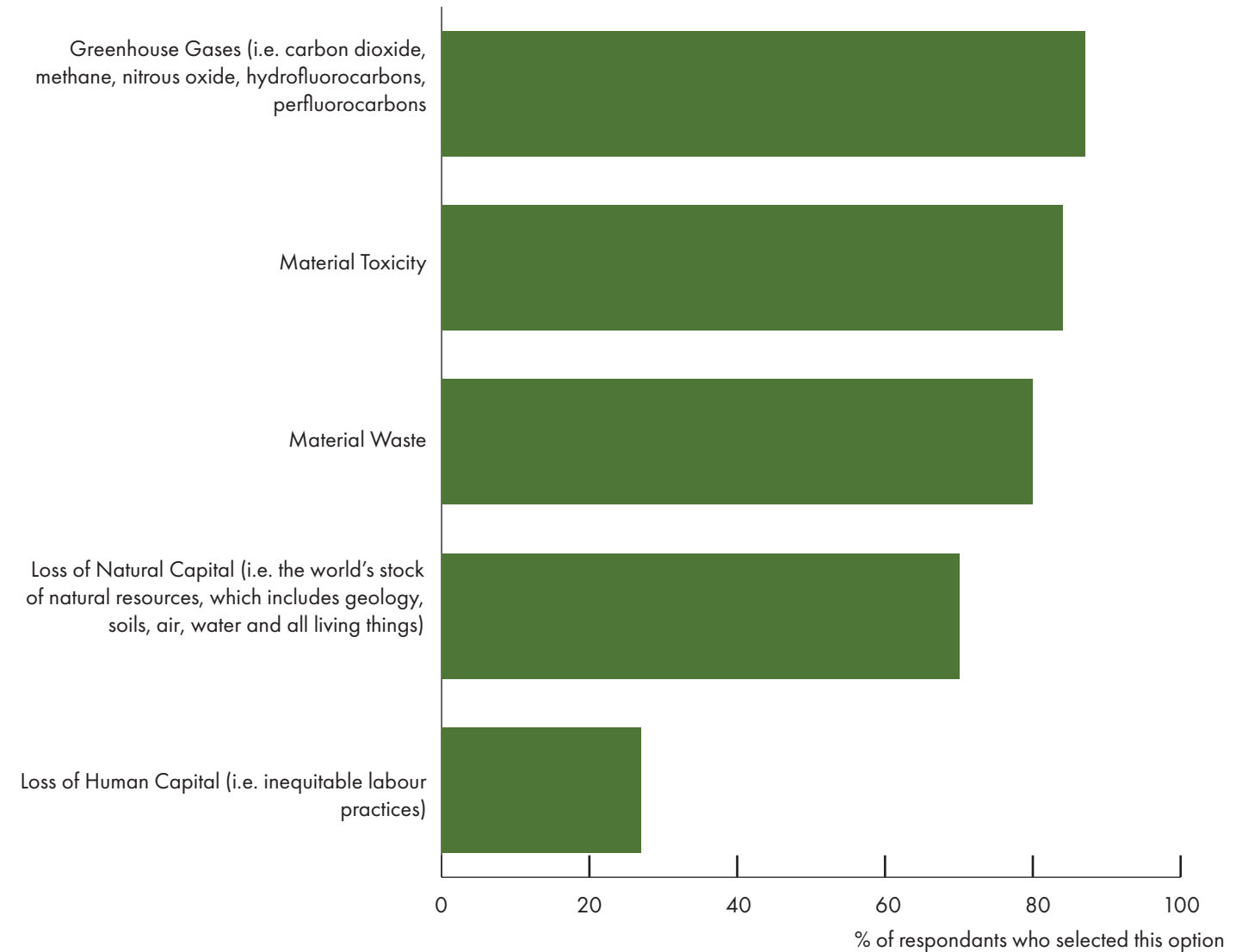
Overall, the majority of respondents are already employing design strategies to mitigate key areas such as greenhouse gases, material toxicity and material waste. Respondents felt confident in advocating for mitigation through improved envelope and HVAC efficiency, but were less familiar with the use of future climate models, mitigation through improved resiliency and regeneration. When asked about the topics and skills they wished they could learn more about, respondents identified circular/regenerative economy, embodied carbon, resilience planning, regenerative design and design for disassembly as their top areas of interest.

When it comes to measurements, almost 80% of respondents are measuring the “as-designed” performance, but that drops to just over 50% for “as-built”. 19% of all respondents do not measure any kind “as-designed” sustainability performance metric, a number that jumps to 42% for “as-built” performances.

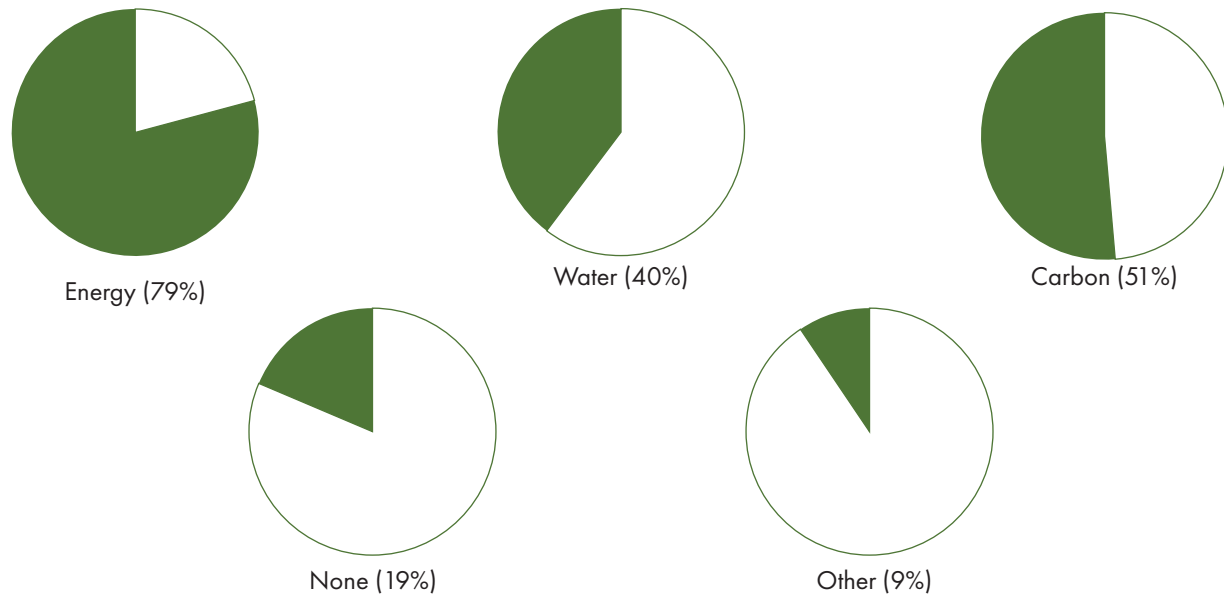
Communicating with the public and clients was clearly identified as a key challenge. Respondents identified their ability to persuasively communicate the value of sustainable design choices as their biggest challenge. Only 36% of participants said they were very comfortable with making the distinction between various returns on investments to clients. This was particularly acute in smaller practices. Embodied carbon, whole building life cycle assessment, energy use, integrated performance retrofits and high performance envelopes were all identified as important topics respondents wished clients and the general public could learn more about.

Approaching Sustainable Design

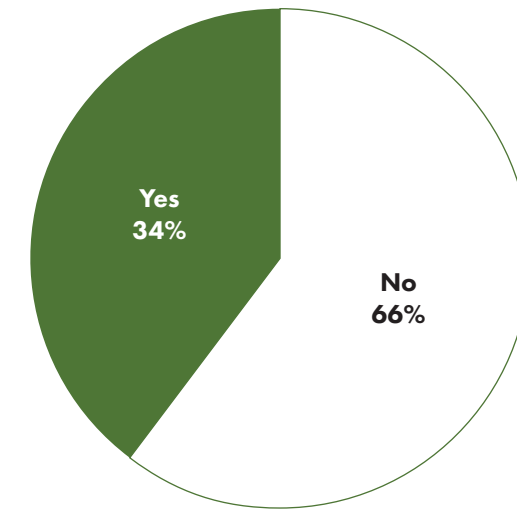
Do you employ design strategies to mitigate negative impacts of any of the following in your projects? Select all that apply.



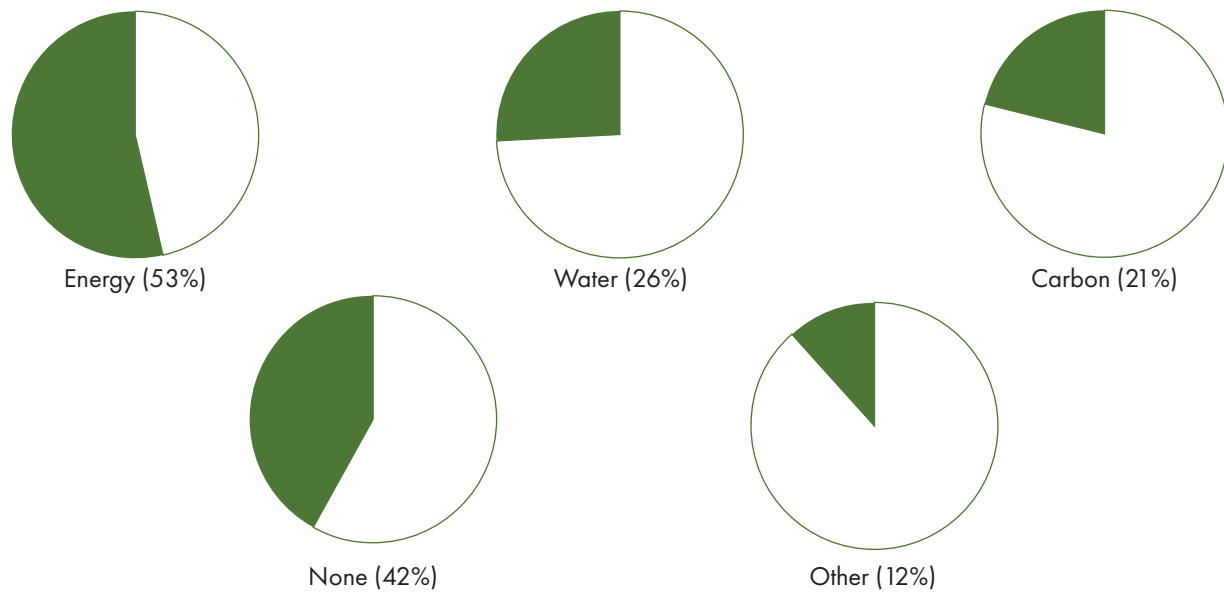
Do you measure the “as-designed” performance of your buildings for any of the following?



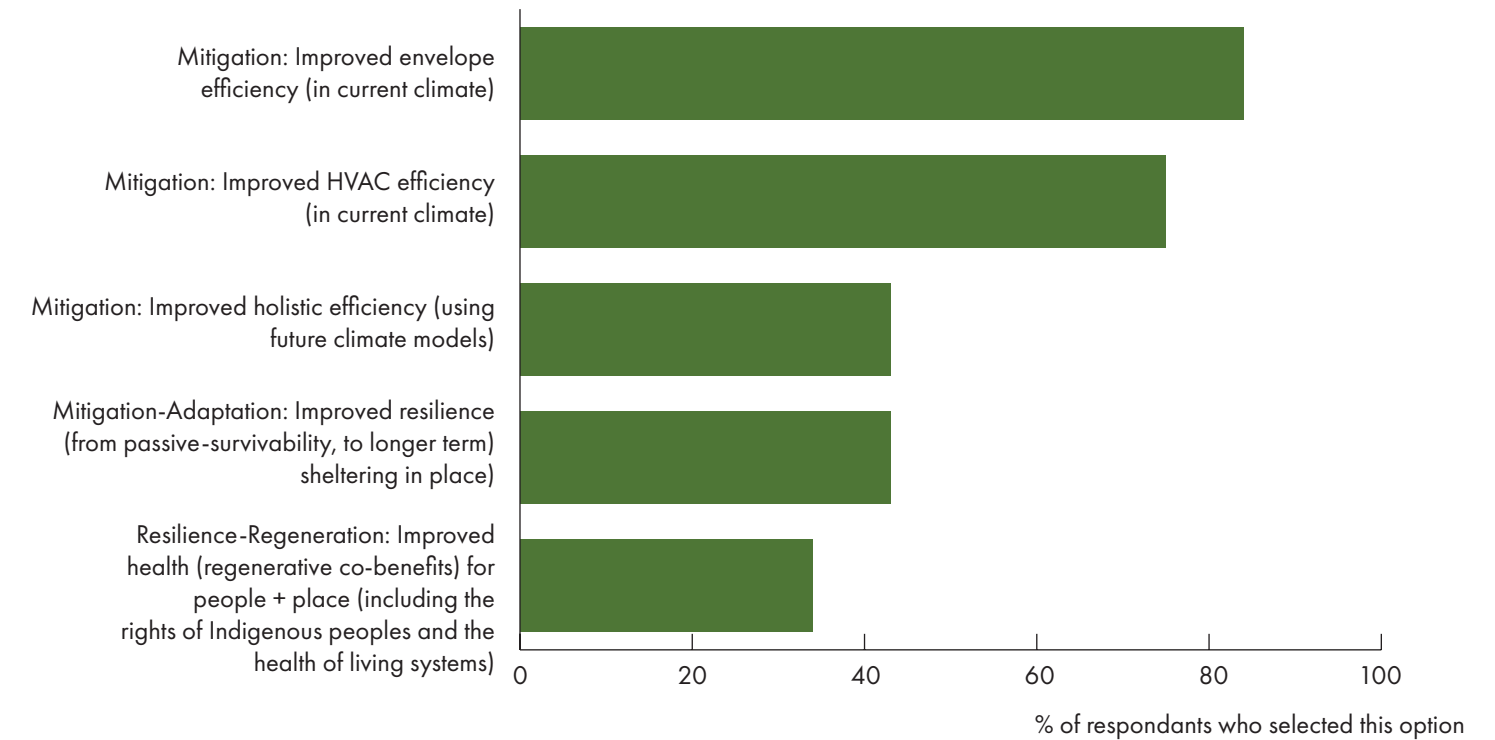
Do you conduct post occupancy evaluations (POEs)?



Do you measure the “as-built” performance of your buildings for any of the following?

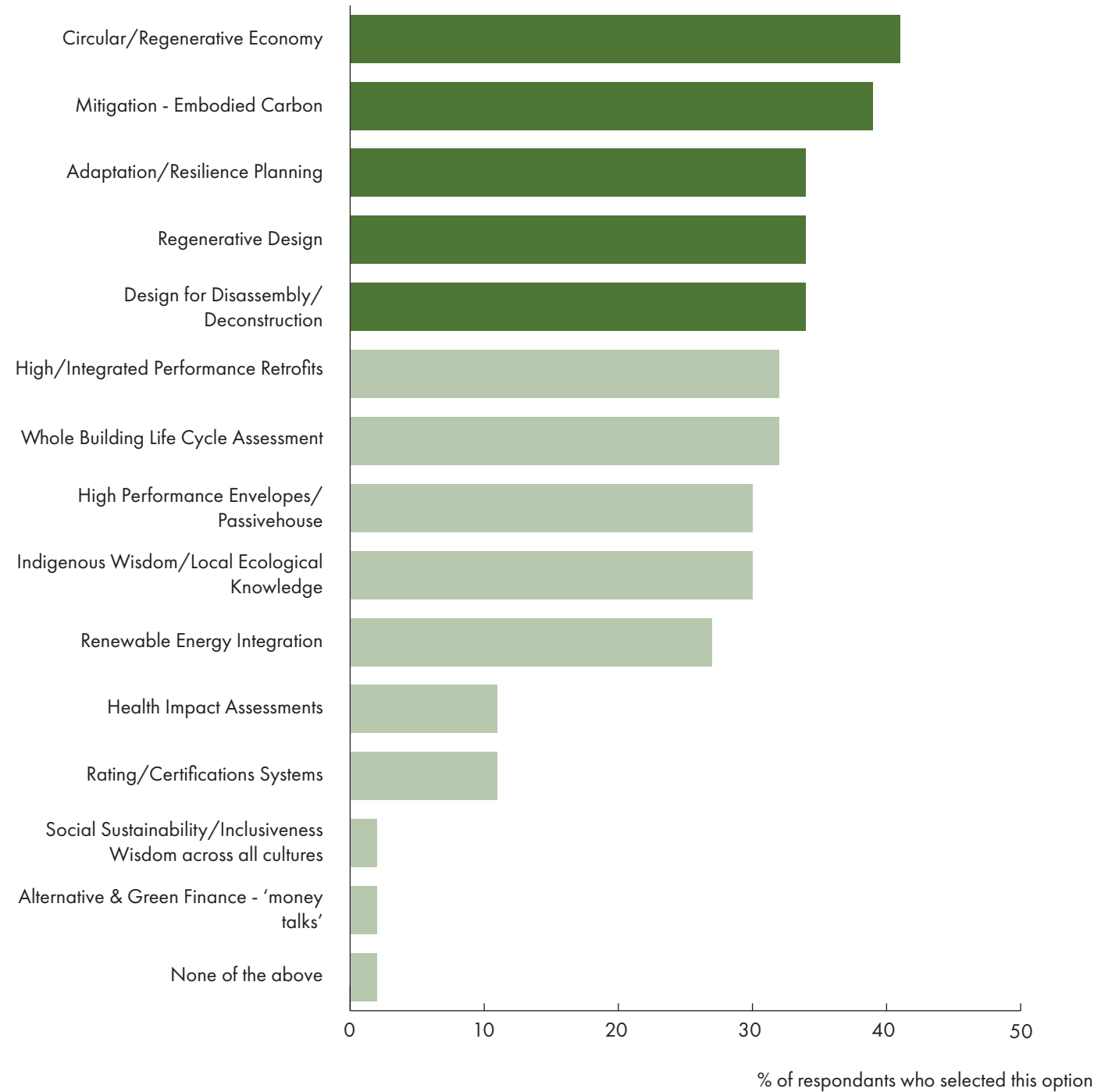


In the context of climate change, do you feel you have the tools to advocate for the following:

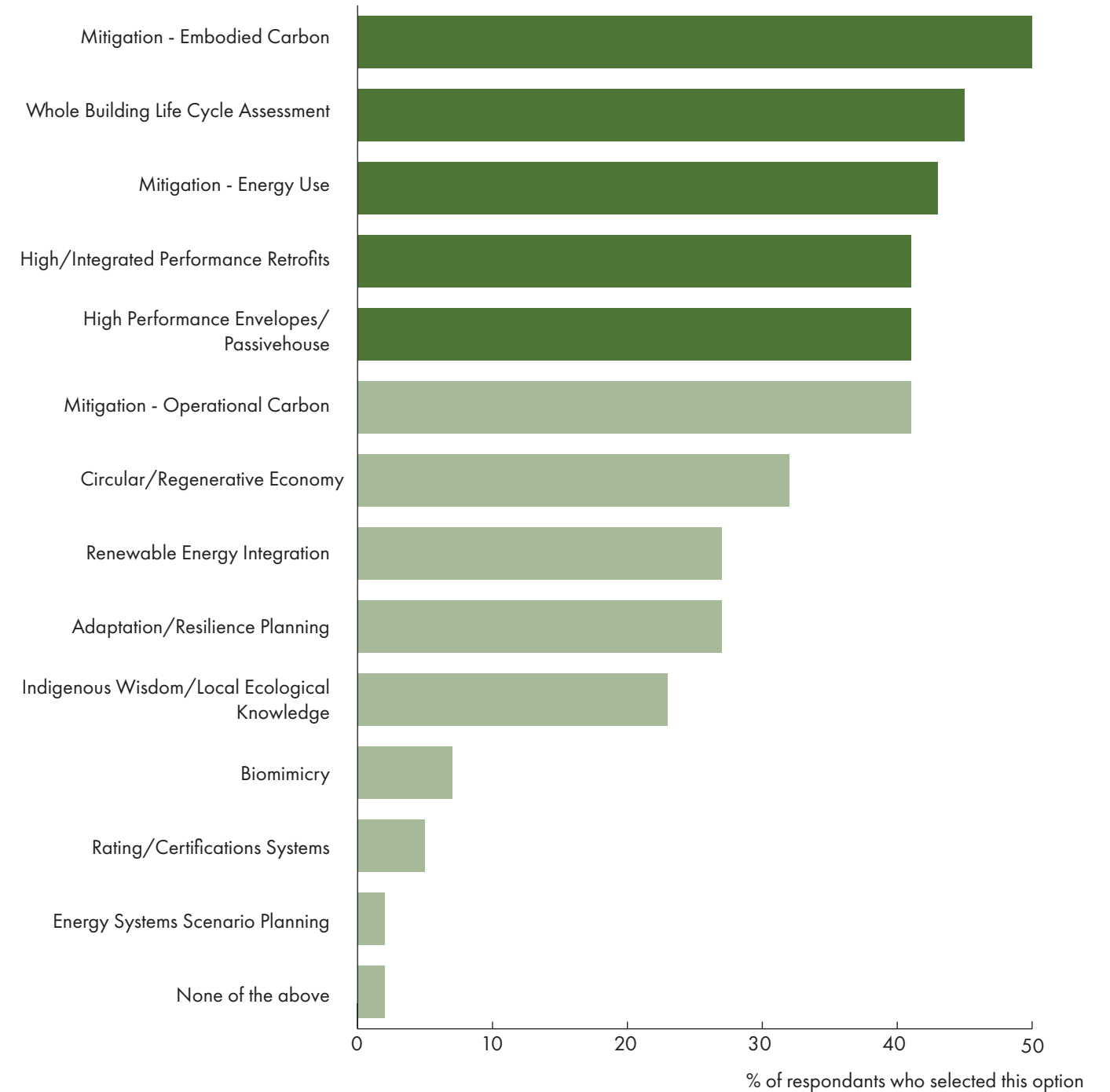


Public And Professional Education And Engagement

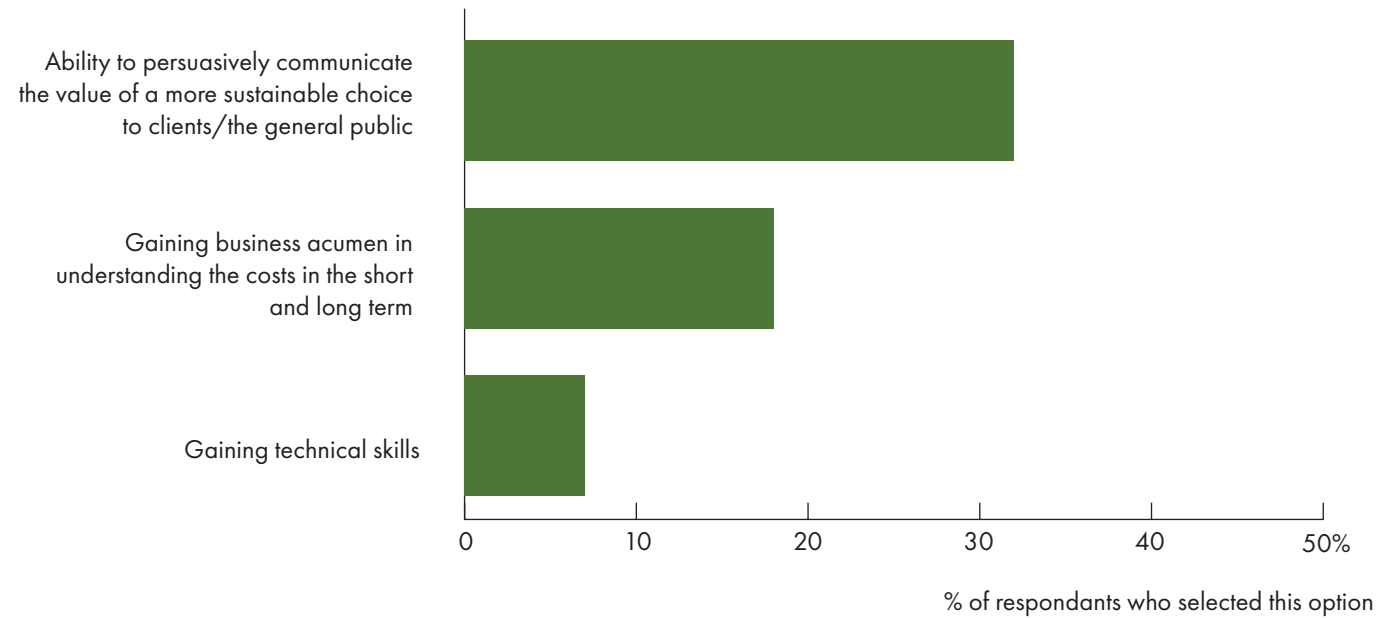
What topics or skills pertaining to whole systems sustainability (high performance design, resilience and regeneration) do you wish you could learn more about? Please choose your "top 5".



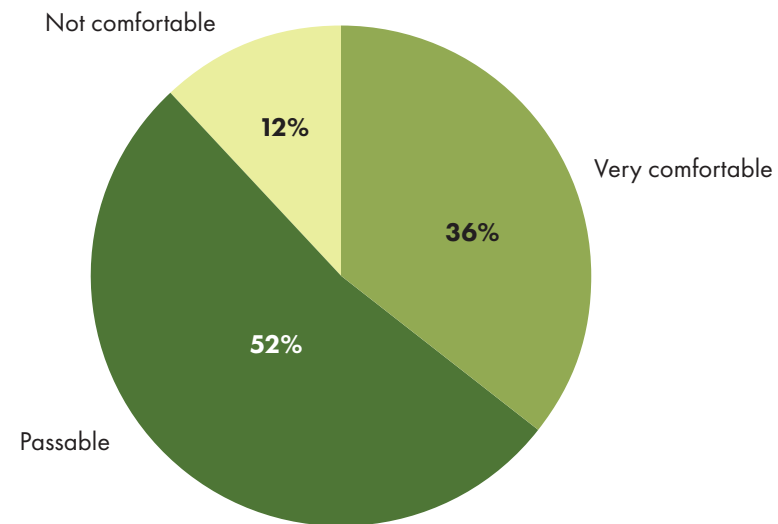
What topics or skills pertaining to whole systems sustainability (high performance design, resilience and regeneration) do you wish your clients or the general public could learn more about? Please choose your "top 5".



In designing and advocating for whole systems sustainability, what do you see as your biggest challenge(s)?



How comfortable do you feel making the distinction between various returns on investment to your clients - e.g. the value of energy savings, value of carbon savings, and this distinction between them related to short-and-long term values for different contexts?



“

It would be helpful if the TSA could create a sustainability opportunities checklist that all firms could bring to clients at kick-off meetings, giving firms a footing in further advocating for “best practices” in sustainability and project considerations. Similarly, developing an evaluation matrix for firms to use for projects would be useful.

”

OUR ASSOCIATIONS

Whether by regulation or voluntary membership, the architecture, design and construction industries are home to a myriad of communal organisations including national bodies like the Royal Architecture Institute of Canada, local organizations like the Toronto Society of Architects and grassroots movements like Architects Declare . This section sought to better understand the role respondents expect these associations and organisations to play in addressing issues of whole systems sustainability and climate action.

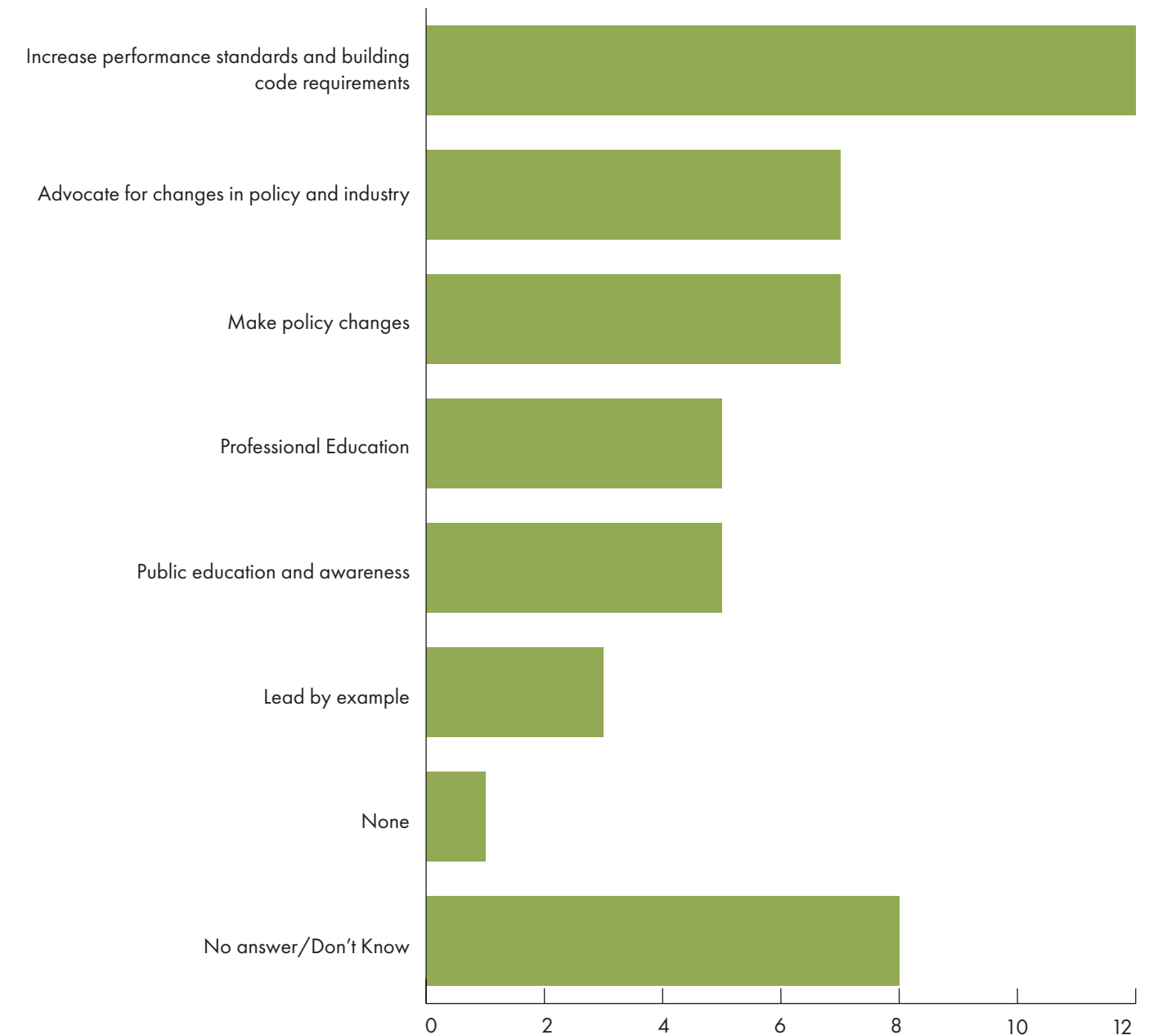
What We Learned

Professional education for design professionals and sustainability education for the public and clients were both clearly identified as key priorities for organizations such as the RAIC, TSA and Architects Declare, far outweighing other resources and initiatives like award programs and research projects. Public education in particular kept being identified as a critical element for meaningful change.

Respondents identified a variety of financial incentives as well as code changes as the most effective incentives to drive change for clients and the general public. Provincial regulators were identified as key players in driving this through policy changes and advocating for increased performance standards and code requirements – particularly in establishing higher sustainability and resiliency targets. Toronto Green Standard and the British Columbia Step Code were highlighted as the most impactful legislations.

Our Regulators and Regulations

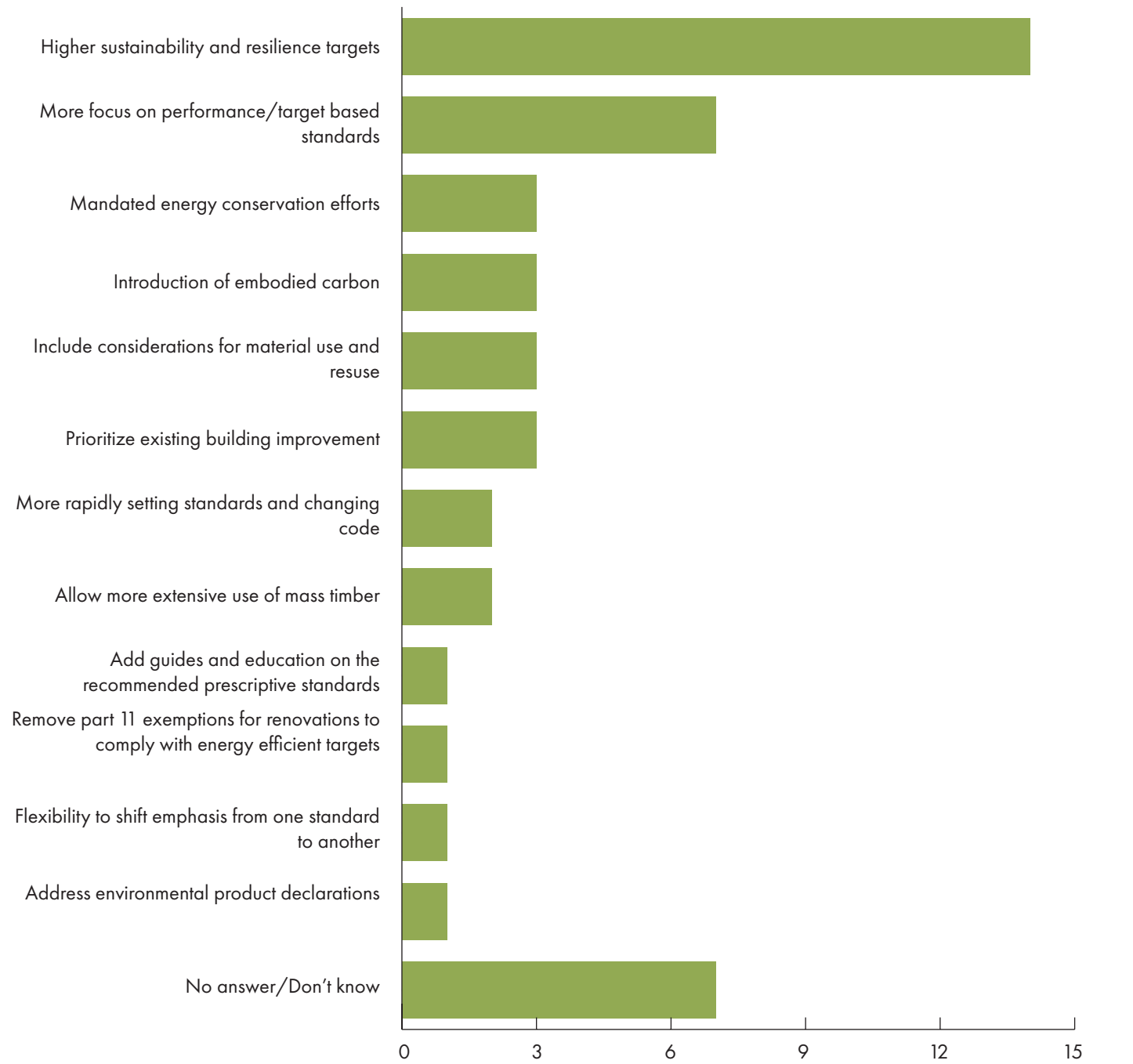
What role do you feel your provincial regulator should play in supporting you to achieve sustainable design excellence in your work?



This question allowed respondents to enter their answers in an open ended text box. The graph above was generated by identifying and grouping common themes in responses together.

of responses

What changes to the building code and other regulations do you feel should be made to support greater sustainable design outcomes?



This question allowed respondents to enter their answers in an open ended text box. The graph above was generated by identifying and grouping common themes in responses together.

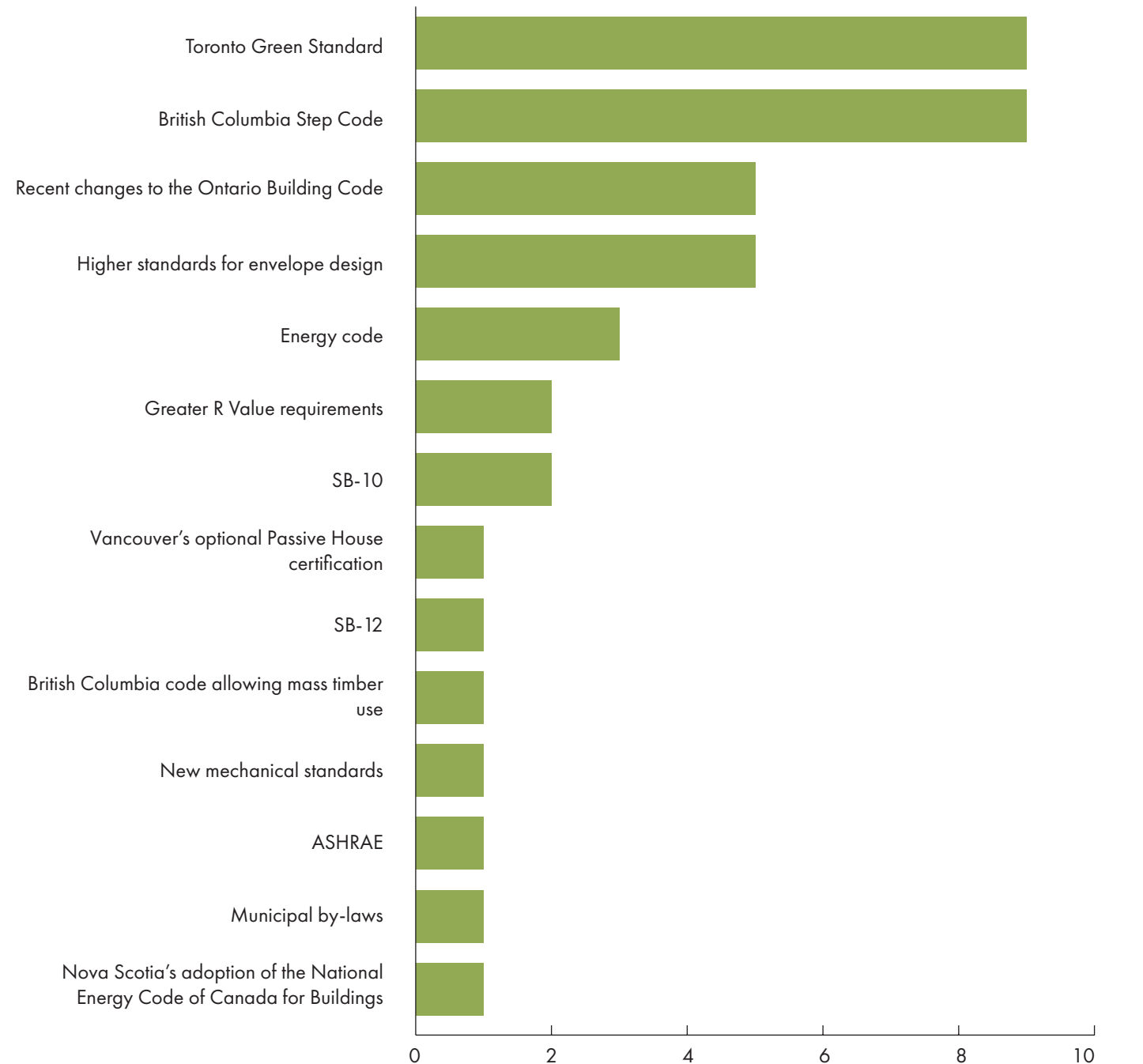
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“

The Ontario Building Code should be holistically studied rather than edited and appended every 10 years. It should be reconstructed as a clear and more simple to use (though not necessarily less strict) set of rules that brings Ontario in line with other provinces on things like tall timber construction, energy efficiency, water reuse, etc... The Toronto Green Standard and equivalents play a significant role in raising the site environmental standards across the province - they should allow for more flexibility shifting emphasis from one standard to another instead of a one size fits all.

”

What regulatory changes have been the most impactful to your practice thus far, or seem most impactful based on what you have seen in other jurisdictions?



This question allowed respondents to enter their answers in an open ended text box. The graph above was generated by identifying and grouping common themes in responses together.

“

The Toronto Green Standard is very progressive and has set some of the highest standards for sustainability in the country. This has had a significant impact on all projects in the GTA, compared to other jurisdictions, and in particular commercial residential projects.

”

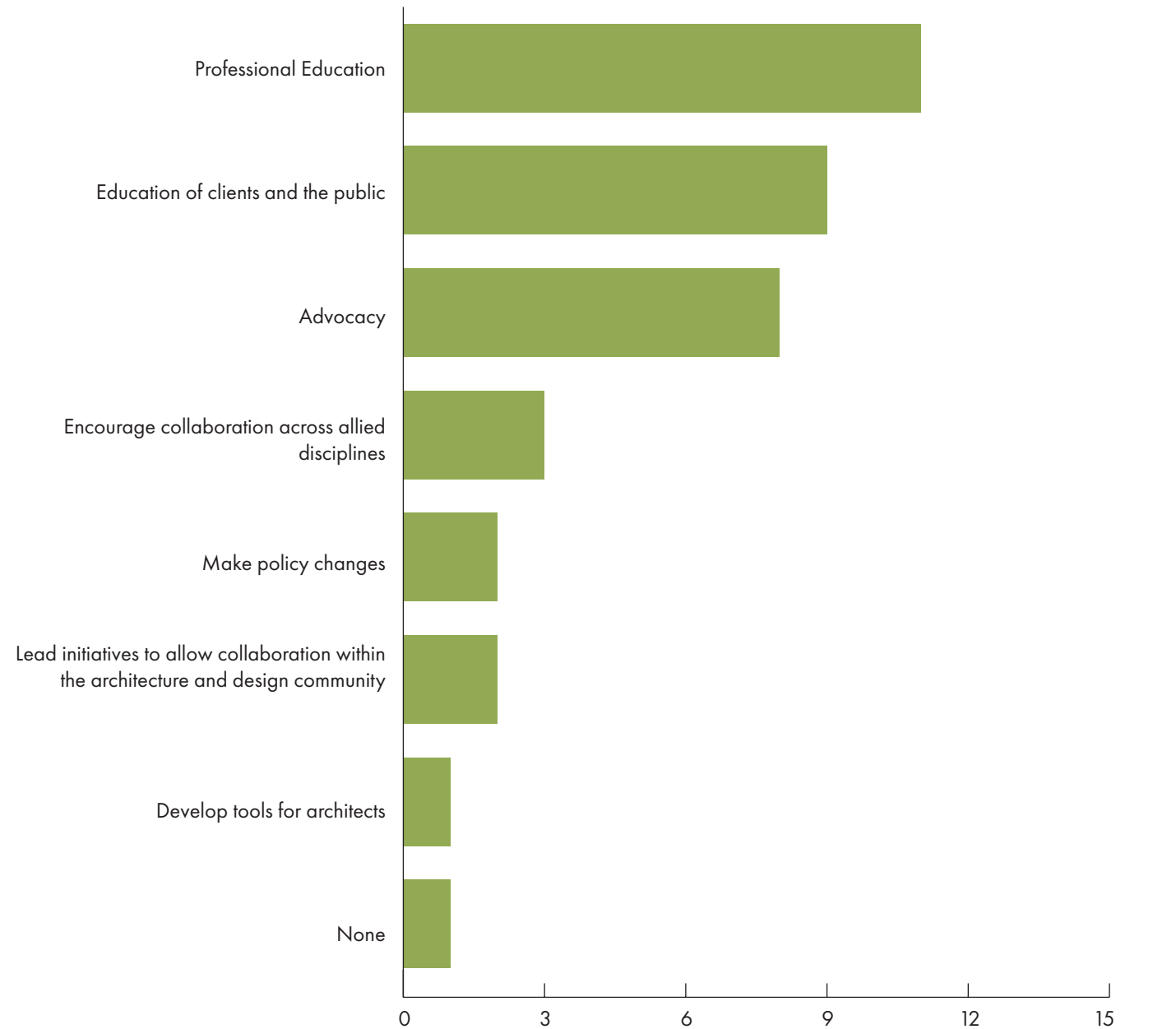
“

The British Columbia Step Code seems to have made a big impact. It would be nice to see it adopted nationally, with a clear plan to phase out lower performance tiers in the near future (similar to the Toronto Zero Emissions Framework).

”

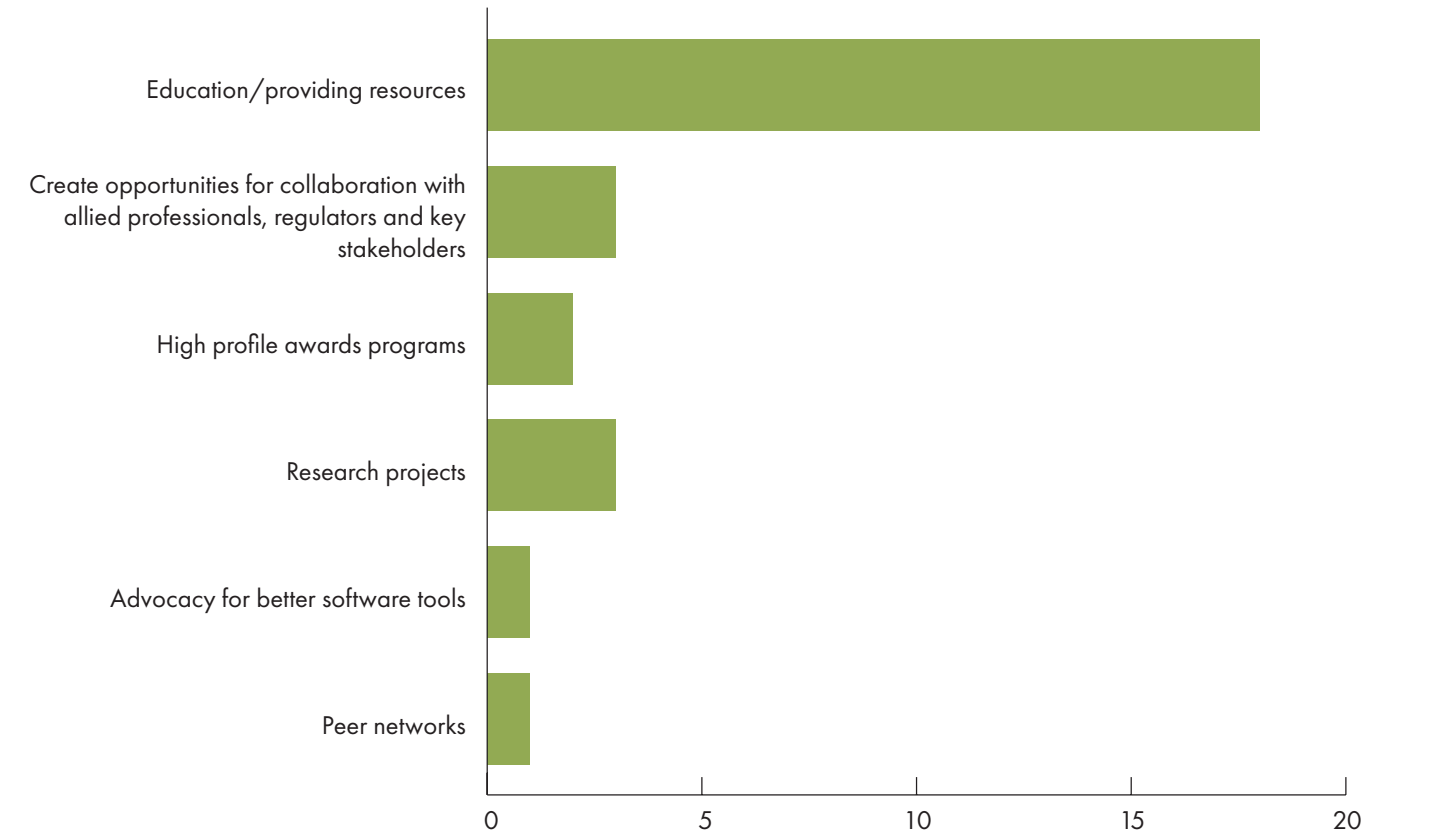
Our Advocates and Community Organisations

What role(s) do you feel organisations like the Royal Architectural Institute of Canada (RAIC), the Toronto Society of Architects (TSA) and/or grassroots efforts (like Architects Declare) could fill to better support you in achieving sustainable design excellence in your work?



This question allowed respondents to enter their answers in an open ended text box. The graph above was generated by identifying and grouping common themes in responses together.

What resources or initiatives do you feel the TSA / others could provide their members to better support sustainable design excellence and professional proficiency on related climate issues?



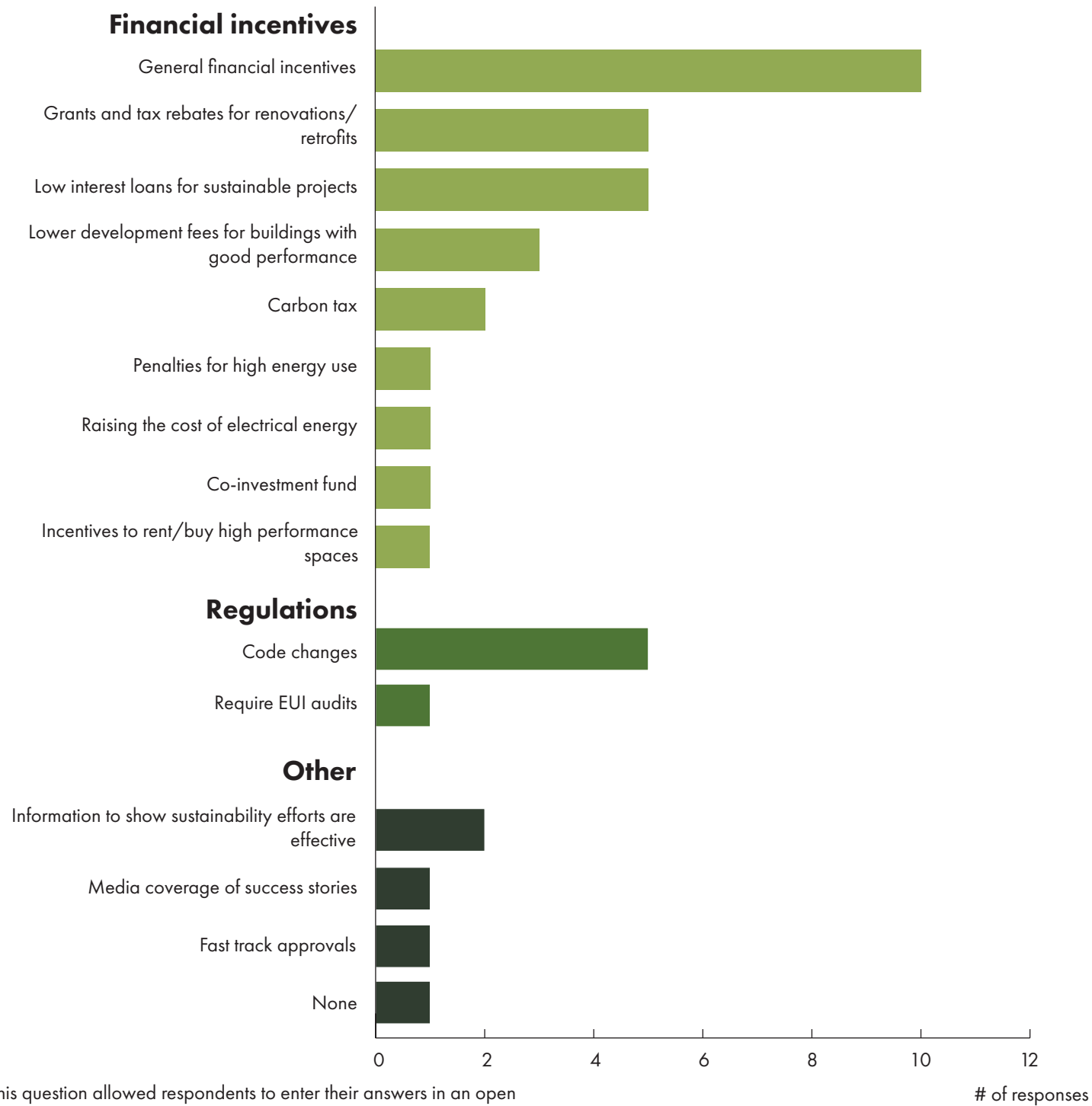
*The graph aggregates responses based on common topics.

of responses

“ Award programs should include sections that ask about sustainability. However, we have found sometimes asking for specific stats on building performances can be challenging for multidisciplinary projects that aren’t always applicable; for example, in the OAA awards there were requirements that were irrelevant to the infrastructure category...”

”

What incentives might be most effective - for clients? For the general public?

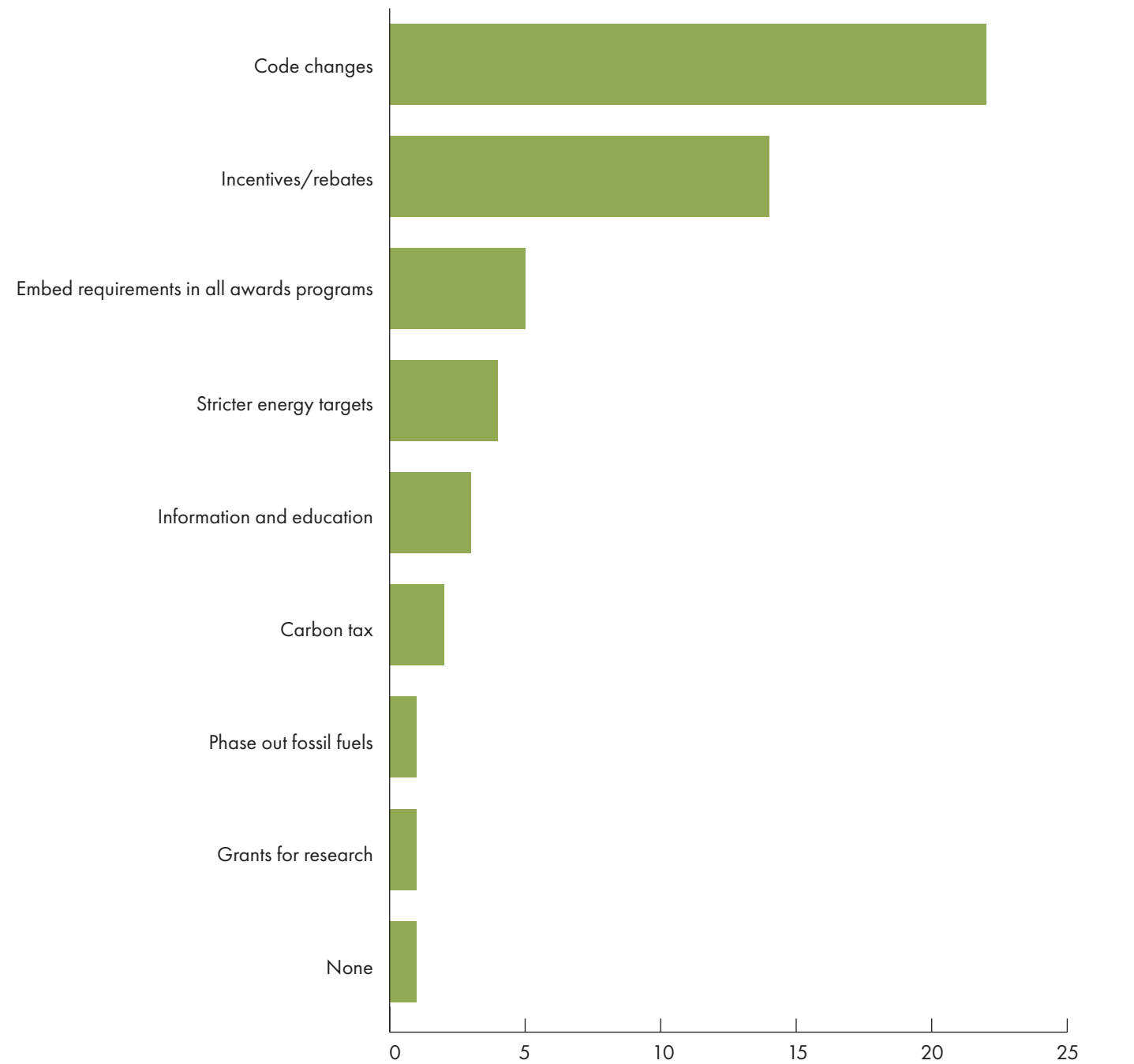


This question allowed respondents to enter their answers in an open ended text box. The graph above was generated by identifying and grouping common themes in responses together.

“ I do not think our clients are very interested in climate change as it relates to their developments. They care about the bottom line and reduced risk. They follow the minimum requirements of the OBC energy requirements and Toronto Green Standard or equivalents.

”

What requirements (i.e. code changes) or incentives (i.e. awards programs / government incentives) might help to increase sustainable design performance in buildings?



This question allowed respondents to enter their answers in an open ended text box. The graph above was generated by identifying and grouping common themes in responses together.

“ Building projects are increasingly complex and difficult for the architect to understand the impact of all disciplines. Architects need to develop better collaboration and listening skills and open the design process up to users local community and all stakeholders. These organizations can discuss decolonization, equity & diversity and this will lead to innovation in architecture.

”

OUR OFFICES

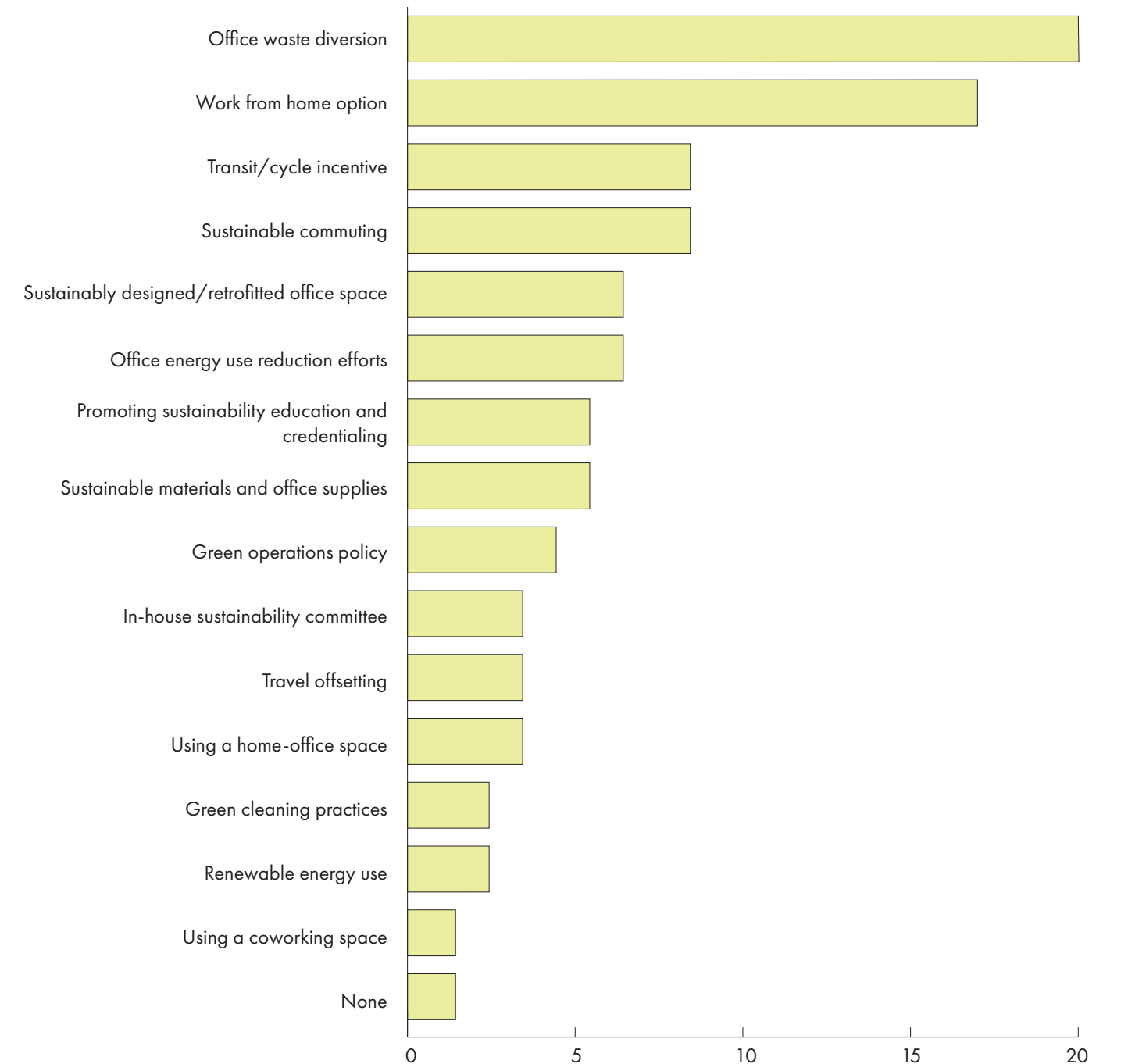
The last section of the questionnaire focused on business practices and office management, recognizing the role architects can play as business owners in influencing our workplaces with respect to sustainable best practices. We wanted to understand more about what each office is doing to improve in-house policies and procedures in relation to climate action and set an example for sustainable office management.

What We Learned

When it came to in house initiatives, there was not a one-size-fits-all with each office implementing many unique sustainability strategies. Overall, waste diversion and work from home were the most commonly used initiatives. Other initiatives included green cleaning practices, travel offsetting, supporting sustainable commuting options such as cycling, walking and public transit, as well as promoting sustainability education and credentialing. No one strategy was identified as being the most impactful.

Almost 50% of the responding practices had engaged in letter writing as a form of advocacy, and 45% had shared their learnings through open source platforms. Overall there was a call for more group actions, recognizing the limited time and financial resources individual offices can invest into advocacy and resource development - particularly among smaller firms.

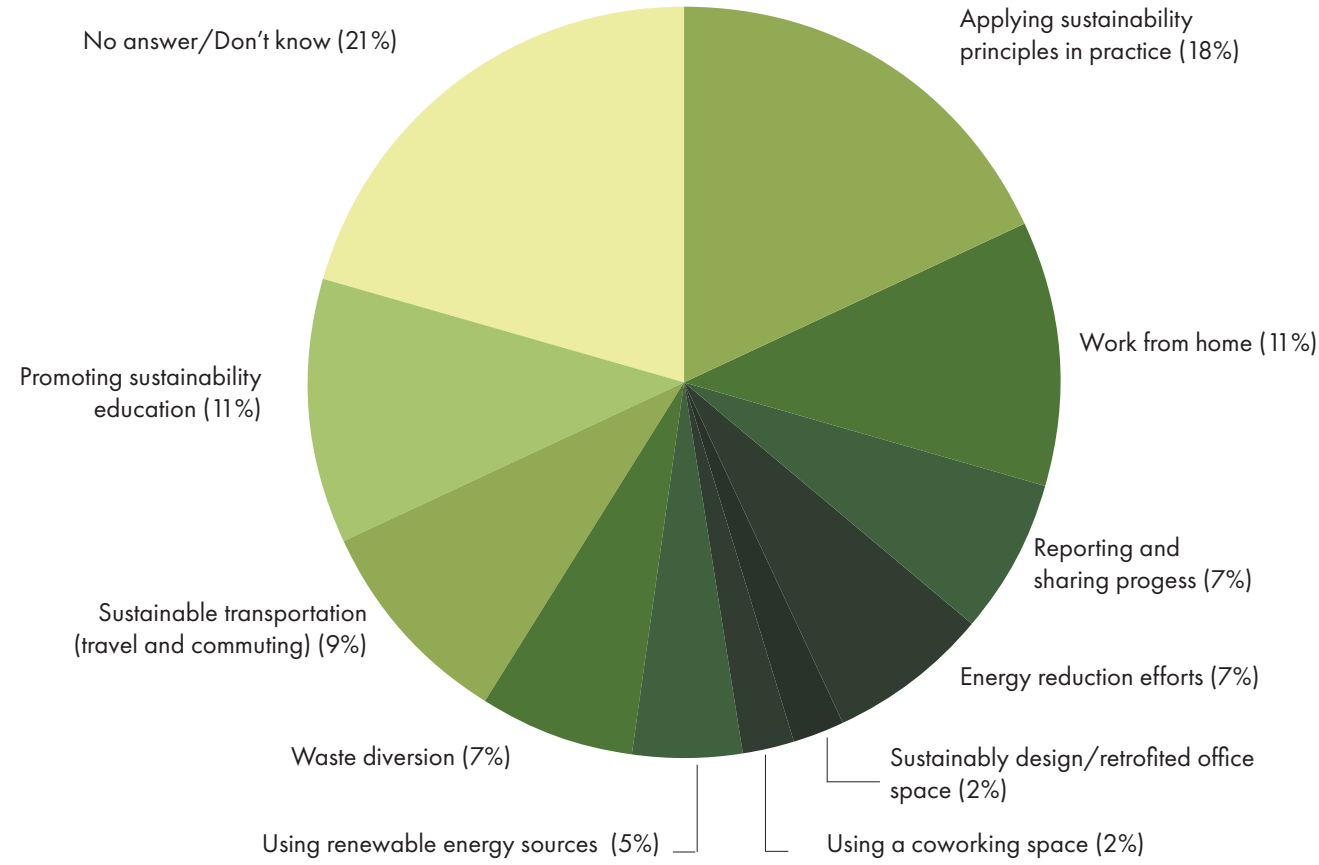
Please take a moment to list any initiatives you've undertaken in your own offices to address the climate crisis: topics might range from waste-diversion practices, sustainable transportation policies, work-from-home policies, workspace design policies, etc.



This question allowed respondents to enter their answers in an open ended text box. The graph above was generated by identifying and grouping common themes in responses together.

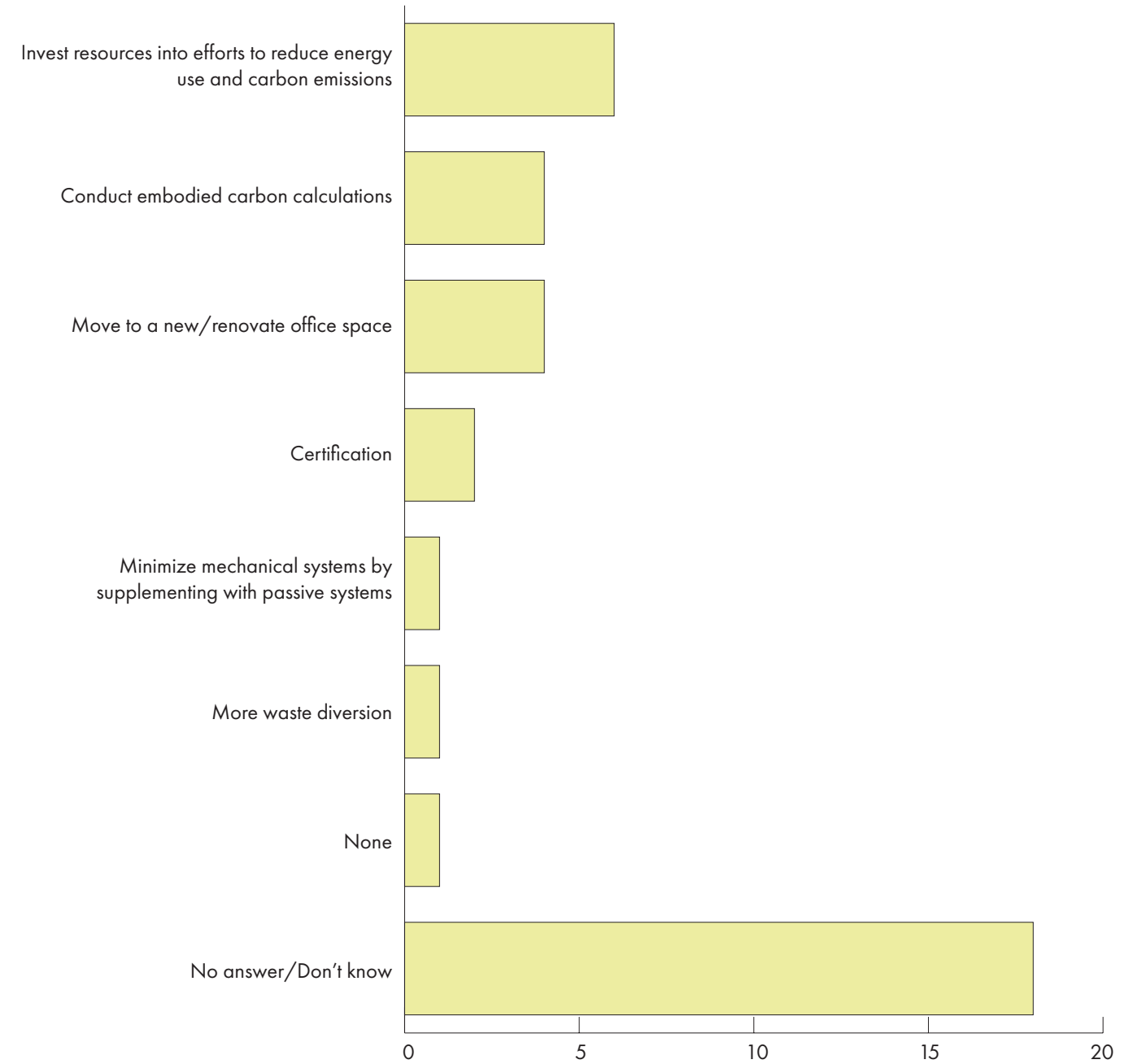
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What measures have you found the most impactful?



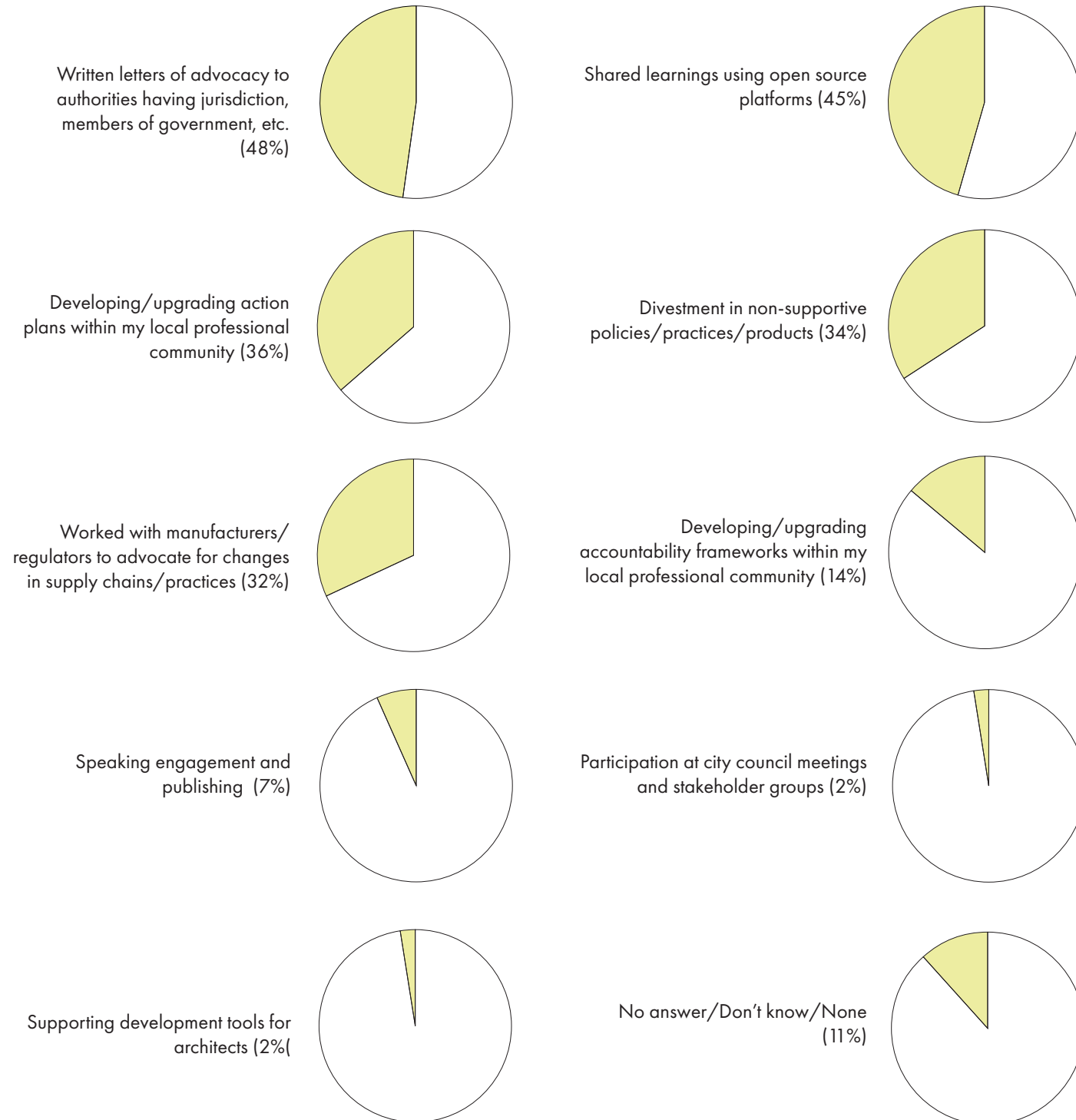
“ Supporting alternative modes of transportation for staff to get to work, especially bike riding, has created a strong community of riders within the office who share resources, information and experiences. This internal community in turn contributes to building advocacy for bikes in the city and improvements to the infrastructure which benefits the wider community. ”

Are there additional measures you wish to undertake but are not currently supported in doing so by your clients/collaborators?



This question allowed respondents to enter their answers in an open ended text box. The graph above was generated by identifying and grouping common themes in responses together.

As a practice what have you done to raise awareness/take immediate action towards the rapid, future-focused systemic changes required to combat climate change?

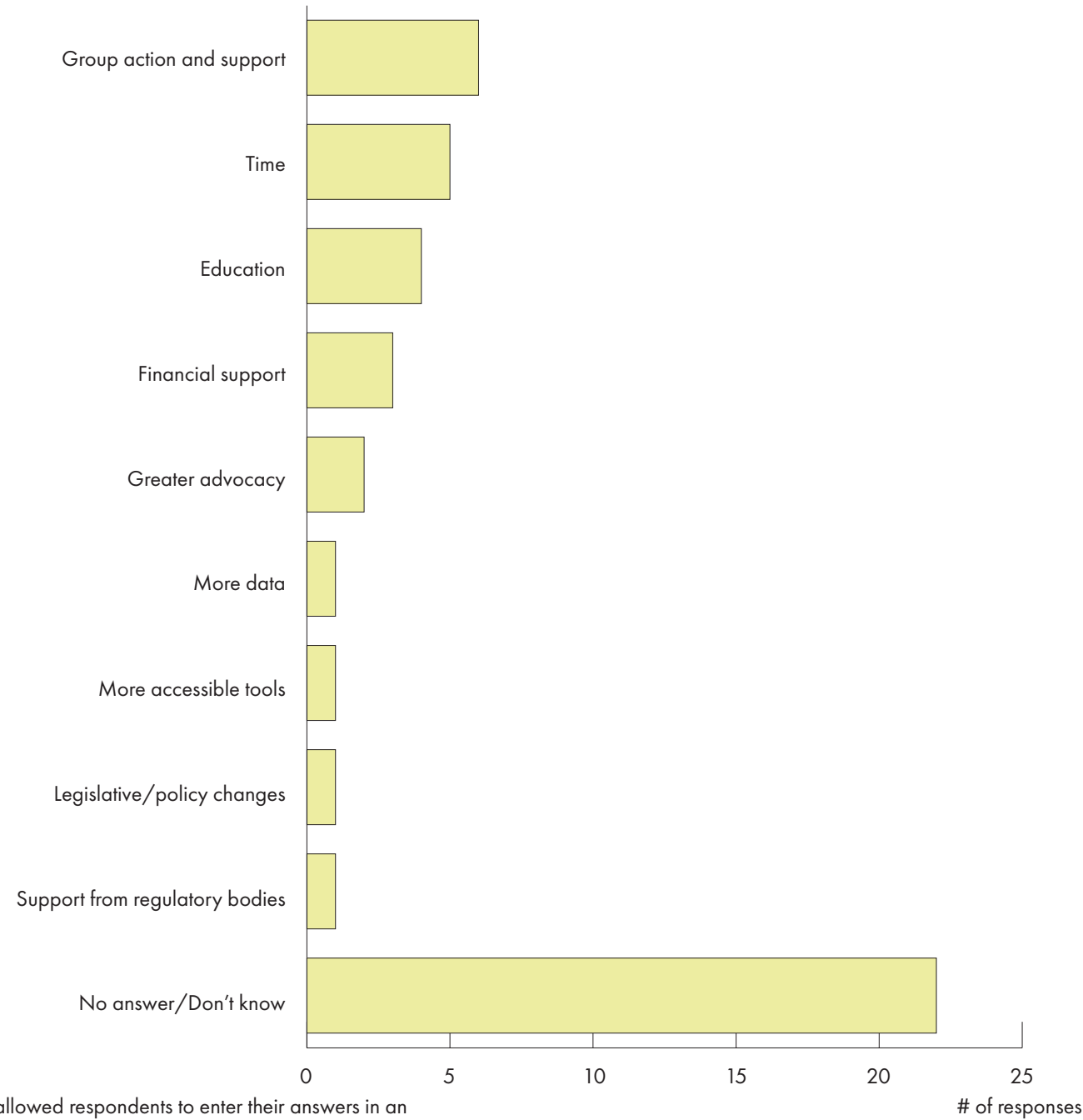


“

Public education is what we really need to happen. Most clients' notions are too vague to impact how they see building.

”

For those interested in taking (more of) the above actions, what support(s) would you need to do so?



This question allowed respondents to enter their answers in an open ended text box. The graph above was generated by identifying and grouping common themes in responses together.

“

We need more easily accessible tools for small businesses.

”

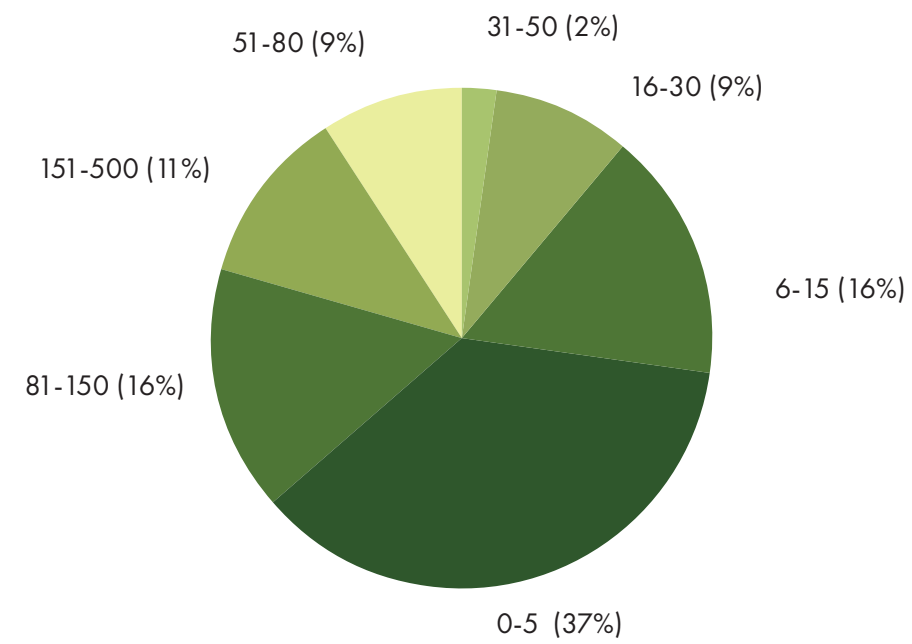
“

It is helpful for there to be professional/industry wide initiatives. Writing letters, advocating for supply chain changes, and so forth are more impactful and efficient if an organizing body were to lead these, instead of every individual firm trying to start their own initiative with limited resources.

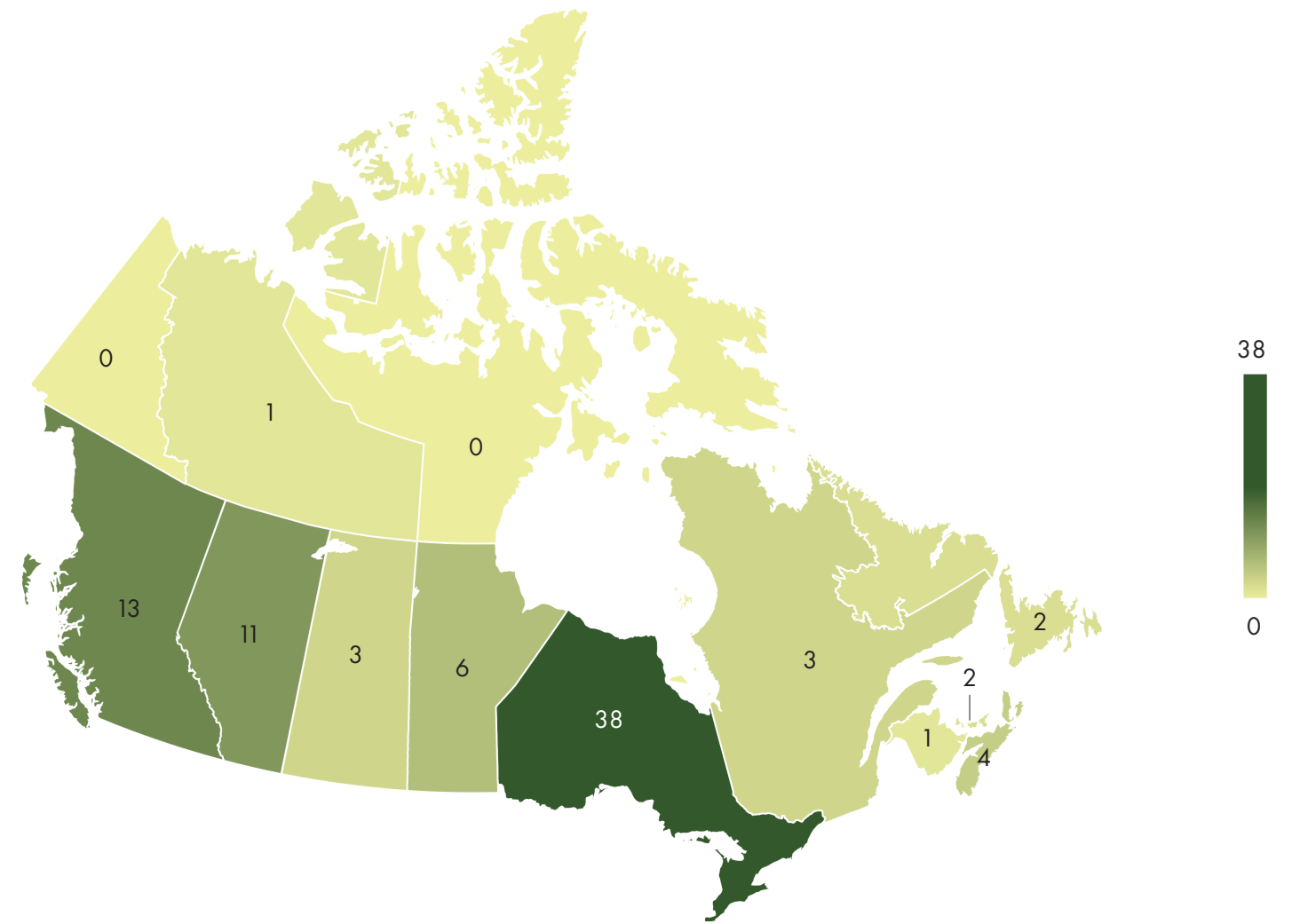
”

DEMOGRAPHICS

How big is your office - how many employees / staff do you have?



In what province or territory is your practice licensed? *

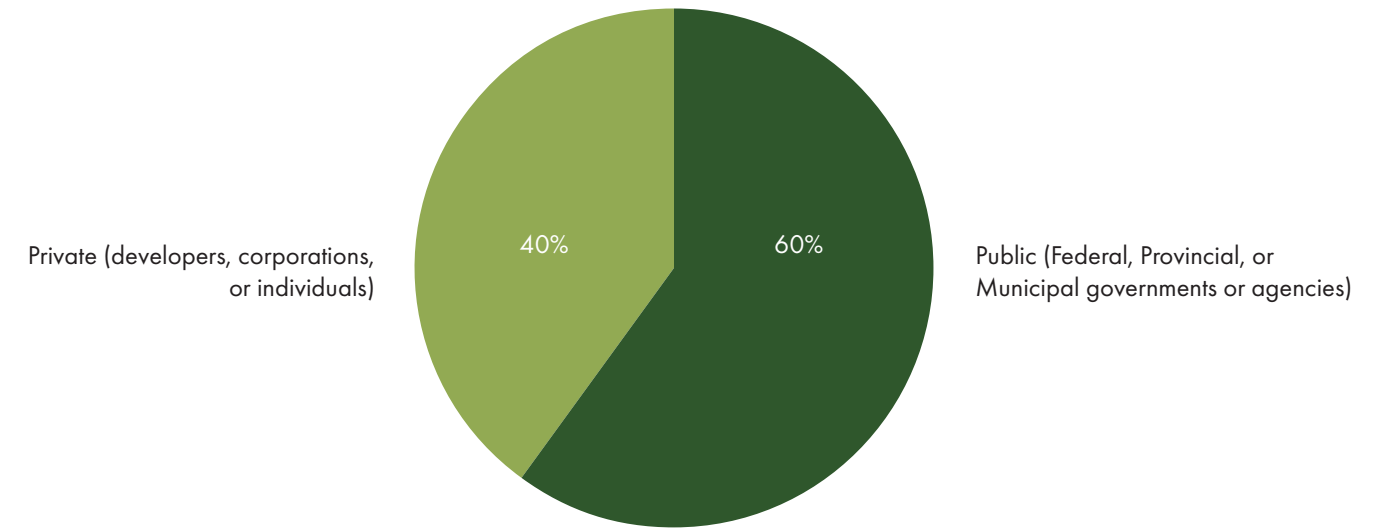


*Canadian offices can be licensed to practice in more than one province or territory.

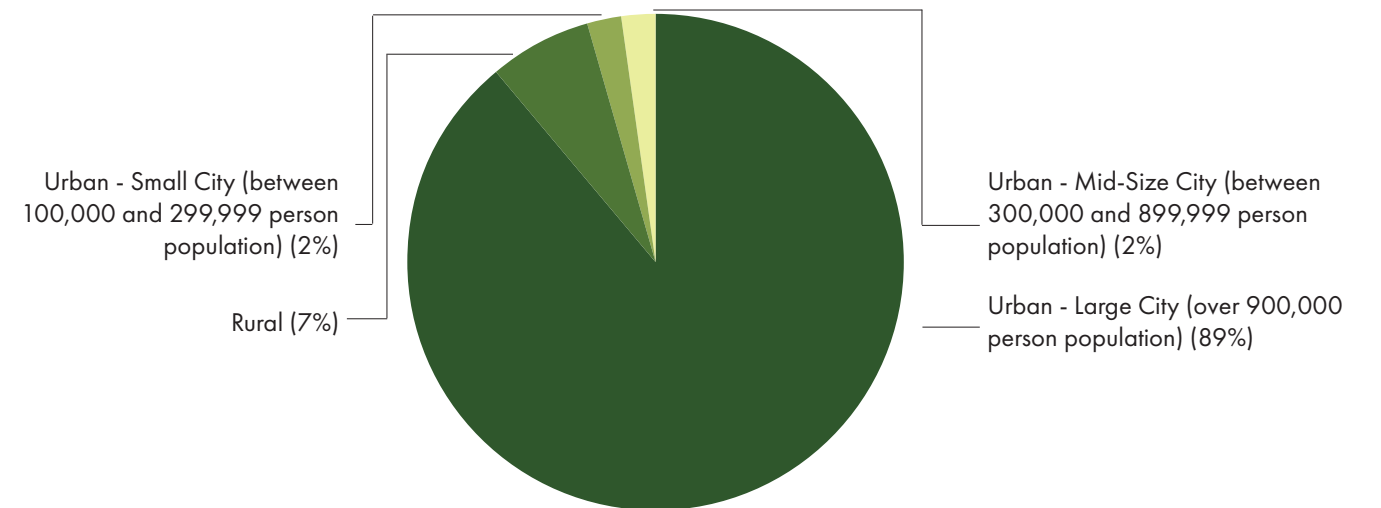
What are your areas of practice?



Are the majority of your projects for public or for private sector clients?



Where do you practice? What is your urban/rural context?



Thank You

The Toronto Society of Architects would like to give thanks to all the practices and individuals who participated in our Climate Action Questionnaire.

We would also like to acknowledge the following people for their efforts in shaping the questionnaire and subsequent report:

Jennifer Cutbill, Architects Declare Canada
Megan Torza, Toronto Society of Architects
Varsha Kumar, Toronto Society of Architects
Sarah Garland, Toronto Society of Architects
Joël León, Toronto Society of Architects

The TSA would like to acknowledge the Ontario Association of Architects for their support of our Climate Action Town Hall.



TSA

TORONTO
SOCIETY OF
ARCHITECTS
