

The State of Sustainability 2017

Orange County

ACKNOWLEDGEMENTS

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We are grateful to the 17 professionals living or working in Orange County (OC) who took the time to share their experiences, insights and outlooks in this survey. My thanks and appreciation also goes to ASCE Sustainability Committee members for assistance in scoping the project, as well as other professionals who contributed their time and talents. A special acknowledgement goes out to those individuals in OC who helped refine the survey instrument and thereby contributed valuable insights into this effort: William Borges and John Irvine.

ABOUT VALUE SUSTAINABILITY

Value Sustainability is a southern California based SBE/DBE firm that offers high quality and cost-effective strategic consulting services to agencies and private sector clients. The firm specializes in providing advisory services in sustainable design, planning, reporting, climate change management, and community engagement. We take a pride in being passionate sustainability practitioners with diverse backgrounds, disciplines and outlooks. Our main objective is to help clients identify opportunities and synergies to develop and implement robust solutions thereby making sustainability an essential tool for unlocking business value. We are green change agents integrating sustainability, systems thinking and responsible transformational leadership into daily business practices. For more information on who we are and what we do please visit: www.valuesustainability.com

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Welcome to American Society of Civil Engineers (ASCE-OC) Sustainability Committee's State of Sustainability 2017 Report - a comprehensive picture of how sustainability is being approached by a wide range of organizations, firms and agencies in Orange County.

In this report we asked the OC community about:

- **The significance of sustainability.** What does it mean for different organizations? How seriously is it taken at the highest levels of management? Who, ultimately, takes responsibility?
- **The organization of sustainability operations.** Does silo thinking about sustainability still prevail, or is sustainability becoming embedded throughout the organization? Is sustainability still largely a marketing effort – providing information, training and monitoring – or a frontline role, with direct bottom line benefits to the organization? What place does sustainability have in agenda setting?
- **Sustainability budget and returns.** What resources do organizations dedicate to sustainability? What are the identifiable returns-on-investment (ROI) and how are they measured?
- **Future prospects.** How will sustainability evolve in the year ahead, and what will the situation be in five years' time?

Our respondents told us that the great majority of firms and agencies are now convinced of sustainability's value. The sustainability discipline has started to slowly escape from its silo and is becoming a vital aspect of strategic planning, engineering, construction and even operations and maintenance. This is especially true for public agencies that have the greatest reputational and operational risks as they build and operate long-lived infrastructure. In addition, the regulatory requirements in the State of California are forcing agencies and businesses to develop a strategy to minimize their greenhouse gas (GHG) emissions, promote healthy living, create green jobs, and contribute positively to socio-economic qualities of life.

Although sustainability is becoming a key strategic issue for public sector and private consulting firms, our respondents reported that there is considerably more work ahead to leverage its potential. This is no surprise. Huge changes are needed to current, conventional business practices and models. Further, they cannot be implemented overnight. In this context, the *State of Sustainability 2017, Orange County* report is a baseline study, a starting point for further work.



CHAPTER 1

OUR RESPONDENTS

ASCE-OC's *State of Sustainability 2017* report is a detailed snapshot of what sustainability means for a range of firms, agencies and educational institutions. It also describes how sustainability concepts are used to identify and resolve their most-pressing *people, planet and profit* needs through capital as well as performance-improvement initiatives.

The survey is comprehensive: 17 individuals gave in-depth answers through an online survey during February and March 2017. The engineering, architecture and other professional respondents work in a range of fields, including transportation, energy, water, environment and education. They work for major architecture, engineering and construction (AEC) firms, small businesses, universities, non-profits, and many others.

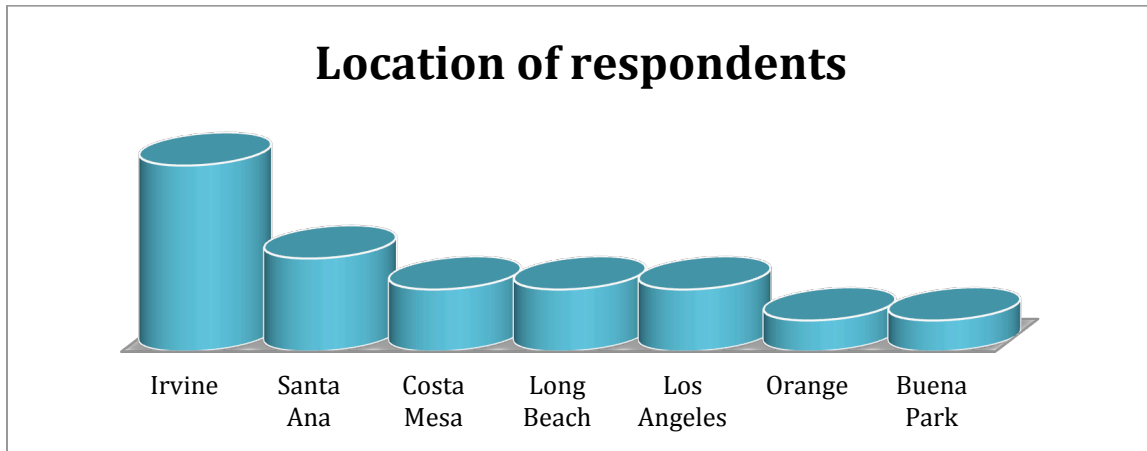
The information they provided offers valuable insights into the current extent and quality of performance of sustainability practices in OC. Future editions of the *State of Sustainability* report will build on these insights by capturing emerging trends and notable developments.

SCOPE

Our *State of Sustainability 2017* report has a wide reach covering most of the cities in Orange County, including some respondents who work both in OC & Los Angeles County offices. **Nearly a half** of respondents are Irvine-based executives, consultants and NGOs. The second biggest, **18%** are based in Santa Ana. Smaller percentages of respondents are from Costa Mesa, Orange, Buena Park, Long Beach and Los Angeles.

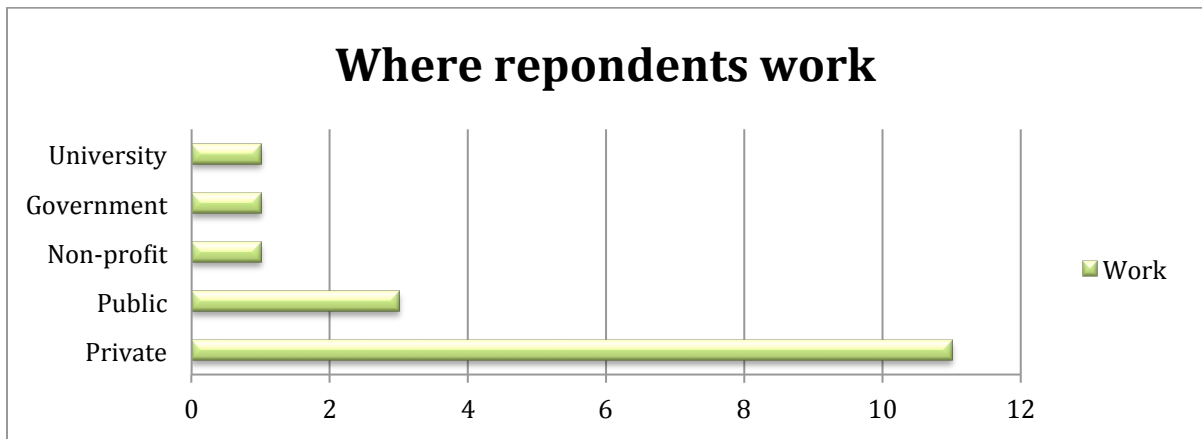


Q: Location of respondents:



It is important to note that the survey captures the wide range of people working in sustainability-related fields at public agencies, consulting firms, non-profits and private sector companies. **Sixty-five percent** work for private consultants/service providers, while **18 percent** represent public sector and 17 percent represent academia and NGOs.

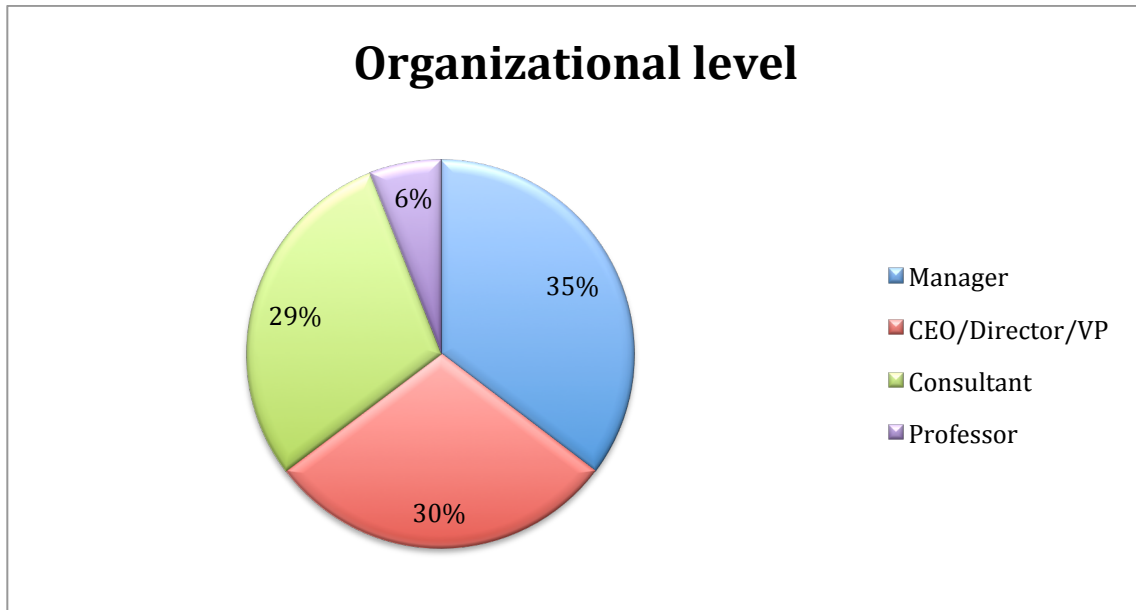
Q: Which of the following best describes where you work?



When asked their level within their organizational level **35%** said Manager, **30%** said CEO/Director/VP, another **29%** said consultants, and **6%** said academia.



Q: What best describes the level of your role?



The high professional level of our respondents means that the *State of Sustainability 2017* report provides a good understanding of how sustainability is understood, perceived and integrated into the administrative and operational concerns of organizations in Orange County.

CHAPTER 2

IMPORTANCE OF SUSTAINABILITY

ASCE defines sustainability as a set of environmental, economic, and social conditions - the "*triple bottom line*" - in which all of society has the capacity and opportunity to maintain and improve its quality of life indefinitely without degrading the quantity, quality or the availability of natural, economic and social resources.

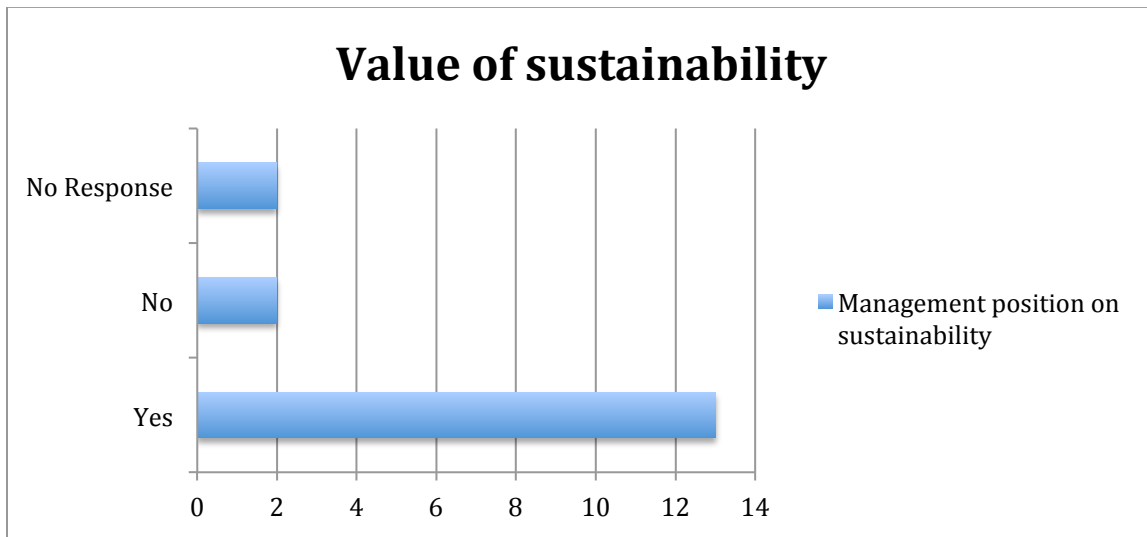
The practice of sustainability in agencies and firms in southern California is in various developmental stages. These stages range from rudimentary regulatory



compliance and public relations to increased integration of sustainability’s value proposition into strategic, tactical and operational management controls, as well as project and product designs. More recently, sustainability concerns and strategy have been elevated to senior management and board levels.

Any organization in which the top-level commitment to sustainability is lacking is going to struggle to effectively implement sustainability strategies and programs. Happily, we found that leaders in Orange County are increasingly recognizing the value of sustainability. Of our respondents, **76%** said their senior management was convinced of its value. Only **12%** of respondents answered this question negatively. The remaining **12%** were unsure of their senior management’s position. This last finding may suggest that even if sustainability is taken seriously at the top in their organization, it is not being effectively communicated down the line.

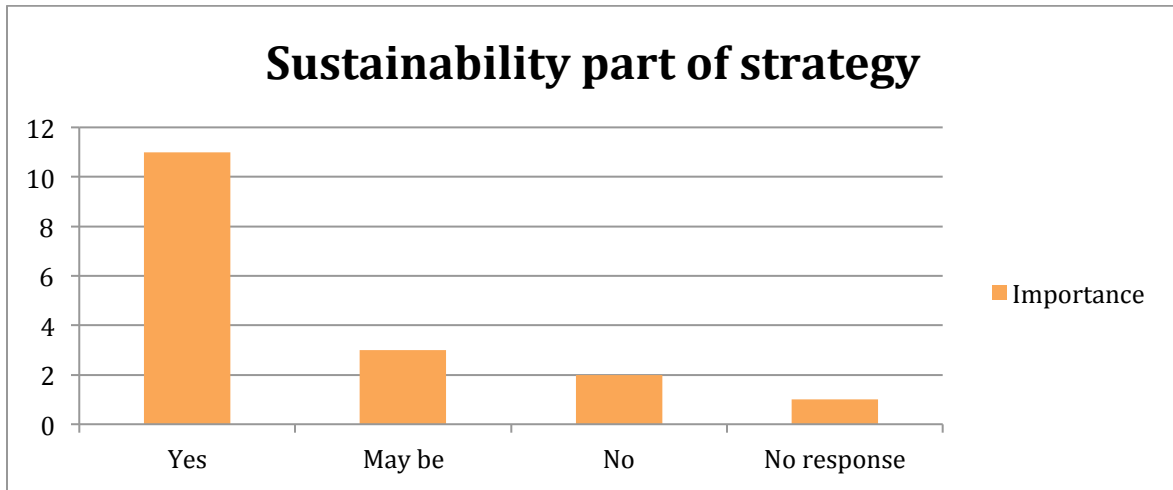
Q: Is your senior management convinced of the value of sustainability?



When we asked our respondents if sustainability is becoming an increasingly important part of their business strategy, we found that the majority said yes: **65%** of respondents answered in the affirmative, **12%** answered negatively, and **17%** said maybe.

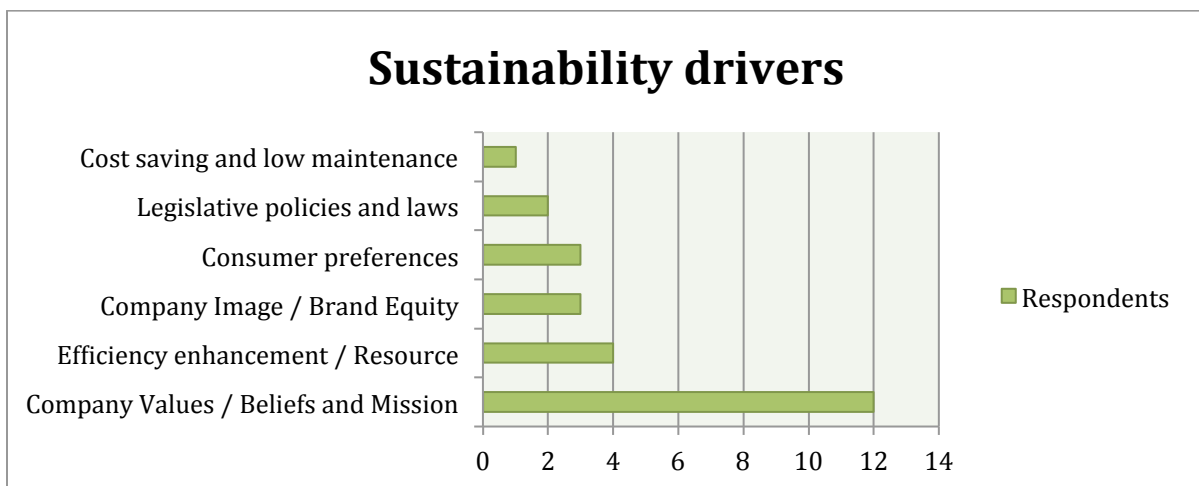


Q: Is sustainability becoming an increasingly important part of your business strategy?



We further examined the seriousness that organizations accord to sustainability with a question regarding the drivers for adopting sustainability as a business practice. Our survey showed that **71%** said company value and mission being a key driver, while **23%** said efficiency enhancement, **18%** company image, **18%** consumer preference, **12%** legal requirements, and **9%** cost saving.

Q: What are the drivers for adopting sustainability as a business practice at your organization? (Multiple answers)



For these two questions – “*What level of seniority is the head of the sustainability team*” and “*Who does the sustainability team ultimately report to?*” – we received a wide range of answers from “*president*” to “*associate*”. Our result indicates that mainly at engineering and professional services firms there are no established sustainability teams. At these firms sustainability is likely to be a project-based concern for which project managers or principal engineers are responsible.

CHAPTER 3

HOW DO YOU ORGANIZE SUSTAINABILITY

For firms to incorporate sustainability and innovation at either a relatively small project scale or at a comprehensive company level, these concepts need to be formally structured in such terms as: strategic, tactical and operational management controls; policies and processes; budget; staff and line organization; and, production and service-delivery capabilities. We received interesting answers for ‘*How many staff members are employed in your company to work exclusively on sustainability?*’ Except one respondent, all said they don’t have a professional dedicated only to sustainability.

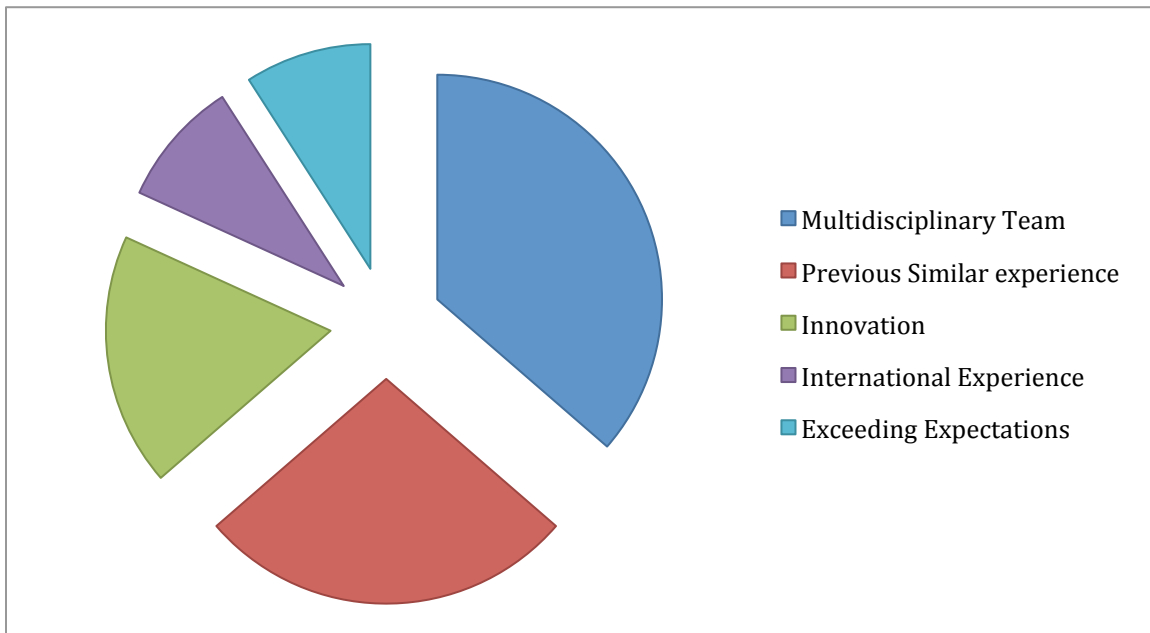
We also looked at the extent to which sustainability teams bring in external consultants for assistance. In response to the question ‘*Do you pay any external organization for advice/assistance with your sustainability strategy?*’ only one firm said “*yes*”. It seems most of the respondents’ organizations do not hire temporary consultants to help.

The two responses above are quite interesting. Even though most of the respondents see the value of sustainability most of their organizations do not have internal dedicated staff nor do they seek assistance from outside experts. This is an issue to explore further in future surveys. In the case of design firms it suspected that because they provide project-based services they may perceive a need for outside expertise only when a project scope requires it.



The next question was if they would to pick a consultant, what would they look for the most? **36%** said they value multidisciplinary team, **27%** said previous similar experience, **18%** want innovative team, and **9%** said international experience.

Q: What do you look for in an external consultant?



CHAPTER 4

PUT MONEY WHERE YOUR MOUTH IS

In today's increasingly competitive landscape, more and more companies are realizing that being sustainable is more than an environmental gesture. It makes long-term economic sense not only in terms of avoiding and controlling costly risks, but in reducing operating costs, increasing revenues, and gaining other tangible and intangible competitive advantages.

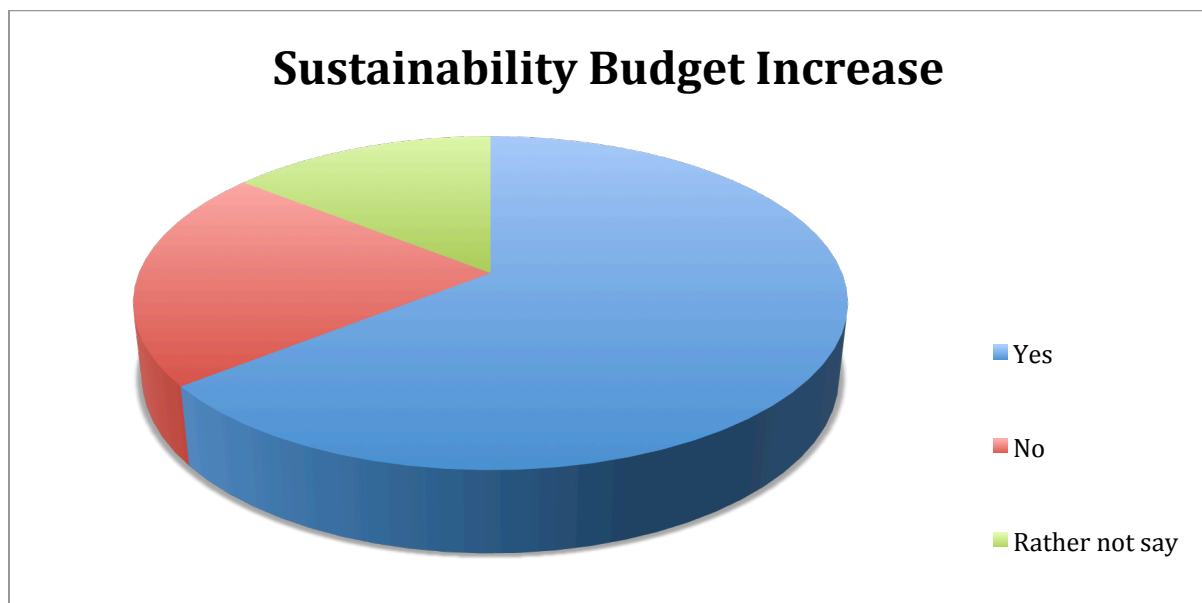
A good proxy for how seriously organizations take sustainability is, of course, how much money they are prepared to spend on it in anticipation of adequate returns-



on-investment. Unsurprisingly, we found a relatively small proportion of organizations with sustainability budgets.

However, when we asked respondents if sustainability budget is expected to increase in the coming years – **64%** of the respondents said “yes” and only **21%** said “no”. The rest **14%** said they would rather not say.

Q: Will your budget for sustainability initiatives increase in the near future?



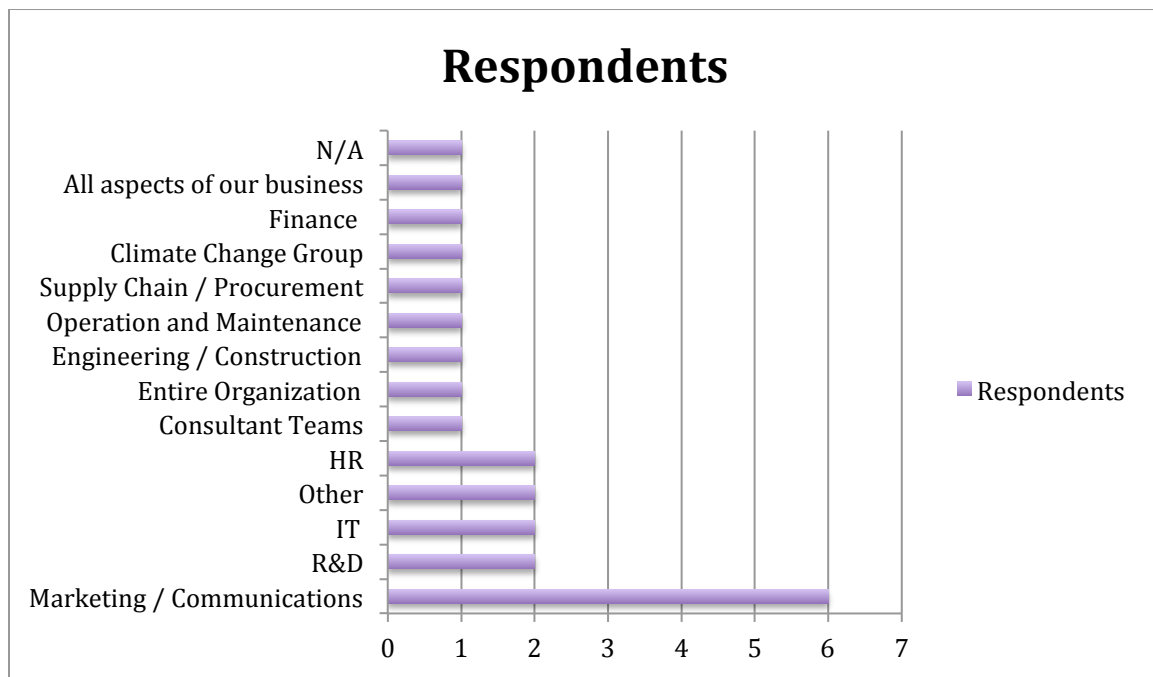
CHAPTER 5

MAKING IT REAL

Another big challenge we identified is who within a firm should lead sustainability initiatives and which function; practice or department benefits the most from the integration of sustainability into business practice. Thirty-five percent of respondents identified marketing/communications as the department most likely to be impacted by a sustainability strategy.



Q: Which departments/teams the sustainability strategy directly impact?

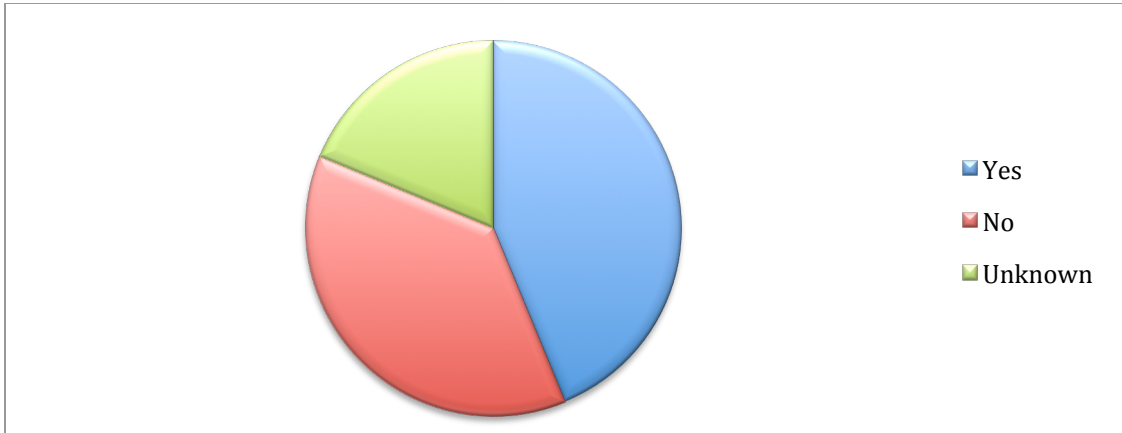


CHAPTER 6

EARNING THE RETURN

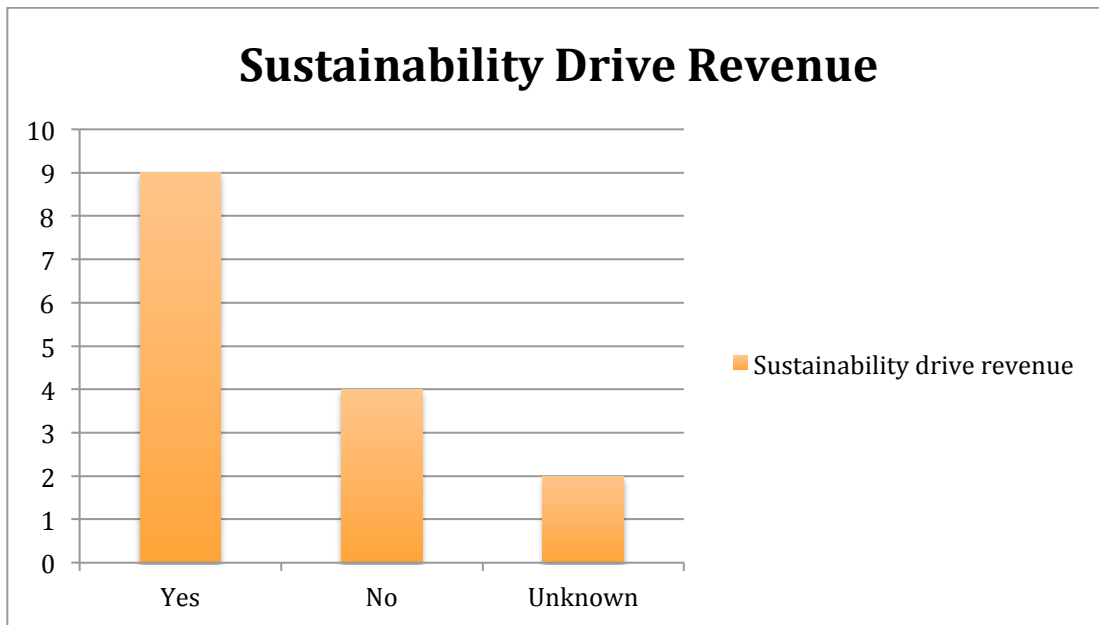
Are organizations seeing the benefit in financial terms? The answer from our respondents is, in most cases, “yes”. However, the margin is slim. In response to the question *“Are you able to link increased revenue/business to sustainability activities?”* 44% said yes, 38% said no and the rest 19% said unknown.





As expected, a higher proportion of respondents said that sustainability was driving savings for their organizations. We found out that **56%** said “yes” when asked if sustainability drives revenue in their firm or agency. However **25%** said “no” and **13%** answered “N/A”.

Q: Does sustainability drive revenue for your business?



We would like to note the engineering firm respondents indicated that projects with climate change elements, healthy communities, and active transportation are clearly linked to sustainability and that it helps with their bottom line.

CHAPTER 7

LOOKING OUTWARD AND FORWARD

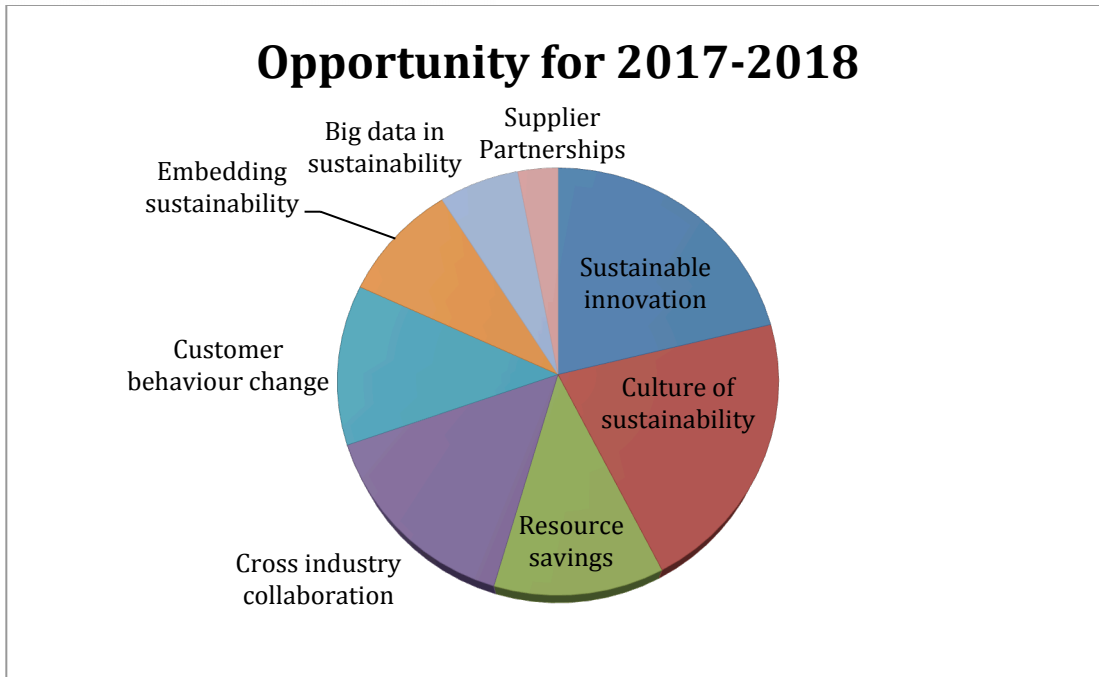
Sustainability in OC is mainly an evolving landscape for civil engineering professionals. However, most firms and agencies are at least aware of the risk of being only reactive to regulatory requirements and customers' needs. In contrast, new ideas and approaches are expected to yield dividends for sustainability-minded firms proactively engaged with a range of stakeholders.

CHANGING BEHAVIOR

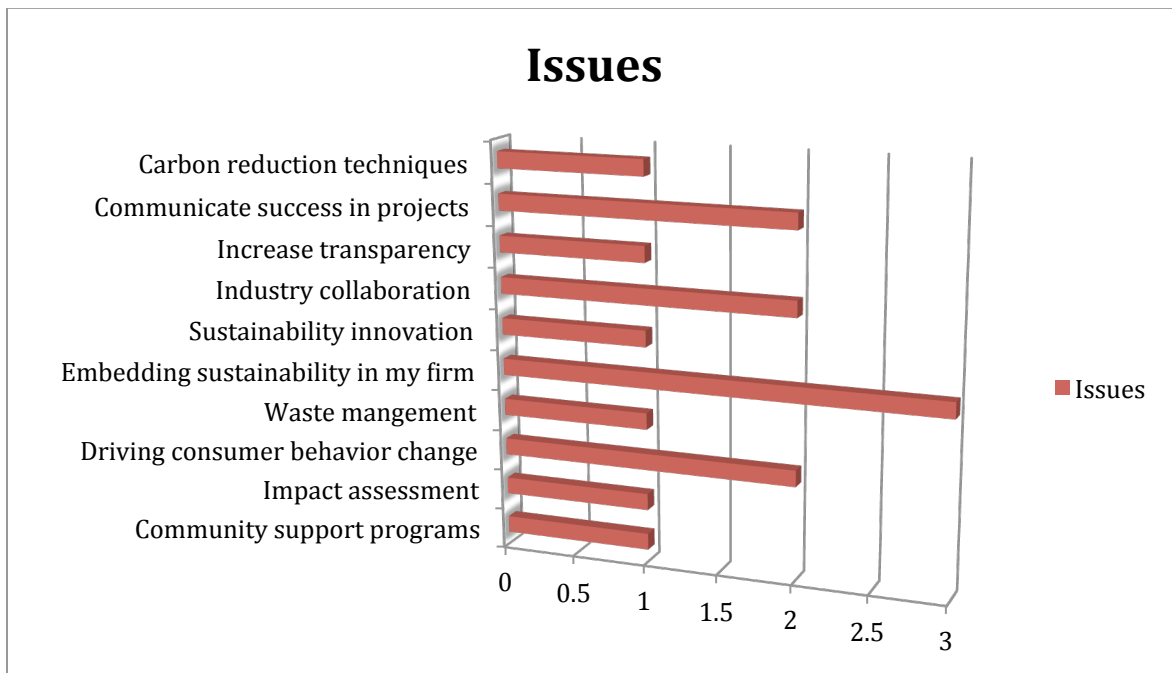
Based on survey findings, there seems to be an emphasis on making the internal organizational changes to better implement sustainability concepts. The primary priorities in the year ahead are in sustainability innovation (**21%**), culture of sustainability (**15%**), and resource savings (**12%**).

Q: Which one area holds the single most exciting opportunity for your organization in 2017-2018?





Q: How important are the below issues for your organization in 2017?



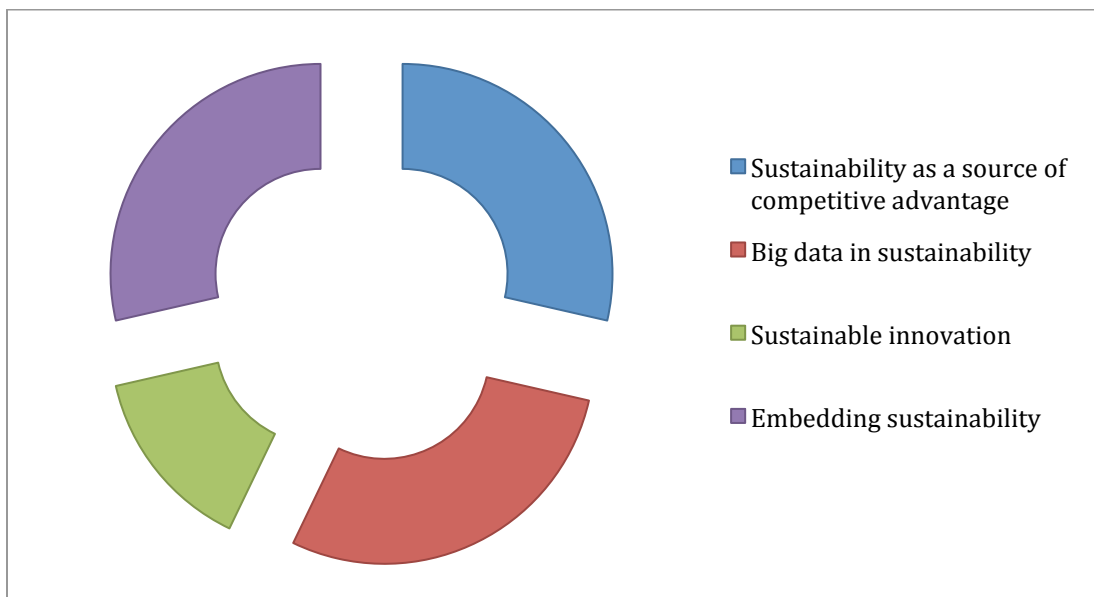
Overall, our results indicate that although organizations are slowly moving ahead on sustainability, the emphasis is still on internal embedding of principles and culture change.

FIVE YEARS AHEAD

When we asked respondents to look five years ahead, rather than one, the work of embedding sustainability seemed less of a priority, perhaps indicating that many organizations see this as something that can be achieved over the relatively short-term. In the half-decade ahead, the emphasis was firmly on three issues: sustainability as a source of competitive advantage; sustainable innovation; and, embedding sustainability (**29%**, **29%** and **29%** of respondents, respectively). Big data in sustainability was in fourth place with **13%** of respondents.

Our view is that our respondents have got the balance about right in looking at the priorities for the next five years. Sustainable innovation will be crucial, especially in the areas of improving current business practices and service offerings, as well as developing new ones. Achieving competitive advantage will surely be, at least in part, a result of sustainable innovation.

Q: How important are the below issues for your organization in the next 5 years?



CHAPTER 8

KEY TAKEAWAYS

Sustainability is emerging on the periphery of business issues as an important concern that is starting to reshape the rules of competition. Despite its simplicity, however, our findings indicate that sustainability is a concept people have a hard time wrapping their minds around, let alone succeeding in fully integrating into all aspects of their organization's activities

Events in 2017 are likely to make it a crucial year for sustainability and environmental protection in United States due to changes in regulatory requirements and federal funding levels for projects with sustainability elements. This *State of Sustainability 2017* report, therefore, comes at an important time. It tells us something about the level of preparedness of firms and agencies on a local level to rise to sustainability challenges.

In this respect it was encouraging that we found that:

- ✓ Leaders and senior management in Orange County are **increasingly persuaded of the value of sustainability.**
- ✓ Even where leaders are not fully engaged, sustainability is becoming increasingly important as a **strategic and tactical business concept to gain competitive advantages.**
- ✓ It is **gaining momentum** at all levels of corporate and municipal government.
- ✓ **Budgeting and spending** for sustainability efforts is expected to **increase** in the coming years.
- ✓ Sustainability is already **driving business revenues** directly or indirectly and it is becoming a key marketing theme.



- ✓ Continued emphasis on the role of sustainability in **healthy communities is a key to increased focus** on sustainability as a value element for design firms.
- ✓ Significant opportunities exist for firms in **sustainable innovation, resource conservation and cross-industry collaboration**, especially when working with clients that have a strong commitment to sustainability.

However, we also found that:

- Firms in OC are slowly beginning to understand that *“sustainable” is more than a synonym for “green”*. This is due to their understanding that sustainability can benefit their bottom lines. However, they are significantly **challenged when it comes to initiating effective actions**.
- The industry still finds it **difficult to quantify the benefits of sustainability**, especially for engineering firms that provide services only on project level for short period of time.
- **Sustainability is still perceived by many as an additional cost..** Because of the substantial regulatory requirements in California, leaders confuse environmental, health and safety compliance with sustainability. In doing so they regard sustainability as yet another costly compliance demand, as opposed to an opportunity to reduce operating costs and risks, while increasing revenues.
- The majority of the firms and agencies in OC **do not have sustainability staff** and will not bring one onboard unless there is a specific project requirement. Local small- and mid-sized firms, which dominate the region's economy, are unable to staff-up adequately to address more than mere regulatory compliance.
- **External consultants** that help firms and agencies with advanced sustainability services are not easy to locate in Orange County. Most of the sustainability professionals in OC work for facility owners and agencies or major AEC firms.



- There is still an emphasis on the early-phase need to somehow embed sustainability within the organization, implying that progress still needs to be made on convincing everybody of its value. However, our respondents also pointed out that there is a need for sustainable innovation, as part of the **switch away from legacy business models**. Many companies in OC tend to use **old-style top-down management**, unlike progressive firms that tend to be far more flexible and adaptable.
- Most of the **professionals work in silos**, and OC being spread out does not help, either. There are no industry groups in multi-disciplinary settings that support and develop sustainability professionals. Definitely, there is a lack in leadership in OC to promote an agenda defining and introducing proven systematic sustainability management concepts and practices.
- Educational institutions need to develop programs that **integrate sustainability in technical fields such as engineering and architecture**. Very few colleges in California teach the essential change management skillsets to design, introduce and effectively run comprehensive sustainability programs. Knowledge taught at universities should be easily applicable on project and program levels.

We see a myriad of opportunities for sustainability in the coming years. However, to tap into them we need to invest in developing skill sets, foster multidisciplinary learning and sharing settings, and earmark adequate financial resources. Recommendations that will promote the further adoption of sustainability efforts and programs in OC are:

- Showcase **successful case studies** of best practices and lessons learned.
- Focus more on education and effective communication. Increase **awareness of sustainability**; work in a collaborative, multi-disciplinary/multi-functional way; and work with multiple stakeholders to **maximize returns on investment**.



- **Conduct Cost/benefit analyses** on projects, including identifying tangible returns on investment to drive increased internal investment.
- **Inform clients and owners of the tangible and intangible values of sustainability** in the short and long terms to include well-being and health benefits.
- **Educate organizational leaders** on why it's important to be sustainable even when it may appear to cost more now, but will actually be far cheaper in consideration of total life cycle risks and costs.

Our broad conclusion is that firms and agencies in OC are making progress in incorporating sustainability into their strategies and business practices even though it is still mostly driven by external factors such as legal mandates and client requirements. However, there is **still a huge amount to do in moving from theory to practice** by fully operationalizing sustainability through an understanding of its business case and impacts on overall organizational performance. There is a need for **challenging the status quo** with open mindedness to solve some of the 21st Century challenges. This can best be done by, **leveraging multidisciplinary** approaches to constantly look for **synergies and win-win opportunities**. Grappling with these issues will be the key challenge in the years ahead!

