Fit for the future
17th Annual Global CEO Survey

Key findings in the engineering and construction industry
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Sector snapshot
Sector snapshot

Engineering and construction CEOs worry about raw material prices, capital markets and getting access to the right skills at the right price, but overall they’re still much more optimistic this year. That may be due to optimism over growth markets and the positive impact they expect to see from technological advances.
Sector snapshot

CEOs are much more confident this year

Engineering and construction CEOs have a much more positive outlook this year. 41% expect to grow over the next 12 months, up 10 percentage points from last year. That’s due in part to renewed confidence in the global economy, which 50% now expect to improve over the next 12 months, up from just 11% last year. But strong growth in new markets is a big part of the equation too – 26% see new geographic markets as the main opportunity to grow their business, almost as many as are counting on an increased share of existing markets.

Half of engineering and construction CEOs believe the global economy will improve over the next 12 months

Africa and the Middle East, Latin America are bright spots

More engineering and construction CEOs (12% vs. 1% of CEOs overall) rank Qatar as one of their most important growth markets over the next 3-5 years, presumably driven by the 2022 World Cup and other infrastructure. And more (14% vs. 5% overall) rank “other Africa” as a top growth market too. That puts it on a par with China for the sector – only the US and Germany are rated higher. When it comes to transactions, 23% of engineering and construction CEOs who say they’re planning M&A activity, a joint venture or a strategic alliance are looking to Africa in the next 12 months, right after Latin America, with 25%.
Sector snapshot

Raw material prices and workforce worries are looming

More sector CEOs (76%, vs. just 55% of CEOs overall) are concerned about high and volatile raw material prices. And the workforce is a matter of some concern too. Nearly one-third of sector CEOs are extremely concerned about access to key skills. And 70% worry about rising labour costs in high growth markets. So it’s surprising that a quarter of CEOs still see no need to change their talent strategies in response to transformative global trends.

Bribery and corruption are still a concern

Two-thirds of engineering and construction CEOs are concerned that bribery and corruption could slow down growth. Indeed, one-third are extremely concerned, compared to less than a quarter of CEOs overall.

Technology is changing the face of the engineering and construction sector

Like their peers across the sample, engineering and construction CEOs see technological advances as the top trend which will transform their business. Many called some aspect of technology the “next big thing” to impact their business, citing everything from new applications for formwork to techniques to better manage and utilise data. Most engineering and construction CEOs are optimistic about their ability to keep up—only 33% are concerned about the speed of technological change, compared to 47% overall.

The ‘next big thing’? Many CEOs say it’s technology.

And so are resource scarcity and climate change and urbanisation

Sector CEOs rate both trends more highly than do their peers across the overall sample. To respond, CEOs see a need for change across a wide range of business functions. And they’re more confident that some functions, like IT and risk management, are well-prepared to cope.

But there’s a big gap between aspiration and action. Less than a third say their company has already begun or completed a change programme in every area. For example, although 89% believe change in customer growth and retention strategies will be needed, just 21% already have programmes underway or completed. Similarly, 85% see a need to alter technology investments but only 25% are already doing so.
Confidence in growth

“I foresee 2014 globally as a year of erratic economic growth due to the financial squeeze and to the countries’ slow recovery from the crisis. But if the correct balance between the financial squeeze and the need for growth is found, I think 2015 and 2016 will see economic growth back on track.”

Marcelo Odebrecht, CEO, Odebrecht
Views on the economy are looking up

• 50% of engineering and construction CEOs believe the global economy will improve over the next 12 months, while just 9% think it will decline. That’s slightly more optimistic than the overall sample with 44%, and a dramatic reverse from last year, when just 11% expected an upturn.

• Whilst confidence is returning, the nature of the industry means it may be a while before improvements are reflected in reported results.

Q: Do you believe the global economy will improve, stay the same, or decline over the next 12 months?

<table>
<thead>
<tr>
<th>Year</th>
<th>Improve</th>
<th>Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>36</td>
<td>11</td>
</tr>
<tr>
<td>2014</td>
<td>50</td>
<td>9</td>
</tr>
</tbody>
</table>

Stay the same

51%

40%

Base: All respondents 2014 (Engineering and construction, 102); 2013 (Engineering and construction, 100)
Note: Don’t know/refused not shown.
Source: PwC 16th Annual Global CEO Survey 2013
PwC 17th Annual Global CEO Survey 2014
Confidence in 12 month growth is up too

- 41% of engineering and construction CEOs are very confident this year. That’s up ten points from last year and reflects strengthening faith in the economy.
- Looking out three years, confidence is slightly higher, with 45% of CEOs very confident of revenue growth.

Q: How confident are you about your company’s prospects for revenue growth over the next 12 months?

Base: All respondents 2014 (Engineering and construction, 102); 2013 (Engineering and construction, 100)
Note: Don’t know/refused not shown.
Source: PwC 16th Annual Global CEO Survey 2013
PwC 17th Annual Global CEO Survey 2014
But more than sixty percent of engineering and construction CEOs worry about a range of issues

- For engineering and construction CEOs, the top worry is how governments will respond to fiscal deficit and debt. If austerity measures cut into infrastructure spend, that could have a big impact on the industry.
- Last year, fears about the economy ranked #1.
- Capital markets continue to be a top worry, because if the sector’s customers can’t secure funding, they won’t build.

| Threat                                      | Concerned (%)
|---------------------------------------------|----------------
| Government response to fiscal deficit and debt burden | 78             
| High and volatile raw materials prices      | 76             
| Increasing tax burden                       | 74             
| Lack of stability in capital markets        | 74             
| Over-regulation                             | 70             
| Availability of key skills                  | 70             
| Rising labour costs in high-growth markets  | 70             
| Continued slow or negative growth in developed economies | 67             
| Bribery and corruption                       | 67             
| Slowdown in high-growth markets             | 66             
| High or volatile energy costs               | 65             
| Exchange rate volatility                     | 63             

Q: How concerned are you, if at all, about each of the following threats to your growth prospects? Top choices listed
Base: All respondents (Engineering and construction, 102)
Note: Respondents who stated ‘extremely’ or ‘somewhat’ concerned.
“I never tire of saying that debt is the greatest structural cost there is.”
Juan Béjar, CEO, Fomento de Construcciones y Contratas (FCC)

“One major global factor that can have an impact on us is a global potential liquidity constraint, in terms of available funding for projects, which could slow down our growth.”
Marcelo Odebrecht, CEO, Odebrecht

“Three or four years ago, the global pool of money available in the world for investment only saw growth potential in the emerging countries. In the last two years, however, the focus has shifted to the USA (as a result of the Federal Reserve’s expansionary monetary policy) and now Europe is also beginning to move into the spotlight, presenting itself as an alternative to the emerging countries.”
Juan Béjar, CEO, Fomento de Construcciones y Contratas (FCC)
Concerns around raw materials prices also stand out

- 76% of engineering and construction CEOs worry about high and volatile raw materials prices. Across the overall sample, just 55% of CEOs are concerned.
- That reflects the high proportion of costs bound up in building materials.
- Steel prices have been particularly volatile in recent years.
Governments could also have a big impact
That’s reflected in many of sector CEOs’ top concerns

**Debt and deficits**
As previously noted, engineering and construction CEOs are concerned about the ability of debt-laden governments to tackle soaring deficits.

Percentage who are concerned about government responses to debt and deficits **78%**

**Increasing tax burden**
Seven out of ten engineering and construction CEOs believe taxes could sidetrack growth prospects. That’s more than the overall sample.

Percentage who are concerned about an increasing tax burden **74%**

**Over-regulation**
Like their peers across the sample, engineering and construction CEOs are also concerned that too much regulation could put the brakes on growth.

Percentage who are concerned about over-regulation **70%**
And infrastructure gaps are a recurring theme too

47% of sector CEOs say they’re concerned that inadequacy of infrastructure could hurt growth

50% think it should be one of the government’s top 3 priorities

More feel the government is ineffective than effective in improving their country’s infrastructure (41% v 33%).

Q: How concerned, if at all, are you about inadequacy of basic infrastructure?

Q: Thinking about the role of Government in relation to the following outcomes, which three areas should be Government priorities, in the country in which you are based?

Q: How effective has Government been in achieving these outcomes? - Improving the country infrastructure

Base: All respondents (Engineering and construction, 102)
Source: PwC 17th Annual Global CEO Survey 2014
The US tops the list of growth markets, but the Middle East is important too

The USA and Germany stand out when it comes to growth this year. And while China comes in third, it’s actually much less important to engineering and construction CEOs than it is to CEOs across the overall sample. This probably reflects the difficulty international contractors have in competing in China. Countries in the Middle East are much higher on the list of growth markets for engineering and construction than for other industries. The United Arab Emirates, Saudi Arabia, and Qatar all make the sector’s top 10 list when it comes to growth markets.

Q: Which countries, excluding the one in which you are based, do you consider most important for your overall growth prospects over the next 12 months?

<table>
<thead>
<tr>
<th>Country</th>
<th>Engineering and construction</th>
<th>Overall sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>26%</td>
<td>30%</td>
</tr>
<tr>
<td>Germany</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>China</td>
<td>16%</td>
<td>33%</td>
</tr>
<tr>
<td>Brazil</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>UAE</td>
<td>9%</td>
<td>4%</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td>Qatar</td>
<td>8%</td>
<td>1%</td>
</tr>
<tr>
<td>India</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>UK</td>
<td>8%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Base: Overall sample, 1331; Engineering and construction, 102
Source: PwC 17th Annual Global CEO Survey 2014
Looking beyond the BRICs, Qatar & other middle Eastern countries are high on the list

Excluding BRICs from consideration, the US and Germany still lead. And the importance of Qatar, Saudi Arabia, and the UAE continues to stand out.

Middle East countries have significant wealth generated from oil revenues and are continuing to make ambitious infrastructure, commercial and residential investments.

Q: Thinking specifically about high growth markets beyond the BRICs, which three markets excluding Brazil, Russia, India, China and South Africa do you consider most important for your growth prospects over the next 3 to 5 years?

Base: All respondents (Overall sample, 1344 ; Engineering and construction, 102)
Source: PwC 17th Annual Global CEO Survey 2014

17th Annual Global CEO Survey – Key findings in the engineering and construction industry
PwC
Cost reduction heads the list of restructuring activities

Whilst the sector is increasingly positive around future growth, these responses highlight that cost reduction initiatives are still very much a focus.

This is unsurprising in a low margin sector where there is pressure to deliver.

Q: Which, if any, of the following restructuring activities do you plan to initiate in the coming twelve months?

- Implement a cost-reduction initiative: 63% (Engineering and construction), 64% (Overall sample)
- Enter into a new strategic alliance or joint venture: 49% (Engineering and construction), 44% (Overall sample)
- Outsource a business process or function: 18% (Engineering and construction), 25% (Overall sample)
- Complete a domestic M&A: 20% (Engineering and construction), 23% (Overall sample)
- Complete a cross-border M&A: 16% (Engineering and construction), 21% (Overall sample)
- "Insource" a previously outsourced business process or function: 17% (Engineering and construction), 14% (Overall sample)
- Sell majority interest in a business or exited a significant market: 19% (Engineering and construction), 13% (Overall sample)
- End an existing strategic alliance or joint venture: 11% (Engineering and construction), 8% (Overall sample)

Base: Engineering and construction 102, Overall sample, 1344
Source: PwC 17th Annual Global CEO Survey 2014
Transforming business
CEOs identified transformative global trends
Headed up by technological advances

Q: Which of the following global trends do you believe will transform your business the most over the next five years? (Top three trends engineering and construction CEOs named.)

69% Technological advances
59% Resource scarcity & climate change
56% Urbanisation

Base: All respondents (Total sample, 1344; Engineering and construction, 102).
Source: PwC 17th Annual Global CEO Survey

Engineering and construction CEOs told us which big trends they think will transform their businesses the most in the coming five years. More than two-thirds of them identified technological advances such as the digital economy, social media, mobile devices and big data.

More than half also pointed to resource scarcity & climate change and urbanisation. That puts resource scarcity & climate change and urbanisation higher on their list than most other sectors.
Sector CEOs see changes ahead in most areas – but relatively few have started

Q: To what extent are you currently making changes, if any, in the following areas?
Base: All respondents (Total sample, 1,344; Engineering and construction, 102)
Source: PwC 17th Annual Global CEO Survey 2014

- No need to change
- Recognise need/developing strategy/concrete plans to change
- Change programme underway or completed

Talent strategies
Organisational structure/design
Customer growth and retention strategies
Technology investments
Use and management of data and data analytics
R&D and innovation capacity
Approach to managing risk
M&A strategies, joint ventures or strategic alliances
Channels to market
Investment in production capacity
Supply chain
Corporate governance
Location of key operations or headquarters
E&C CEOs are concerned about developing a workforce that can cope

• 70% of engineering and construction CEOs are worried about the availability of key skills. That’s significantly more than across the overall sample.

• The same number – 70% – are also concerned about rising labour costs in high-growth markets.

• 37% of engineering and construction CEOs believe that creating a skilled workforce should be a government priority, but only 17% believe that the government has been effective.

• So many are taking actions themselves – 62% say a creating a skilled workforce is a priority.

Talent is one of the main engines of business growth. So one of the biggest issues CEOs face, as these huge demographic changes occur, is finding and securing the workforce of tomorrow – particularly the skilled labour they need to take their organisations forward.

For engineering and construction, that includes not just engineers, but workers in a wide range of skilled trades.
“The most complex change is undoubtedly developing international teams. This is one very important challenge: to re-programme the company’s DNA so that it is understood that every contract won is a training opportunity for the next contract, which could be signed anywhere in the world.”

Juan Béjar, CEO, Fomento de Construcciones y Contratas (FCC)
And with headcounts increasing, the urgency is growing too

More than half of engineering and construction CEOs say they plan to increase headcount this year. That’s more than twice as many as anticipate a decline.

The situation has improved since last year, when 27% expected lower staffing levels.
Only a minority are changing talent strategies in response

Engineering and construction CEOs recognise that they’ll need to refine their talent strategies to cope with a transforming world. But just 20% have completed or are currently making changes. That compares to 32% across the overall sample.

This may be because only 38% believe their HR departments are well-prepared.
Customers are getting more demanding

“Our most challenging stakeholder, however, is what we call the ‘client-user’. They are clients of the many new concessions we hold – surface trains, underground trains, sanitary facilities, sports arenas and so on – who are very demanding for good service as well as extremely impatient with waiting for developments in the new or existing infrastructure.”

*Marcelo Odebrecht, CEO, Odebrecht*
And while most agree customer strategies need to change, here too, few have started

Very few engineering and construction CEOs see no need to change their customer growth and retention strategies.

But relatively few – just 21% – have already started. That compares to more than a third of CEOs across the overall sample.

Q: In order to capitalise on the two-three global trends which you believe will most transform your business over the five years, to what extent are you currently making changes, if any, to customer growth and retention strategies?

- Recognise need to change
- Developing strategy to change
- Concrete plans to implement change programmes
- Change programme underway or completed

**Base:** All respondents (Overall sample, 1344; Engineering and construction, 102)

**Source:** PwC 17th Annual Global CEO Survey 2014
Leading through sustainability

89%

Engineering and construction CEOs who say it’s important for their company to measure and try to reduce their environmental footprint.
Climate change and resource scarcity is still high on the agenda

- The built environment accounts for a large percentage of CO2 emissions, and greener building is becoming increasingly important to the sector. That’s probably a big reason why engineering and construction CEOs rate climate change and resource scarcity higher than do CEOs across the overall sample.
Engineering and construction CEOs also focus on corporate citizenship more broadly

<table>
<thead>
<tr>
<th>Statement</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>It's important to us to ensure the integrity of our supply chain</td>
<td>96</td>
</tr>
<tr>
<td>It's important for us to promote a culture of ethical behaviour</td>
<td>95</td>
</tr>
<tr>
<td>It's important for us to measure and try to reduce our environmental footprint</td>
<td>89</td>
</tr>
<tr>
<td>Improving workforce and board diversity and inclusion is important for my business</td>
<td>87</td>
</tr>
<tr>
<td>Satisfying societal needs beyond those of investors, customers and employees, and protecting the interests of future generations is important to my business</td>
<td>82</td>
</tr>
<tr>
<td>Being seen as paying our “fair share” of tax is important</td>
<td>81</td>
</tr>
<tr>
<td>Measuring and reporting our total (non-financial) impacts contributes to our long-term success</td>
<td>73</td>
</tr>
<tr>
<td>The purpose of business is to balance the interests of all stakeholders</td>
<td>69</td>
</tr>
</tbody>
</table>

Q: To what extent do you agree or disagree with the following statements?

Base: All respondents (Overall sample, 1344; Engineering and construction, 102)
Note: Respondents who stated ‘agree strongly’ or ‘agree somewhat’

Engineering and construction CEOs are taking sustainability seriously – 95% agree that it’s important to promote a culture of ethical behaviour, and even more feel it’s important to ensure the integrity of the supply chain (96%).

Nearly nine out of ten also believe it’s important to measure and reduce their environmental footprint, more than across the overall sample (89% vs. 81%).
About PwC’s 17th Annual Global CEO Survey

We surveyed 1,344 business leaders across 68 countries around the world, in the last quarter of 2013, and conducted further in-depth interviews with 34 CEOs.

Our overall survey sees a leap in CEOs’ confidence in the global economy – but caution as to whether this will translate into better prospects for their own companies. The search for growth is getting more and more complicated as opportunities in both developed and emerging economies becomes more nuanced, leading CEOs to revise the portfolio of overseas markets they will focus on.

In ‘Fit for the future: Capitalising on global trends’, we also explore three forces that business leaders think will transform their business in the next five years: technological advances, demographic changes and global economic shifts. We show how these trends, and more importantly the interplay between them, are creating many new – but challenging - opportunities for growth through: creating value in totally new ways; developing tomorrow’s workforce; and serving the new consumers.

We also show how, in responding to these trends, CEOs have the opportunity to help solve important social problems.

In short, the demands being placed on business leaders to adapt to the changing environment are increasing exponentially; CEOs are having to become hybrid leaders who can successfully run the business of today while creating the business of tomorrow.

This sector key findings report takes a closer look at responses from engineering and construction CEOs. It is based on 102 interviews, conducted in 42 countries around the world. We also cite more in-depth conversations with two engineering and construction CEOs.
Acknowledgements
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Juan Béjar, CEO, Fomento de Construcciones y Contratas (FCC)
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Download the main report, access the results and explore the CEO interviews from our 17th Annual Global CEO Survey online at www.pwc.com/ceosurvey