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Growth reimagined
Chemicals industry summary

Key industry findings from the 14th Annual Global CEO Survey

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The global economy is still recovering from the worst economic crisis in 75 years, as many countries grapple with the aftermath of the recession. So we set out to uncover how chief executive officers (CEOs) are approaching growth during a time when sustainable economic growth is far from certain. We surveyed 1,201 business leaders in 69 countries around the globe in the last quarter of 2010, and conducted further in-depth interviews with 31 CEOs.

The PwC 14th Annual Global CEO Survey documents a surprising level of confidence in this environment; chief executives are nearly as confident of growth this coming year as they were in the boom years before the crisis. The survey also revealed *where* CEOs see growth coming in 2011, and *how* they are going to achieve it. In 'Growth reimagined: Prospects in emerging markets', we show how CEO confidence is being driven by targeted investments in particular emerging markets – often far from home.

We also identified three strategic focal points to achieve that growth: innovation, talent and a shared agenda with government. These three business imperatives have always had their place on the CEO agenda. But now, with their worst fears about the crisis behind them and an emerging recovery ahead, CEOs are adopting new attitudes and approaches, tailored to dealing with the issues of the multi-speed global recovery that they hope is underway.

This is a summary of the findings in the chemicals sector, based on interviews with 59 chemicals sector leaders in 27 countries. To explore the full results from the 14th Annual Global CEO Survey, please visit www.pwc.com/ceosurvey

Chemicals CEOs see a particularly bright future for their sector: 29% are somewhat confident, and 66% are very confident, of revenue growth over the next three years. All this in a sector that was one of the hardest hit during the downturn.

Why such an optimistic outlook? One reason is greater efficiency. Many chemicals companies aggressively cut costs during the slump in demand: 85% of chemicals CEOs report that they have implemented a cost-reduction initiative in the past 12 months. Their companies are emerging leaner and meaner.

They've changed strategies, too. A full 82% of chemicals CEOs say they've altered course in the past two years – and 29% believe the change has been 'fundamental'.

Uncertainty about economic growth is the predominant reason for steering in a different direction. Demand for chemicals industry products generally follows GDP levels and, though the global economy has improved, nearly three-quarters of chemicals CEOs are still worried about uncertain or volatile economic growth hurting their businesses. But many chemicals CEOs are also adopting new strategies in response to shifts in customer demand and industry dynamics – and all these factors are ultimately leading them towards emerging markets.

Targeting emerging markets

The International Monetary Fund predicts that growth rates for 2011 will still be sluggish for developed economies. But emerging markets are booming[1] – and providing huge opportunities for chemical producers. Most chemical companies have already set up shop in key emerging markets; a higher percentage of chemicals CEOs say they already have operations in Asia and Eastern Europe than in the survey population as a whole. And 69% of chemicals CEOs agree or strongly agree that emerging markets are more important to their company's future than developed markets, compared to 59% of CEOs in the total sample.

Chemicals CEOs are looking to China – 58% rank it among their top three countries driving future growth, and 49% place it at the top of the list for sourcing needs, too.

Chemicals CEOs see China as key for both growth and sourcing

The majority of CEOs, regardless of the sector in which they operate, have high expectations of Latin America and Asia – particularly China. Thirty-nine percent of CEOs in the full sample named China one of the three foreign countries most important to their company's growth.

But chemicals CEOs accord China even greater weight: 58% rate it among their top three countries for growth. Its significance is equally striking from a production perspective. Forty-nine percent of chemicals CEOs see China as one of the most important countries for their future sourcing needs, compared to 37% of the entire sample.

Global strategies for dealing with macro risks

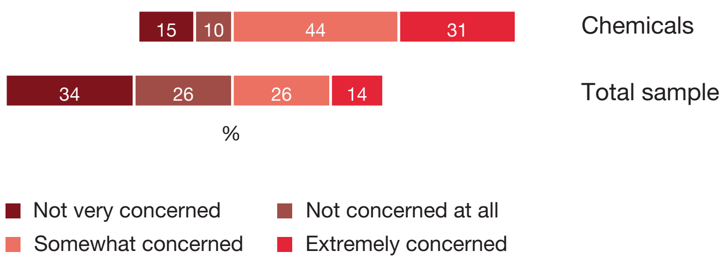
It's clear that with so many chemicals CEOs – and, indeed, those in all industries – turning to emerging markets for growth, the competition is likely to be fierce. In China, for example, revenues are rising steadily – but margins are falling.[2] So chemical CEOs will need to ensure their companies have efficient operating models and processes. They'll also need to make sure they have access to raw materials, and the energy to process them, reliably and at a reasonable cost – and dealing with these global risks is no easy feat.

A full 66% of chemicals CEOs (versus just 34% of the total sample) tell us they're concerned that scarcity of natural resources could put the brakes on growth. Most are already responding: two-thirds of chemicals CEOs intend to invest more effort in securing natural resources over the next three years. And about half now include natural resource-related factors explicitly in strategic planning and risk management scenarios.

Chemicals CEOs are also much more concerned than other CEOs about energy costs – which is not surprising, given the energy-intensive nature of chemicals production (see Figure 1). That's why they are more likely to have plans in place to mitigate related risks than are CEOs across the sample as a whole. And many are focusing their companies' research efforts on energy reduction, too.[3]

Figure 1: Chemicals CEOs are especially worried about energy costs

Q: How concerned are you about the following potential business threats to your growth prospects (energy costs)?



Base: All respondents (Total sample, 1,201; Chemicals, 59)
Source: PwC 14th Annual Global CEO Survey

1 'IMF World Economic Outlook' (October 2010).
2 'Where are the profits?' The Economist (11 December 2010).
3 'Chemicals Sector Climate Change Responses', PwC (2010).

A full 81% of chemicals CEOs are increasing their commitment to generating innovations and safeguarding intellectual property.

Putting customers at the centre of innovation

The chemicals industry, which is sometimes called the world's first science-based industry, has long been at the forefront of innovation. Nonetheless, in past years, chemicals CEOs have typically concentrated on better penetration of existing markets as the key way to drive growth. Now they're more likely to be focusing on stimulating the innovations needed for new products and services. This trend is common to CEOs in many industries, but it's even more pronounced in the chemicals sector.

Most chemicals CEOs are confident their innovations will succeed: 85% believe new products and services will produce significant new revenue streams (see Figure 2). But that will mean getting to know the customers of key markets very well.

Making innovation local

Companies operating globally will need to innovate to ensure they can meet the needs of local markets. But to get closer to customers, some CEOs are shifting the development process closer to customers – literally. Chemicals CEOs are particularly likely to think the majority of the innovations their companies make will originate in markets other than the countries in which they themselves are based.

Figure 2: Chemicals CEOs believe innovation will bring competitive advantages and new revenues

Q: To what extent do you agree or disagree with the following statements about your expectations regarding your company's innovation over the next 3 years?

Base: All respondents (Chemicals, 59)
Note: Neither agree nor disagree excluded. No chemicals CEOs replied "disagree strongly" to either question.
Source: PwC 14th Annual Global CEO Survey

Chemical companies are helping customers operate more sustainably

Sixty-four percent of all CEOs think that developing environmentally-friendly products or services is an 'important part' of their companies' innovation strategies. The numbers are even higher in the chemicals sector (see Figure 3). Many chemicals CEOs believe their companies can play a major role in fighting climate change by researching and developing products that help their customers reduce their carbon footprint.

As one example, chemical products are critical in reducing the carbon footprint of buildings, through the use of insulation and a wide range of other applications.[4] The industry is also starting to use Life Cycle Analysis (LCA) – a process which looks at the emissions generated during the entire life cycle of a product, from extraction to manufacture, transportation, usage and finally recycling or disposal – to document the positive impact its products can make on the carbon footprint of customers.

Opening innovation to supply chain partners and beyond

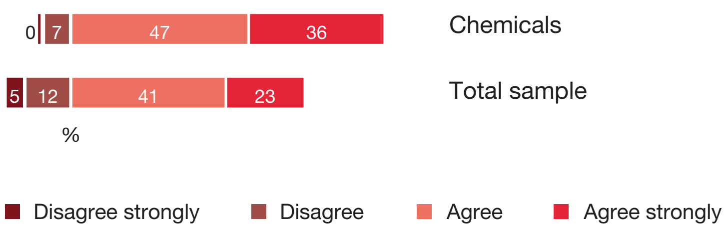
The chemicals industry already has a history of working with supply chain partners in the search for innovation: 36% of chemicals CEOs this year expect that the majority of their innovations will be co-developed with external partners. The recent appointment of Paul-Joël Derian, group vice-president for research and development at Rhodia, as the chairman of SusChem (the European Technology Platform for Sustainable Chemistry) is another sign of this trend. In a press release, Suschem described his appointment as a marker of its 'increasing determination to accelerate the adoption of innovation along the chemical value chain by enhanced collaboration with partners'. SusChem aims to lead large innovation programmes with downstream industries in the European Union, and similar programmes are happening in other parts of the world as well.

Innovation communities are also gaining momentum on the chemical manufacturing scene. Chemelot, an open innovation community in the Netherlands, is one of the largest chemicals industry parks in Europe. It combines factories and a research campus at one location. Seventy companies, from start-ups to service providers, take advantage of access to raw materials and peripheral services – and the community uses Twitter and Facebook to maintain connectivity.

Individual companies are turning to open innovation to boost R&D productivity, too. DSM sees open innovation as key to its programme to boost innovation performance.[5] Its range of open innovation activities runs the gamut from venture capital investments and partnerships with early-stage companies to licensing, joint ventures and strategic partnerships.

Figure 3: Chemicals CEOs are focusing innovation efforts on developing environmentally-friendly products

Q: To what extent do you agree or disagree with the following statements about your expectations regarding your company's innovation over the next 3 years: "Developing environmentally-friendly products or services is an important part of my company's innovation strategy"?



Base: All respondents (Total sample, 1,201; Chemicals, 59)
Note: 'neither agree nor disagree' and 'don't know/refused' excluded
Source: PwC 14th Annual Global CEO Survey

[4] 'Chemicals Sector Climate Change Responses', PwC (2010).
[5] 'Achieving the next level of excellence in innovation', DSM Innovation Center (October 2010).

Bridging global skills gaps

The 'war on talent' was declared more than 10 years ago, but few CEOs are prepared to declare victory. Given that 82% of chemicals CEOs have changed strategies in the past two years, their companies' talent needs are changing, too. And with emerging markets representing a key strategic driver, talent strategies will naturally shift to address that theme.

So talent is now at the top of the CEO agenda for 2011. More chemicals CEOs expect to add jobs in 2011 than did so last year – but three-fifths of chemicals CEOs believe they're facing a limited supply of skilled candidates. For the chemicals industry, large numbers of retiring older workers will add to the pressure. Filling skills gaps begins with companies making themselves more attractive to employees, and devising a global strategy for the development and deployment of personnel. Identifying under-utilised pools of talent is another means of filling key roles. But all goes for nought if the firm can't retain top talent.

Three-fifths of chemicals CEOs say there is a limited supply of skilled candidates

Thinking globally and locally

In high-growth markets talent shortages are critical. Businesses are stepping up overseas deployments of key employees in response: 64% of chemicals CEOs are already changing their people strategies to deploy more staff internationally. It's not always easy, though. Close to half of all chemicals CEOs (and a similar number of CEOs in other sectors) are encountering difficulties deploying experienced employees in other countries.

Global deployments are a first step to address shortages as company footprints change, but most CEOs know they need to nurture local talent in the long run.

Casting wider nets in the global talent pool

Some companies are turning to women as an under-utilised source of talent. For example, in South Korea, foreign multinationals have gained advantages 'by aggressively hiring an excluded group, women, in the local managerial labour market', according to research from the Harvard Business School.[6] Yet only 14% of chemicals CEOs are planning to make 'significant' changes to their human resources policies to attract and retain more female employees.

Older workers are another under-utilised pool of talent. In many countries, populations are ageing and Baby Boomers are becoming eligible for retirement. More than half of chemical CEOs are concerned about the impact that pending retirements will have on their workforce. Yet only 44% expect to change their workforce strategies in response – and only 17% anticipate changing course 'significantly' (see Figure 4).

[6] J. Siegel, L. Pyun, and B.Y. Cheon, 'Multinational Firms, Labour Market Discrimination, and the Capture of Competitive Advantage by Exploiting the Social Divide', Harvard Business School working paper (2010).

And while chemicals CEOs are less likely than their peers in other sectors to anticipate difficulties in recruiting and retaining younger employees – the mercurial Generation Y workers who have their own distinct expectations about their relationships with employers – they'll need to succeed with these future employees to ensure growth. However, only 42% of chemicals CEOs plan to change the way younger employees are incentivised as a measure to improve recruitment.

These pools of talent are particularly vital in thinner talent markets where skills are scarcer. Successfully attracting, developing, deploying and retaining people from different backgrounds also helps to stimulate greater creativity – which is a key driver of innovation. But harnessing such talent requires specific strategies. You can't just pay lip service to them.

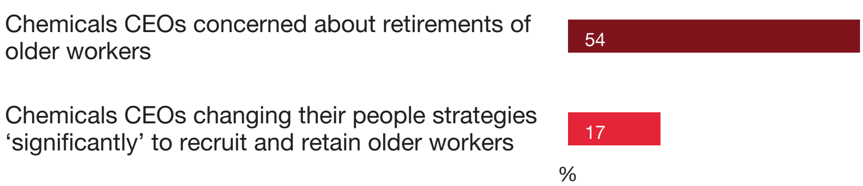
Necessity is the mother of retention

Many employers made concerted efforts through the recession to hold onto as many qualified people as possible. Voluntary turnover declined sharply in mature economies, but history tells us rates will rise as economies recover. And, in hot talent markets, turnover rates can be high: turnover in China can reach 20-40% in some sectors, compared to rates that are typically less than 10% in the US or UK.

Recognising this trend, many CEOs are changing their people strategies to improve employee engagement and retention. Fifty-nine percent of chemicals CEOs plan to use 'non-financial' rewards, for example (although that's slightly less than the overall average of 65%). These approaches can take many forms, but often involve training and mentoring programs, with a closer focus on career trajectories. Instilling a deeper sense of ownership by spreading employee stock ownership more widely is another important retention tool for CEOs.

Figure 4: More than half of chemicals CEOs are concerned about older workers retiring, yet relatively few are changing their strategies significantly in response.

Q: Considering the talent required for the success of your business over the next three years, what are the key challenges you expect to face? To what extent do you plan to change your people strategy to increasingly recruit and attempt to retain older workers?



Base: All respondents (Chemicals, 59)
Source: PwC 14th Annual Global CEO Survey

Nearly three-quarters of chemicals CEOs say they will actively support policies that promote 'good growth' that is economically, socially, and environmentally sustainable.

Achieving shared priorities with government

While CEOs need to focus on their own growth plans, many also see a common purpose with governments with regard to social well-being at home and abroad. Constrained public budgets will force difficult decisions on governments; CEOs are keen to protect shared priorities that are critical to business growth.

Nearly three-quarters of chemicals CEOs (and a similar ratio of CEOs in other industries) intend to actively support new government policies to promote 'good growth' that is economically, socially and environmentally sustainable. It will take both political will and private sector commitments, as many CEOs told us. This means that corporate and government leaders have a shared agenda.

Chemicals CEOs are committed to certain key areas, like creating and fostering a skilled workforce and maintaining the health of that workforce – and they're less likely to see these areas as government priorities than CEOs in other industries. That may reflect the strength of their involvement. For example, in Europe the chemicals industry is involved in the healthy ageing innovation partnership, an effort to help address health challenges by innovating across the value chain.[7]

Taking the lead to develop a workforce with the skills to drive innovation

More than half of all chemicals CEOs (and a similar proportion of CEOs in other industries) plan to work with government and the education system to improve the talent pool. The chemicals sector has already begun to address the challenge. The European Chemical Industry Association (CEFIC) recently released a report on the key skills needed for innovation in the European chemicals industry. According to the report: 'The next crucial step is to ensure an effective collaboration between the chemical industry and academia, and to respond to the identified needs through tailored, concrete actions. Issues such as integration of business and related skills in scientific curricula, or broadening the scientific multidisciplinary skill base have to be addressed in order to ensure innovation can successfully complement research.'[8]

In the UK, theory is being put into practice. The National Skills Academy: Process Industries is an employer-led centre of excellence that was launched to address skills and training needs throughout the chemicals, polymer and pharmaceutical sectors. The Academy's mission is to provide UK organisations with access to high-quality training to boost efficiency and productivity throughout the workplace.

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7 'Chemical industry ready to speed up Innovation Union in Europe', European Chemical Industry Council (CEFIC) (October 2010), accessed at http://www.cefic.be/templates/shwNewsFull.asp?HID=1&NSID=776

8 'Skills for Innovation in the European Chemical Industry', CEFIC (2011), accessed at http://cefic.org/Files/Publications/Skills-for-Innovation-in-the-European-Chemical-Industry.pdf

Globalisation reimagined

CEOs' shift towards a targeted strategy signals the advance of globalisation – but it may diverge from how it's looked in the past. Companies are not only affected by globalisation; the actions they take will shape it. That 73% of chemicals CEOs support 'good growth' is recognition that they would like to see globalisation evolve in a way that links economic growth and social development. Good growth is a long-term path towards value creation that creates lasting prosperity for both shareholders and society.

Many CEOs understand that such efforts help attract and retain a strong workforce. And employees who believe their efforts are helping society as well as their company are likely to be more committed to the research efforts that drive innovation. For chemicals CEOs innovation is hands-down the best way to achieve sustainable growth.

Chemicals CEOs are optimistic about the outlook: a higher percentage than in the total sample believe that business and government partnerships will be more effective at mitigating key global risks like climate change, terrorism and financial crises in the future. And the industry is already using its strength in R&D to make a difference, as 'Chemicals Sector Climate Change Responses', the recent supplement to our report 'Different Shades of Green: The Outlook for Industrial Products Companies Post Copenhagen', shows.[9] It details some of the efforts chemicals companies are making to combat climate change as just one example of the ways in which they're helping create broader value for society, value that extends beyond the profits and jobs they create, and the products and services they provide.

[9] 'Different Shades of green: The outlook for Industrial Products companies post Copenhagen', PwC (2010); and 'Chemicals Sector Climate Change Responses', PwC (2010). Both are available for download at www.pwc.com/chemicals

Our CEO Survey coverage includes a full report, in-depth interviews, and a visual story of the data. Explore the entire story in the full report. Simply download at www.pwc.com/cesosurvey. To view other publications and learn about our Chemicals industry practice, visit www.pwc.com/chemicals.

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