



Appetite for change

Global business perspectives on tax
and regulation for a low carbon economy

Contacts

**Global Leader,
Sustainability & Climate Change Tax**
Mark Schofield
mark.schofield@uk.pwc.com
+44 20 7212 2527

Australia
Michael Bona
michael.bona@au.pwc.com
+61 3 8603 3065

Belgium
Maarten Tas
maarten.tas@be.pwc.com
+32 2 710 7402

Brazil & South America
Raimundo Christians
raimundo.christians@br.pwc.com
+55 11 3674 2452

Canada
Leanne Sereda
leanne.a.sereda@ca.pwc.com
+1 403 509 7586

Central & Eastern Europe
Peter Burnie
peter.burnie@rs.pwc.com
+381 11 330 2100

China
Gary Chan
gary.chan@cn.pwc.com
+ 86 21 2323 3331

France
Guillaume Glon
guillaume.glon@fr.landwellglobal.com
+33 1 5657 4072

Rémi Montredon
remi.montredon@fr.landwellglobal.com
+33 1 5657 4154

Germany
Frank Schmidt
frank.r.schmidt@de.pwc.com
+49 69 9585 6711

Felix Planitz
felix.planitz@de.pwc.com
+49 69 9585 6885

India
Ketan Dalal
+91 22 6689 1422
ketan.dalal@in.pwc.com

Indonesia
Anthony Anderson
anthony.j.anderson@id.pwc.com
+62 21 52890642

Ireland
Ronan MacNioclais
ronan.macnioclais@ie.pwc.com
+353 1 792 6006

Italy
Valentino Guarini
valentino.guarini@it.pwc.com
+39 02 91605807

Japan
Jun Takashima
jun.takashima@jp.pwc.com
+81 3 5251 2574

Korea
Sang-Keun Song
sang-keun.song@kr.pwc.com
+82 2 709 0559

Luxembourg
Wim Piot
wim.piot@lu.pwc.com
+352 49 48 48 1

Mexico
Arturo Mendez
arturo.mendez@mx.pwc.com
+52 33 3648 1013

Middle East
Dean Rolfe
dean.rolfe@ae.pwc.com
+971 4 304 3100

The Netherlands
Fred Klaassen
fred.klaassen@nl.pwc.com
+31 10 407 5439

Singapore
Sunil Agarwal
sunil.agarwal@sg.pwc.com
+65 62363798

South Africa
Kyle Mandy
kyle.mandy@za.pwc.com
+28 11 797 4977

Chaya Lakhani
chaya.lakhani@za.pwc.com
+27 31 250 3766

Spain
Pablo Azcona
pablo.azcona@es.landwellglobal.com
+34 96 303 2032

Araceli Zatarain
araceli.zatarain@es.landwellglobal.com
+34 96 303 20 48

Sweden
Lars Henckel
lars.henckel@se.pwc.com
+46 8 555 333 26

Switzerland
Markus Hertel
markus.hertel@ch.pwc.com
+41 58 792 94 45

Dr. Niklaus Honauer
niklaus.honauer@ch.pwc.com
+41 58 792 59 42

UK
Mark Schofield
mark.schofield@uk.pwc.com
+44 20 7212 2527

US
Matthew Haskins
matthew.haskins@us.pwc.com
+1 202 414 1570

Foreword



Mark Schofield

Global Leader, Sustainability & Climate Change Tax
PricewaterhouseCoopers LLP (UK)

This PricewaterhouseCoopers report examines attitudes in the international business community towards environmental regulation, legislation and taxes. I believe that this is the most comprehensive survey of its kind yet completed, because of the number of participants and the range of industries and nationalities represented. Together they create a unique insight into corporate thinking.

In almost 700 interviews, conducted in 15 countries, executives shared their perspectives on the following:

- the impact of climate change;
- the government's role in protecting the environment;
- which environmental policy tools they prefer and why; and
- the ingredients necessary for a global climate change deal.

Climate change is testing the ability of the world's leaders to develop effective environmental policies through consultation. Many, in and out of government, are frustrated with the pace of negotiations, as evidenced during the challenging summit in Copenhagen, but recriminations and defeatism are distractions. The message from business leaders in this survey is clear: focus on expanding the baseline commitments from (and post-) Copenhagen into straightforward policies that are applied consistently over the long term.

Our research indicates what business leaders think, and what they are looking for, from government and environmental policies. This creates a platform for constructive dialogue between business and government, which is ultimately what business really wants. For those struggling to find a global consensus, there is plenty of hope. While companies of different sizes and sectors do emphasise different concerns, attitudes around the world are strikingly similar. A large majority of businesses, for example, are potential supporters of incentives, emissions trading schemes and carbon taxes. Political leaders who activate this potential have a good chance of creating historic solutions to the unprecedented challenges facing our planet.

Many executives believe that current government policies are not sufficiently coherent or effective. But they remain ready to support policies that are consistent, clearly linked to saving the environment, and developed in consultation with the private sector, so as to be effective when implemented.

More cooperation among governments, international institutions and businesses will be required to preserve the environment so that subsequent generations can prosper. The findings here and on pwc.com/appetiteforchange are intended to encourage dialogue, identify opportunities for collaboration and policy optimisation, and help governments and international institutions understand the views of businesses.

I hope you find reading this report as interesting and thought-provoking as we have found researching it.

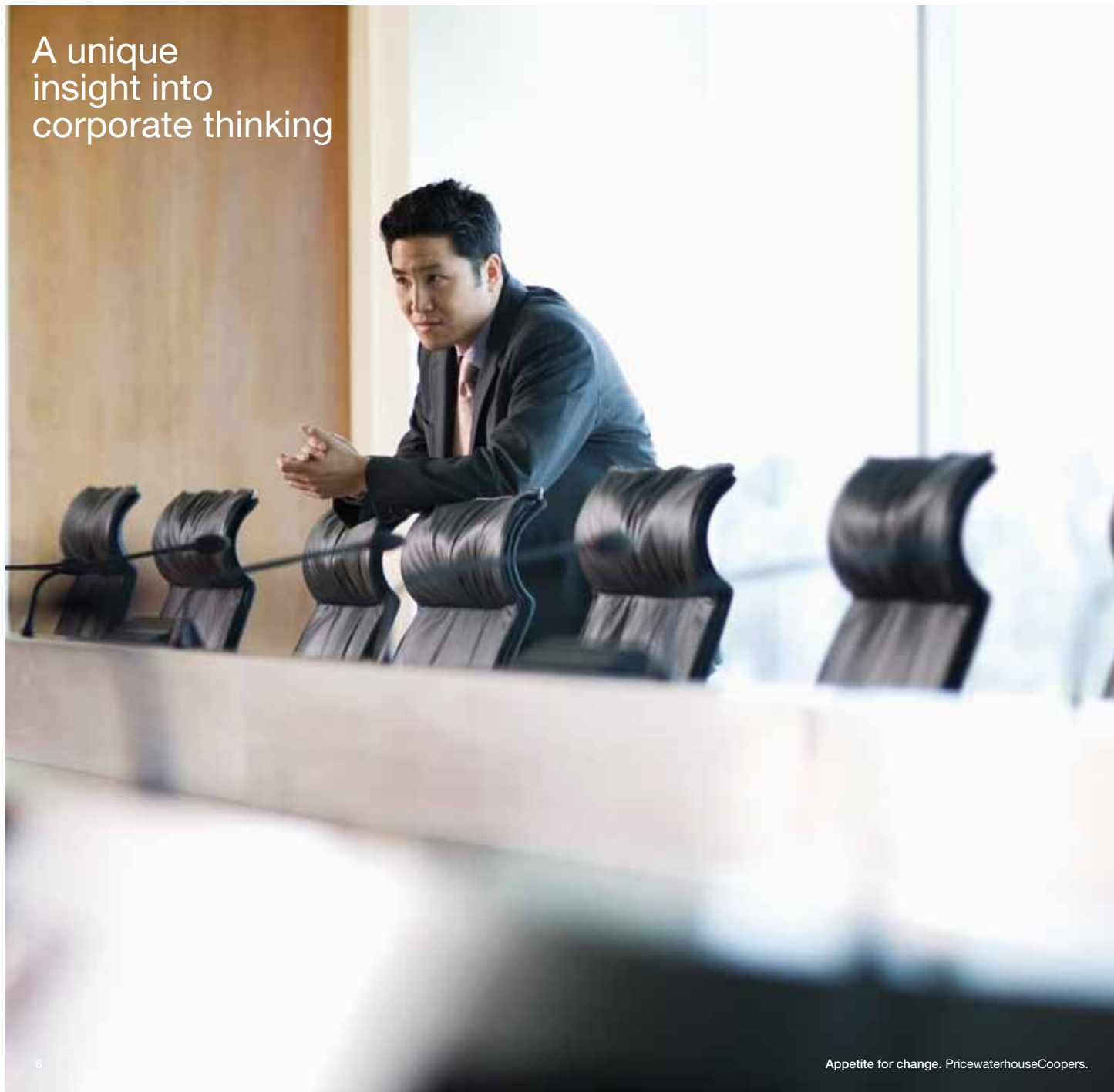
A handwritten signature in black ink that reads "Mark Schofield". The signature is written in a cursive style with a long, sweeping underline.

Contents

Section 1

Executive summary

A unique
insight into
corporate thinking



- In the battle against climate change, government leadership is indispensable.
- The business community is ready for, and supportive of, government action.
- Business leaders around the world recognise the need for meaningful emissions targets.
- Carbon taxes, emissions trading and incentives have widespread support in the business community.
- Businesses generally believe that existing environmental taxes, regulations and incentives are ineffective, inconsistent and unclear.
- Businesses want clear long-term investment signals, and input into the formulation of direction and derivative policies.
- Certainty and simplicity are the biggest challenges for carbon trading; for carbon taxes, the key issues are flexibility and the availability of incentives.
- Executives prefer the hypothecation of carbon and other environmental taxes, i.e. the use of taxes to fund environmental and low carbon programmes.
- Government action on climate change will increase the importance of regulatory compliance, reputation management and stakeholder relations.
- Corporate climate change strategies will affect operations, key performance indicators and innovations, around new products and services.
- A growing number of businesses are developing strategies to manage the uncertainty surrounding climate change, but they remain hopeful that governments and business can work together to create consistent policies that halt global warming.
- More data can be found at

Section 2

Why is government leadership essential?

In the battle against climate change, government leadership is indispensable

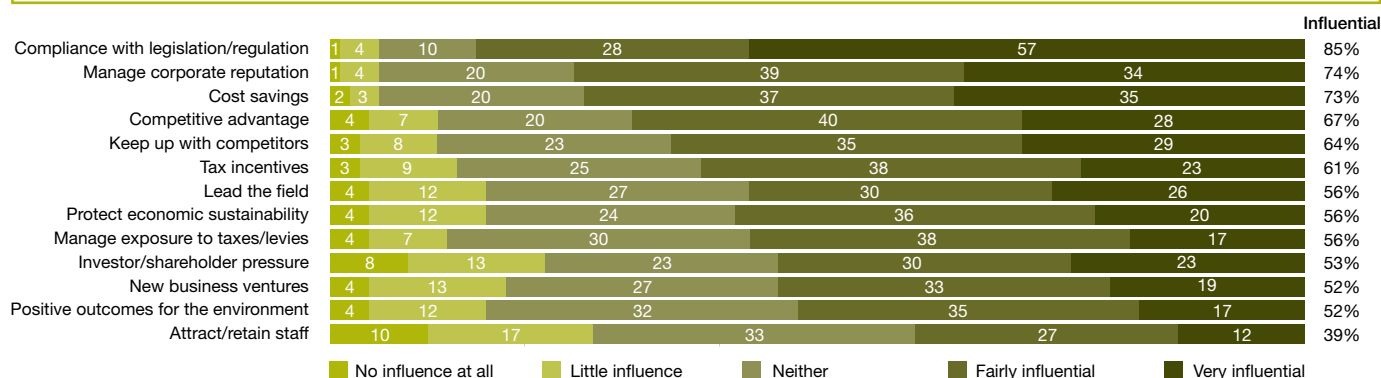


In the battle against climate change, government leadership is indispensable. Through legislation and regulation, governments exert a stronger influence on environmental practices than any other force motivating businesses (see fig. 1 below). As Bart Kuper, Tax Director of TNT Holding B.V. in the Netherlands noted, “There are all sorts of voluntary initiatives to motivate groups in society to live more carefully...it’s all very noble but...it’s not enough.”

Only among the largest companies surveyed (those with more than 5,000 employees) do a majority believe that voluntary agreements are effective (see fig. 2 below). More than 80 per cent of all executives surveyed, on the other hand, believe regulation and tax incentives motivate businesses to change their environmental behaviour. Tax charges are considered effective by 74 per cent of business leaders.

Figure 1

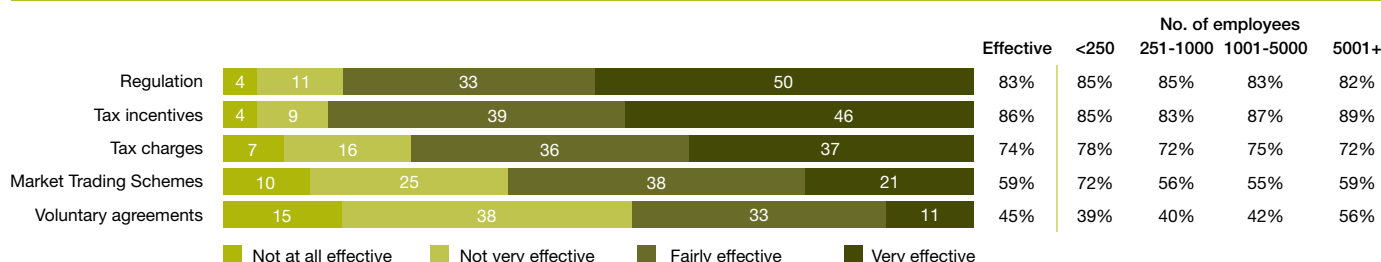
Top influencers are compliance, corporate reputation, costs and competitive advantage



I am now going to read out a list of factors which may potentially influence your organisation’s environmental behaviour, in terms of the efforts made to minimise environmental impact and promote responsible environmental behaviour. For each factor, please indicate its influence on decision making by giving it a score from 1 to 5, where 5 is very influential and 1 is no impact at all. Base: Total (654)

Figure 2

A combination of carrot (tax incentives) and stick (regulation, tax charges) is required



How effective do you feel each of the following tools are/would be at encouraging your business to reduce its environmental impact? Base: Total (654)

Section 2

Why is government leadership essential?

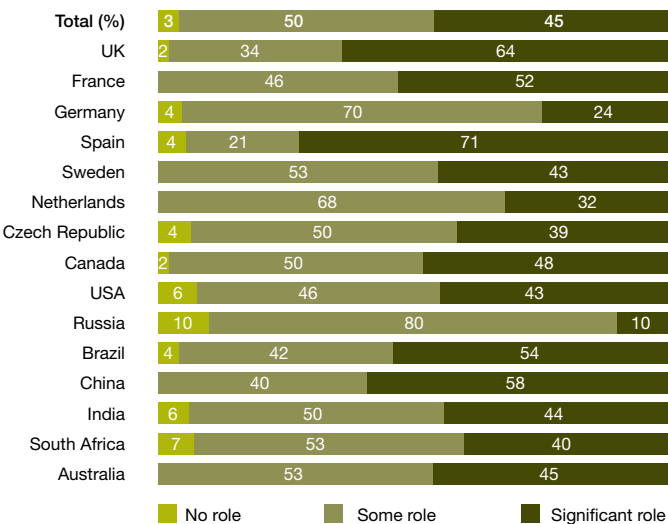
Compared to a dozen other behavioural drivers, including cost savings, reputation and competition, regulatory compliance is viewed by 85 per cent of business executives as the most influential. More than half of executives believe it is ‘very influential’.

Business leaders believe that stable, properly enforced policies protect fair competition and facilitate long-term planning. Put simply, businesses want to be assured that their international peers are helping to bear the costs and responsibilities of changing environmental behaviour. Ninety five per cent agree that tax and regulation will help the world reach a climate deal (see fig. 3 opposite). Clare Luehman, Emissions Trading and Sustainability Manager at Incitec Pivot Ltd. says, “We need to have a baseline of regulations from government to ensure that all companies operate to the same level.”

Long-term planning is vital for the transition to a low carbon economy. Developing the necessary economic ecosystems, especially new technologies, requires large capital expenditures. As a US executive explains, the environmental issues that are most likely to affect her business, “will be driven by legislative and regulatory changes in the US. The way we expand facilities and distribute capital investment may all be affected.”

Figure 3

95% feel tax and regulation will have some role in achieving targets



Governments are expected to agree a new global climate change deal in Copenhagen which should include targets on national greenhouse gas emissions. Which of the following best reflects your experience of the role that tax and regulation will have in achieving these targets? Base: Total (654)

Note: This question was asked before the UN Summit in Copenhagen, where no targets were agreed. However, an agreement on targets is expected in the near future.

95% agree that
tax and regulation will help
the world reach a climate deal

Section 3

Where are the opportunities for government?

The business community is ready for, and supportive of, government action



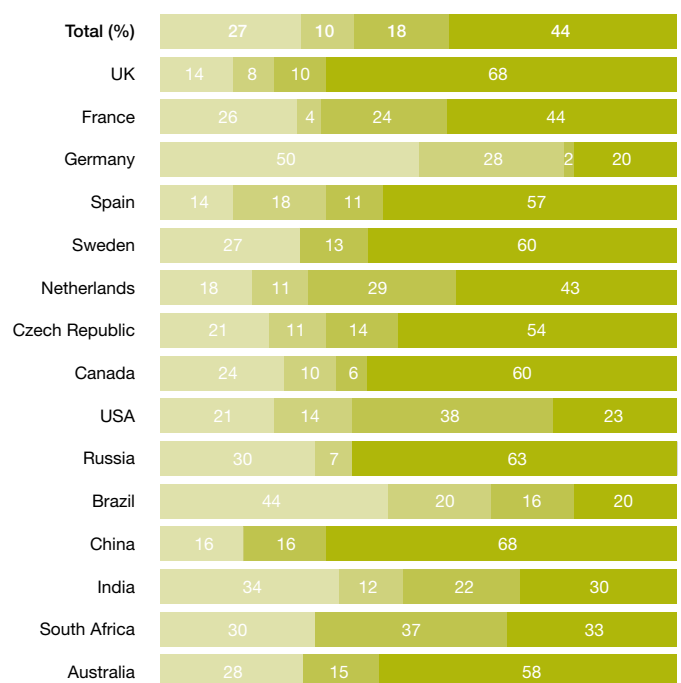
As demonstrated previously, the business community is ready for, and supportive of, government action. When environmental policies are unstable and unclear, businesses look to governments for leadership. Speaking at the climate change meeting in Copenhagen, JohnsonDiversey's Chairman Curt Johnson said, "Once industry adopts a mindset that equates greenhouse gas emissions with waste, we'll make progress in ways and to an extent that we have never seen before. This will be good for the planet and good for our businesses. But we must act and we must act now."¹ A large majority of business executives believe that governments should help lead the behavioural changes that will both guide and encourage such action.

Seventy one per cent of businesses believe governments, either alone or in cooperation with the private sector and individuals, should provide leadership (see fig. 4). Executives in the UK and China are most likely to say governments alone should have primary responsibility for leading change. However, even in the US and South Africa, where more than one third of companies believe the market alone should lead, the majority of business leaders still feel the government must play the leading role.

Many organisations across the world already expect to change the way they conduct business in the next two to three years, as a result of climate change (see fig. 7 on page 17). Business leaders in Brazil, India, China and Russia are more likely to be sceptical that changes are imminent. Russian business executives are most likely to expect no impact from climate change in the next few years.

Figure 4

Just under half think government should take the lead on change



■ A combination ■ Individuals ■ Business (the market) ■ Government

Who do you think should have primary responsibility for leading behavioural change in relation to climate change? Base: Total (654)

¹ Press Release, WWF, Dec 13, 2009 downloaded from www.worldwildlife.org 15 December 2009

Section 3
Where are the opportunities for government?

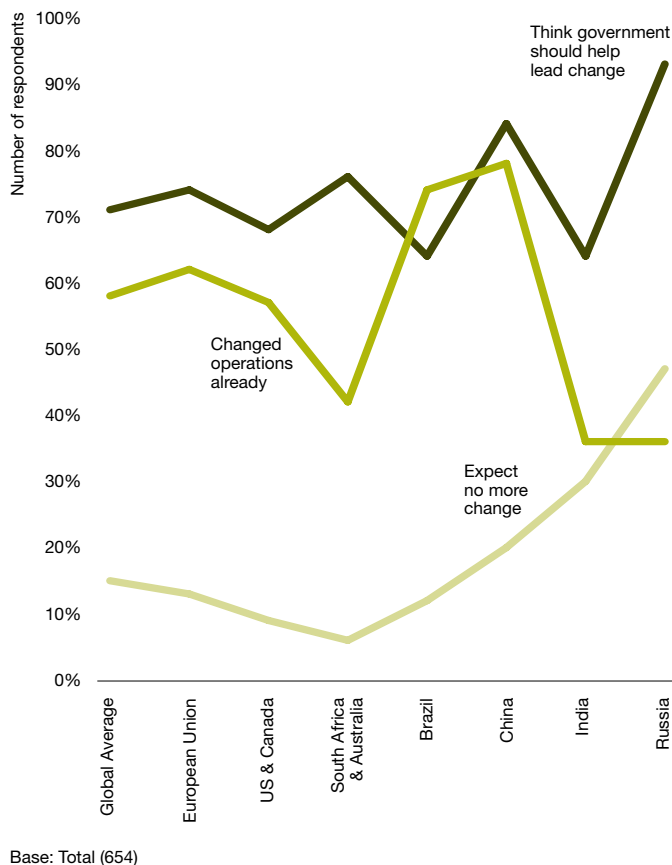
In recent polls of the public, Russians are among the nationalities that express the least concern about the seriousness of climate change, but this alone does not explain the attitude of Russian business leaders. In the US, the individual level of concern is the same as in Russia. A GlobeScan/BBC World Service poll found that 46 per cent of Russians and 45 per cent of Americans consider climate change a “very serious” problem. (In the European Union, the percentages are markedly higher, ranging from 59 per cent of UK citizens to 77 per cent of Spanish citizens.)²

Other studies show that the number of Americans who believe global warming does not exist or has been exaggerated is actually increasing.³ Although Americans may be more sceptical than Russians about global warming, only 11 per cent of US executives expect their businesses to experience no changes within three years as a result of climate change. In contrast, 47 per cent of Russian business leaders predict no changes (see fig. 5 opposite).

The different attitudes may be responding to different indications from government. As part of the post-Kyoto climate change deal, Dmitry Medvedev has offered to hold Russian greenhouse gas emissions at 25 per cent below 1990 levels. The ceiling is comparable to other European nations but allows for emissions growth in Russia. Due to changes in Russia’s economy since 1990, its current emissions are already approximately 34 per cent below the 1990 level.⁴ The proposed national cap, then, suggests that business as usual can continue, at least for a few years. This is significant for Russian executives, who are the most likely to look to government to lead the behavioural changes necessary to stop global warming.

Figure 5

Relationship between the relative impact of climate change and those believing the government should help lead change.



² 2009 GlobeScan/BBC World Service poll. The Pew Global Attitudes survey conducted from May to June 2009 found that 44 per cent of Russians and 44 per cent of Americans considered global warming a very serious problem.

³ Pew Research Center, “Searching for Clues in the Global Warming Puzzle,” 27 October 2009. Lydia Saad, “Increased Number Think Global Warming is ‘Exaggerated’” Gallup, 11 March 2009. Dana Blanton, “Fox News Poll: Where Americans Stand on the Issues,” Fox News, 18 May 2009.

⁴ As of 2006, the most recent official figures available under the UN Framework Convention on Climate Change, Russia was emitting greenhouse gases at 34 per cent below 1990 levels (excluding land use, land-use change and forestry). United Nations Framework Convention on Climate Change, 28 January 2009, Geneva, Document code: FCCC/ARR/2008/RUS.

In the US, Barack Obama has offered national targets that look modest next to Medvedev's pledge, at least until 2020.⁵ If the US economy continues to recover, however, the targets would require the US to hold emissions levels or begin reducing them within a few years.⁶ The Obama Administration, furthermore, has made climate change a political priority, significantly raising the likelihood of either US legislation or administrative action (by the US Environmental Protection Agency).

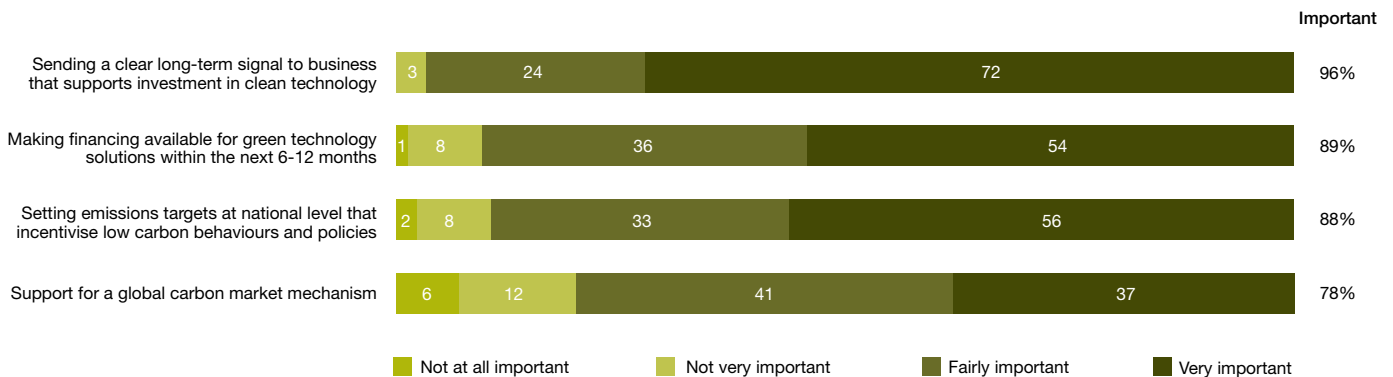
Business leaders around the world recognise the need for meaningful emissions targets. Eighty eight per cent of businesses (see fig. 6), including 93 per cent of Russian

firms, believe national emissions targets will play an important role in a global climate change deal. A separate PricewaterhouseCoopers analysis shows that the reduction pledges made before Copenhagen were still insufficient to put the world on the path to a low carbon economy.⁷

Business leaders around the world recognise the need for meaningful emissions targets

Figure 6

Importance of potential ingredients of a new global climate change deal



Could you tell me how important or unimportant they are in ensuring an effective (new global climate change) deal? Base: Total (654)

⁵ The US congress is currently considering emission reduction targets for selected sources of 17 per cent below 2005 levels by 2020 (approximately 4 per cent below 1990) and economy-wide emissions levels of 20 per cent below 2005 levels by 2020 (approximately 7 per cent below 1990). Source: John Larsen, Alexia Kelly and Robert Heilmayr "WRI Summary of H.R. 2454, the American Clean Energy and Security Act (Waxman-Markey)," World Resources Institute 31 July 2009.

⁶ According to the US Environmental Protection agency US emissions were below 2005 levels in 2006 but above in 2007. The US Energy Information Agency recently estimated that US emissions were also approximately 2 per cent below 2005 levels in 2008.

⁷ PricewaterhouseCoopers, "Post-Copenhagen Analysis: Implications for Business," 7 January 2010

Section 3

Where are the opportunities for government?

To be meaningful, the targets need to be sufficiently ambitious, and backed by legally binding frameworks, which may include regulations, taxes and emissions trading schemes. UK law, for example, mandates emissions of 34 per cent below 1990 levels by 2020, and the government has offered to raise the target as part of a global agreement. Not surprisingly, only six per cent of UK business leaders (the second lowest percentage worldwide), expect climate change will not affect them in the next few years. To be effective, national targets also need a monitoring and verification regime, which has been proposed in the Copenhagen Accord.

The absence of legal clarity, on the other hand, discourages investment in change. Like the US Congress, the Australian Parliament is debating legislation to curb greenhouse gas emissions, and the outcome is still uncertain. Seventy per cent of US and Australian businesses are not confident about long-term investments as a response to current environmental policies. It is also very difficult for US companies to predict how much carbon abatement is going to make economic sense, with no clarity on the path of carbon prices. Even in the UK, long-term confidence is low. Only in China and India do large majorities of business leaders feel confident (see fig. 14 on page 23).

To create a long-term investment strategy, companies must forecast both likely policies and their outcomes. In the case of climate change, a critical outcome is the price of carbon five or ten years in the future. This would be difficult to predict for any mature, consistently-regulated commodity or pollutant. Carbon is neither.

Carbon taxes, emissions trading schemes and incentives have widespread support in the business community.

There is a surprising abundance of carbon tax supporters. Sixty four per cent of businesses endorse the idea. Bart Kuper, Tax Director of TNT Holding B.V., believes: “If we all think we’re going to win the game by giving incentives to people who behave well, instead of levying a tax for those who pollute, then we are a long way from home. If we only do this by sending out carrots and not using sticks, we will run out of carrots.”

Many environmental taxes are currently too low to be material, and only 13 per cent of businesses report paying a carbon tax. In the European Union, for example, environmental taxes account for about one sixteenth of tax revenues, and overall revenues from environmental taxes declined between 1999 and 2007.⁸ “None [of the environmental taxes] makes a difference because they are so fragmented,” according to an executive in the Netherlands, “They’re not even on our radar.”

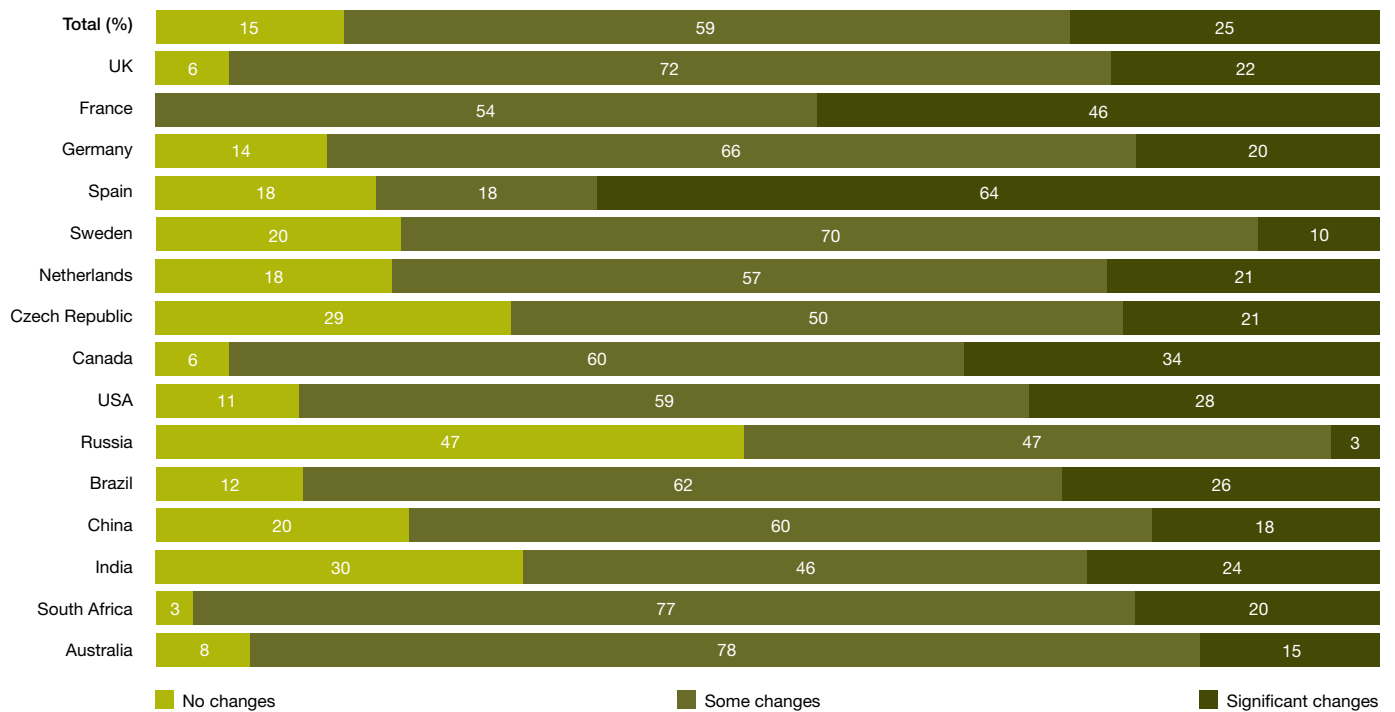
“If we all think we’re going to win the game by giving incentives to people who behave well, instead of levying a tax for those who pollute, then we are a long way from home. If we only do this by sending out carrots and not using sticks, we will run out of carrots”

Bart Kuper
Tax Director, TNT Holding B.V.

⁸ European Commission, “Taxation Trends in the European Union: Main results” 2009 edition.

Figure 7

Most are expecting some change in the way they conduct business as a result of climate change.



Which of the following best reflects your views on the likely level of change in the way you conduct business as a result of climate change over the next 2-3 years?

Base: Total (654)

Section 3

Where are the opportunities for government?

To significantly affect environmental behaviour in this area, tax rates would have to increase worldwide, and they are highly unlikely to apply uniformly across regions, as some executives hope. Still, despite some unrealistic expectations, the bulk of evidence suggests that business leaders would support a carbon tax (see fig. 9 on opposite page). Businesses that already pay a carbon tax are slightly more likely to endorse one. Sixty eight per cent of carbon tax payers are supporters. In a separate survey of Irish tax directors, 61 per cent said they supported introducing the carbon tax rather than postponing it.⁹

Businesses that already pay a carbon tax are slightly more likely to endorse one -

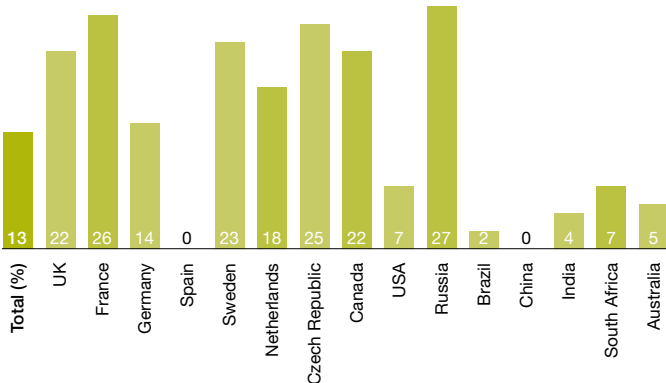
68%

of carbon tax payers are supporters

The support for carbon taxes seems anchored by a feeling that taxes are an effective method of reducing greenhouse gas emissions. Seventy four per cent of executives agree that tax charges effectively encourage businesses to reduce their environmental impacts. More companies believe incentives (86 per cent) and regulation (83 per cent) are effective, but significantly fewer believe market trading schemes (59 per cent) and voluntary agreements (45 per cent) are effective (see fig. 2 on page 9). Interestingly, the proportion of executives who think market trading schemes are effective is actually lower than the proportion who support the idea of a trading scheme.

Figure 8

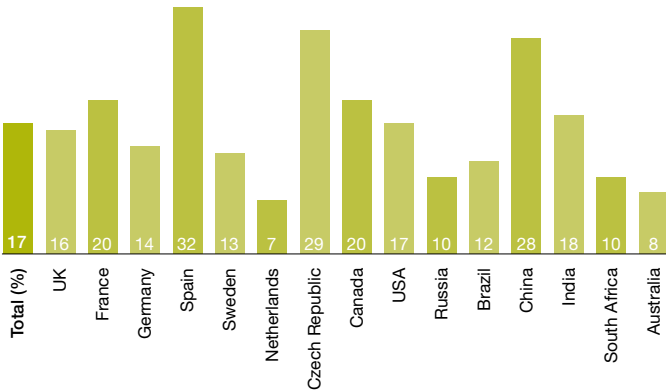
Few companies are currently paying any form of carbon tax or levy.



Organisation having to pay any form of carbon tax or levy? Base: Total (654)

Figure 10

Fewer than one fifth of companies are currently involved in an emissions trading scheme

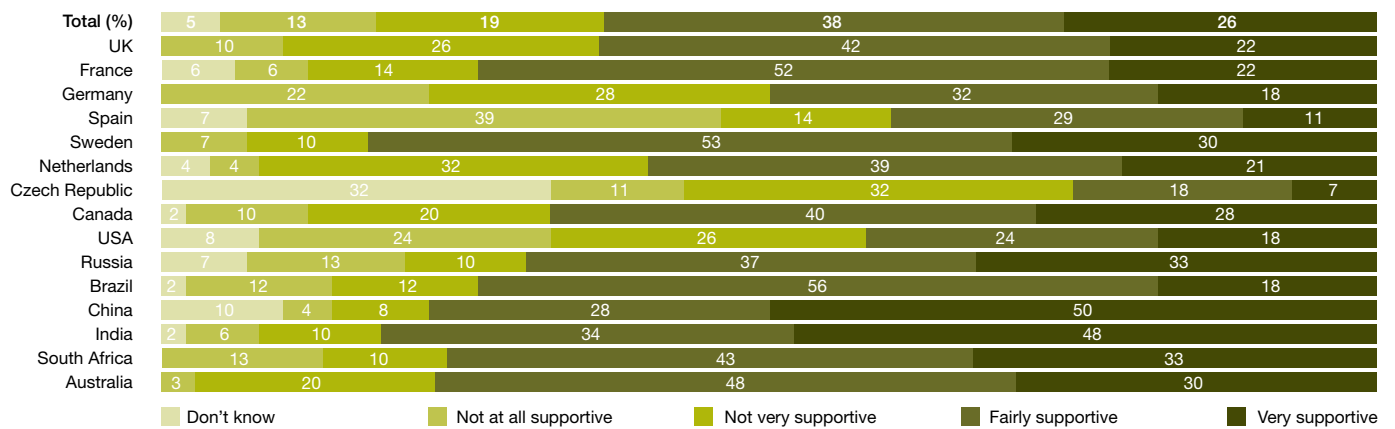


Currently involved in any form of emissions trading scheme? Base: Total (654)

⁹ In September 2009, PricewaterhouseCoopers asked 250 Irish tax directors whether they would like the proposed €20 per tonne carbon tax to be introduced in December 2009 or deferred.

Figure 9

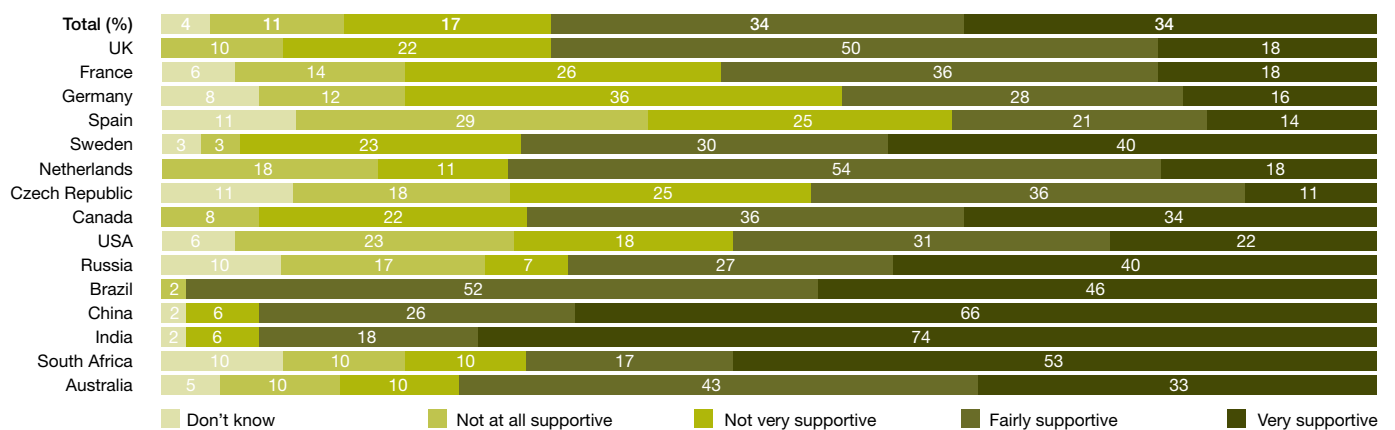
Support for a carbon tax.



How supportive are you of a carbon tax? Base: Total (654)

Figure 11

Support for an emissions trading scheme



How supportive are you of an emissions trading scheme? Base: Total (654)

Section 3
Where are the opportunities for government?

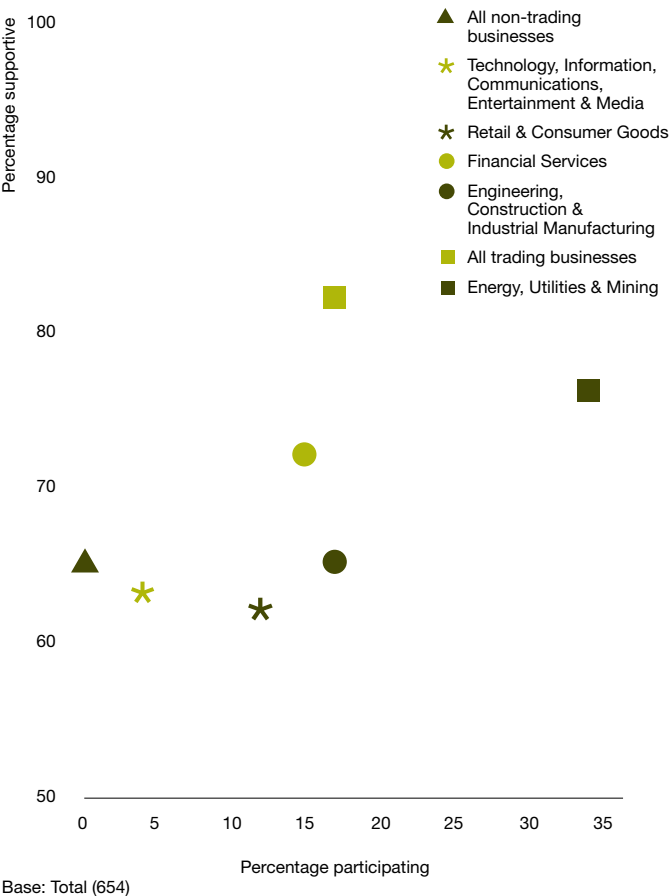
A company that already participates in an emissions trading scheme is also more likely to support the idea (see fig. 12).

Energy, utility and mining firms are most likely to be involved in trading. Thirty four per cent of them participate in and 76 per cent support emissions trading. In contrast, only 12 per cent of retail and consumer goods companies trade emissions and 62 per cent support the idea.

92% of businesses agree that government should offer more incentives to invest in environmentally beneficial activities and technologies

Across all industries, 82 per cent of businesses that trade emissions support trading. This compares with 65 per cent of non-trading businesses that are supportive. The 17-point gap appears wide next to the 5-point difference in support between carbon tax payers and those who do not pay a carbon tax. The trading profits some companies have made may contribute to this divide. Businesses that have sold allowances for windfall profits in the last few years are likely to support trading. These include some European utilities and developers of projects that sell allowances through the clean development mechanism (CDM). The fillip from CDM is evident in the high percentages of supporters in Brazil, China and India (see fig. 11 on previous page).

Figure 12
Support for an emissions trading scheme increases with participation

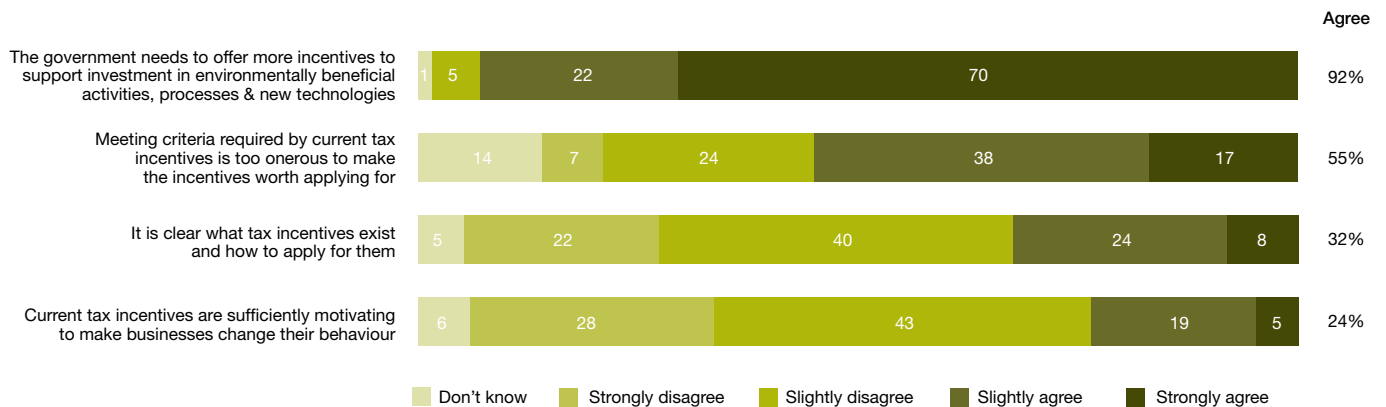


Limiting the policy debate to carbon taxes and emissions trading ignores the most popular policy tool in the business community – incentives. Ninety two per cent of businesses agree that government should offer more incentives to invest in environmentally-beneficial activities and technologies (see fig. 13 below). Eighty nine per cent believe financing for green technology is important to ensure the effectiveness of a global climate change deal (see fig. 6 on page 15). This compares to 78 per cent that believe a global carbon market is important.

82% of businesses that trade emissions support trading

Figure 13

Most are in favour of incentives, but current criteria are too onerous, it is unclear what incentives do exist and they are insufficiently motivating

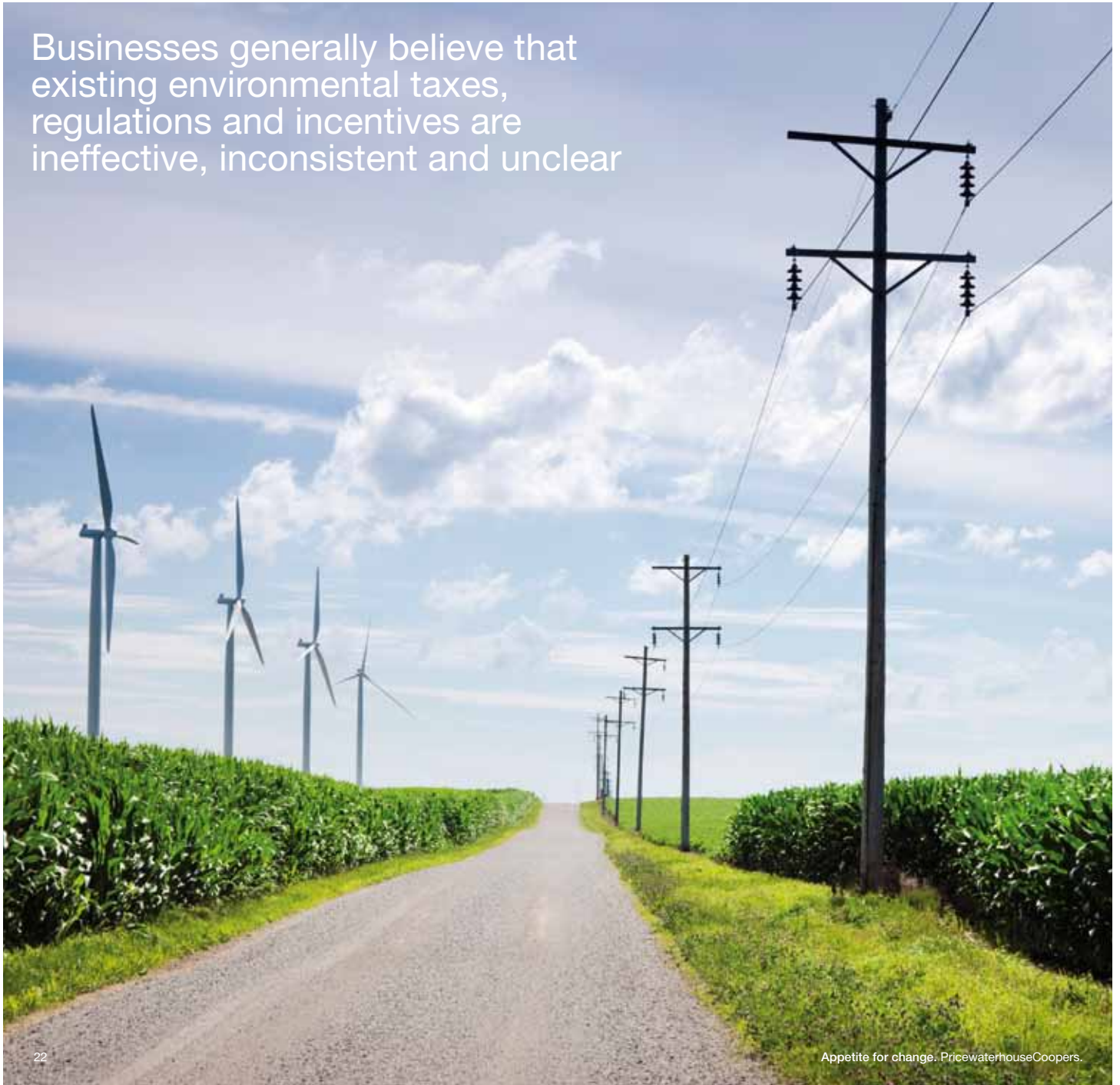


Thinking about environmental tax incentives, how strongly do you agree or disagree with the following statements about government policy? Base: Total (654)

Section 4

How can policies find support?

Businesses generally believe that existing environmental taxes, regulations and incentives are ineffective, inconsistent and unclear



Businesses generally believe that existing environmental taxes, regulations and incentives are ineffective, inconsistent and unclear. When asked about seven different factors related to environmental policy, less than half of businesses agreed with the government's current approach. Fewer than 15 per cent strongly agreed (see fig. 14 below).

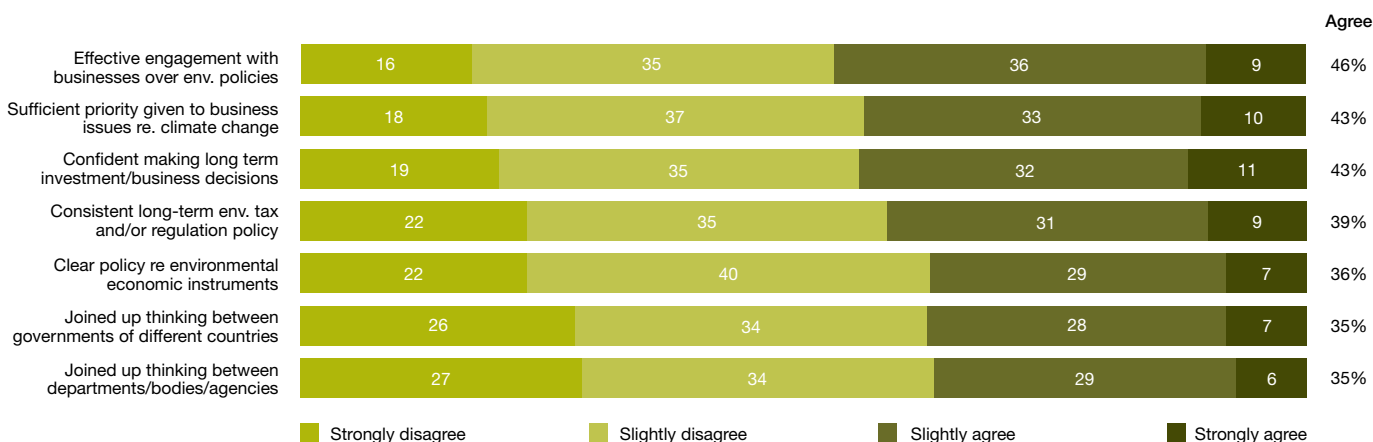
One of the greatest concerns among business leaders is the inconsistency of policies and enforcement, both within and among nations. For example, the EU Emissions Trading Scheme was established in 2005, but emissions trading is limited elsewhere. Only 41 per cent of utility companies in this survey are involved in an emissions trading scheme, which in part reflects their uncertainty about the impact of such schemes on company behaviour, given weak carbon prices.

This kind of regulatory diversity creates what are perceived as unfair advantages and unnecessary costs. Peter Dobney, Group Manager, Resources and Energy, Amcor Limited, says "There are currently environmental efficiency regulations in every state [in Australia] and there are huge inconsistencies between them.... This generates enormous compliance costs. I would like to see an end to the state regulations and for these to be replaced with a single national scheme."

Less than half of businesses agreed with the government's current approach

Figure 14

There is work to be done in convincing organisations about all aspects of government tax and regulatory frameworks



How strongly do you agree or disagree with the following statements about the government's environmental tax and regulation framework? Base: Total (654)

Section 4

How can policies find support?

Conflicting policies can become perverse incentives that reward the status quo over more environmentally-friendly behaviour. In the US, the Environmental Law Institute estimates that fossil fuels received approximately USD 70 billion in direct spending and tax relief in the period from 2002 through to 2008. During the same period, traditional renewable fuels received about USD 12 billion, and the controversial fuel corn ethanol received just under USD 17 billion.¹⁰ Outside of the Organisation for Economic Co-operation & Development (OECD) countries, Chinese incentives for renewable energy, particularly wind and solar power, have fostered a rapid build-up in capacity, yet along with Russia and India, China remains one of the world's largest subsidisers of fossil fuels.¹¹

Business leaders bear some responsibility for the contradictions. Generally, they will seek exceptions, promote competition between governments, and protect the status quo when it benefits their stakeholders. Business executives do, however, strongly support the consistent implementation of environmental policies across regions and over the long term. Particularly as operations spread across borders, legal differences often create more disadvantages than advantages.

Chris Lenon, Global Tax Director at Rio Tinto explains, "We apply our standards on a global basis and we stick to these standards. That's a decision that the Group has taken.... We want there to be one measure of what a tonne of carbon is

"We apply our standards on a global basis and we stick to these standards. That's a decision that the Group has taken.... We want there to be one measure of what a tonne of carbon is because that way it will be easier to comply and to operate on a global basis on a level playing field."

Chris Lenon, Global Tax Director,
Rio Tinto

because that way it will be easier to comply and to operate on a global basis on a level playing field. We seek certainty and consistency. Our fundamental issue is that our investments are very long-term investments, so if you can't predict what a potentially significant cost is going to be, over the life of a project, it's difficult to evaluate any project."

A lack of coordination within and between governments creates uncertainty about long-term investments and other business decisions that could be affected by environmental policies. Clearing the uncertainty is critical for the transition to a low carbon economy. The utilities sector, for example, needs to plan investment in cleaner generation and much-needed power infrastructure on time-scales of up to a decade or more.

¹⁰ Adenike Adeyeye, James Barrett, Jordan Diamond, Lisa Goldman, John Pendergrass and Daniel Schramm, "Estimating US Government Subsidies to Energy Sources: 2002-2008," Environmental Law Institute, September 2009

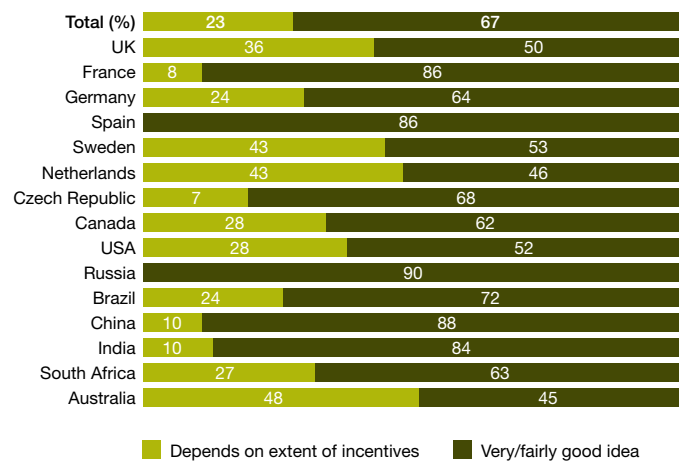
¹¹ The Economist, "A long game," 5-11 December 2009. International Energy Agency, "World Outlook: 2008 Edition"

Sixty two per cent of business executives, however, believe their governments have not created clear economic signals about environmental issues. Fifty seven per cent feel their governments do not have consistent, long-term taxes and regulations (see fig. 14 on page 23). For example, although incentives are popular in theory, 62 per cent of businesses have difficulty understanding what incentives exist (see fig. 13 on page 21). When they do discover relevant incentives, 55 per cent of business executives are discouraged from actually applying by the perceived administrative burden. With these experiences in mind, it is not surprising that 71 per cent of executives believe that existing incentives do not change environmental behaviour.

Businesses want clear long-term investment signals and input into the formulation of direction and derivative policies. Ninety six per cent of the survey respondents agree that an important element of an effective global climate change deal is sending a clear long-term signal that supports investment in low carbon technology (see fig. 6 on page 15). Incentives remain the favoured way of sending such a signal (see fig. 2 on page 9) despite the difficulties businesses have with existing incentives (see fig. 13 on page 21). Eighty six per cent of Spanish executives believe there should be tax incentives for becoming carbon neutral, for example, even though the stop-and-start implementation of recent subsidies has created a volatile solar power market (see fig. 15 opposite).

Figure 15

Should the tax system include incentives to become carbon neutral?



What do you think of the idea that the tax system, as it applies to companies, should include incentives for companies to become carbon neutral, to encourage environmentally-beneficial activity in the business community? Base: Total (654)

Businesses want clear long-term investment signals and input into the formulation of those signals and derivative policies.

Section 4

How can policies find support?

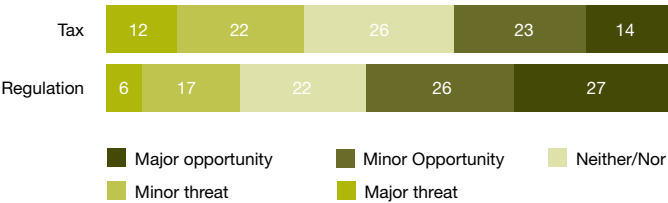
Incentives take advantage of two important influences on corporate environmental practices – creating competitive advantage and generating cost savings (see fig. 1 on page 9). Sixty seven per cent of respondents agree that incentives for companies to become carbon neutral are a good idea (see fig. 15 on page 25). A further 23 per cent remain cautious but are potential supporters, saying their endorsements would depend on the extent of the incentives.

Regulations and taxes will create costs for businesses, but they may at the same time create a level playing field, as well as opportunities for new sources of competitive advantage and new ways to burnish reputations (which is another important behavioural influence). When asked if they view regulation as a potential opportunity, 53 per cent of businesses say, ‘Yes’ (see fig. 16 opposite).

In developing new taxes and regulations, governments could build on existing goodwill through more cooperation. Fifty nine percent of global CEOs believe the key to smarter regulation is more dialogue between government and business and ‘co-designing’ policies.¹² John T. Disharoon, Sustainable Development Manager, Caterpillar Inc., believes, “Regulators have good motives but don’t fully understand the implications for business in terms of compliance, so it is important to ensure that business gets involved in policy-setting at the earliest stage.”

Figure 16

Around half see environmental regulation as an opportunity for business



For each of these two forms of government intervention, tell me to what extent you see them as an opportunity vs. a threat to your organisation’s competitiveness.
Base: Total (654)

“Regulators have good motives but don’t fully understand the implications for business in terms of compliance, so it is important to ensure that business gets involved in policy-setting at the earliest stage.”

John T. Disharoon, Sustainable Development Manager, Caterpillar Inc.

¹² For further discussion of CEO views on collaboration with government, see “Rethinking and Reshaping the business environment: Government and the Global CEO,” PSRC, January 2010

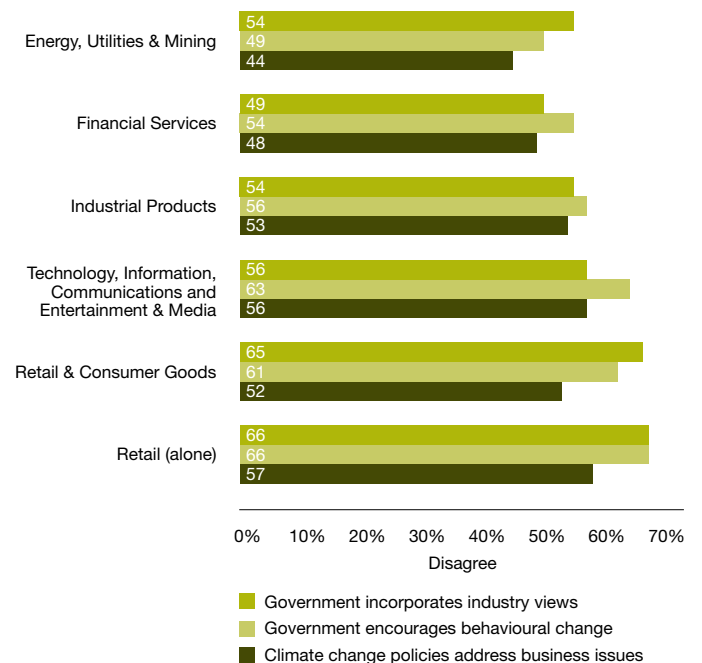
Business leaders do recognise that government leaders try to collaborate with the private sector in many cases. Forty six per cent of all business executives believe their governments have effectively engaged business over environmental policies, and this engagement has created support (see fig. 14 on page 23) . Forty three per cent of executives think their governments are prioritising business issues during the development of climate change policy (see fig. 14 on page 23). In Germany, 52 per cent of businesses feel their climate change-related issues are given priority, possibly as a result of their government's long-term, multi-faceted green agenda.

Business leaders do recognise that government leaders try to collaborate

Among small businesses,¹³ a slim majority also feel their views are solicited and accepted by government. This positive view, however, may have a weak foundation, especially when applied to climate change policies, such as carbon taxes and regulation. Small business executives are least likely to believe that climate change regulations and taxes will affect their profits, investments and operations in the next two to three years. When the long-term price of carbon and its effects on small businesses become clear, attitudes may shift among firms of all sizes.

Figure 17

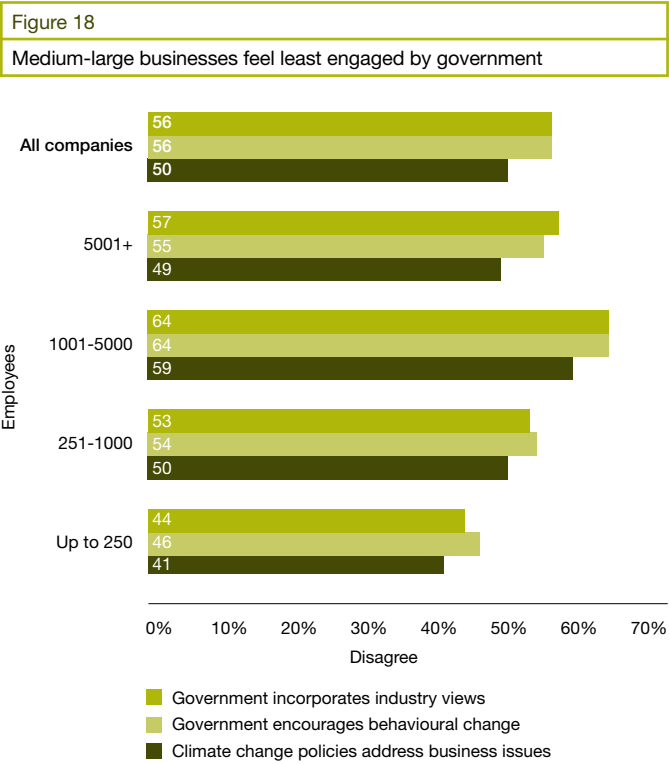
Retail sector feels least engaged by government



Base: Total (565) of which (53) are retail companies.

¹³ This survey defines a small business as any respondent who reported having fewer than 250 employees. This may include subsidiaries owned by larger organisations.

Section 4
How can policies find support?



To gather business support, governments may need special efforts for the retail and consumer sectors and for organisations with 1,001-5,000 employees (medium-large businesses). These types of businesses feel least engaged by environment policies. Two thirds of retail executives (see fig. 17 on page 27) and 64 per cent of executives at medium-large businesses (see fig. 18 opposite) believe that governments have not encouraged businesses to change environmental behaviour significantly. The same proportions think that climate change policies do not give sufficient priority to business issues. Among all companies, 55 per cent of executives feel the same way.

Certainty and simplicity are the biggest challenges for carbon trading; for carbon taxes, the key issues are flexibility and incentives. As suggested by the strong support for both policies, most business leaders do not see carbon taxes and trading as mutually exclusive. A Chinese executive provided a good summation of a common view that “both of them are good ways to encourage companies to reach emission targets. In practice, it really depends on a company’s nature and type of business.” Asking business leaders to state a preference, however, reveals the attitudes that drive and inhibit support for each policy (see fig. 19 on page 30 and fig. 21 on page 31).

Figure 19

Reasons given for supporting carbon tax

Actively support carbon tax
Impact:

- Faster, more effective way to effect change
- Obligated to re-think activity as hits bottom line
- Applies to all types/sizes of companies – nobody exempt

Understanding:

- Easier/simpler to understand

Governance:

- Easier to define, measure and monitor
- More difficult to falsify

Certainty:

- Easier to predict as price of carbon known: better able to plan future investments

Transparency:

- Linked directly to desired behaviour

Opportunity:

- Could finance environmental initiatives. Payback on investment in energy efficiency

Concern over emissions trading schemes
Fails to solve the problem:

- Polluters can 'buy their way out'
- Exchange of CO₂ emissions simply pushes problem around

Rewards/compensates polluters
Harder to implement:

- Difficult to determine fair quotas
- No existing infrastructure
- Administratively more complex
- Harder to define and monitor emissions

Open to manipulation:

- Will find loopholes to exploit
- Depends on 'agreements' with politicians

As discussed earlier, businesses executives are more likely to say carbon taxes are effective than they are to say carbon trading is effective at changing environmental behaviour (see fig. 2 on page 9). Perceptions of certainty, simplicity and transparency underpin the general sense that taxes are effective (see fig. 19 opposite).¹⁴ Explaining her proposal for a US carbon tax, Senator Maria Cantwell (Democrat), reflected this mood. "I think there's a lot of interest across the aisle in a process that is simpler and fairer," she told The New York Times. "Cap-and-trade is not as predictable in its allowance system and who gets what. Republicans like predictability."¹⁵

The volatility of the carbon price and the challenges of verifying and allocating allowances in the European Union emissions trading scheme (EU ETS) has also led many European executives to conclude that a carbon tax would be easier to administrate and provide more stable criteria for strategic decisions. When asked whether market trading or a carbon tax would be better for their businesses, more EU businesses chose a tax. One Spanish executive said, "Carbon trading in my opinion is an opportunity for some companies to make money by 'cheating' [i.e.] exaggerating their emissions needs and then selling the remaining rights." Tax advocates are particularly numerous in France, Sweden, Germany and the UK.

¹⁴ For analysis of the views of global CEOs about developing more stable and simple regulation see "Rethinking and Reshaping the business environment: Government and the Global CEO," PSRC, January 2010.

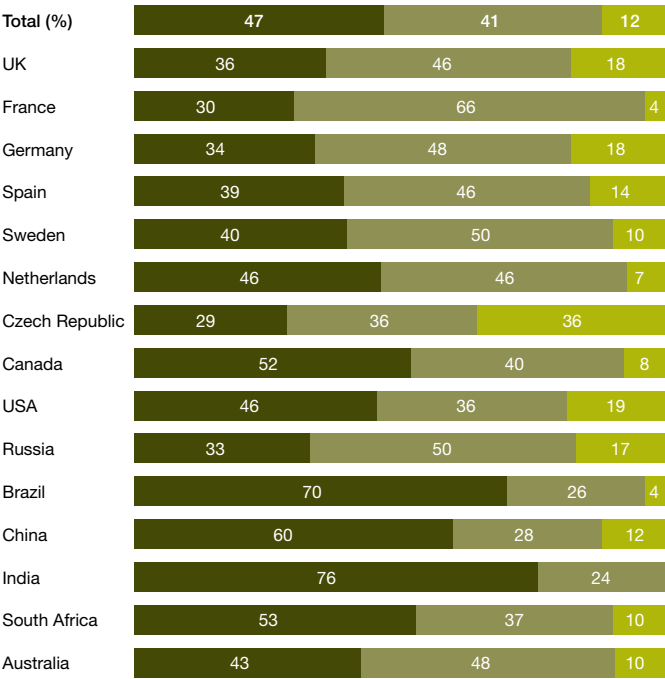
¹⁵ John M. Broder, "Senators Offer New Climate Proposals," The New York Times, 10 December 2009

Section 4

How can policies find support?

Figure 20

Overall, opinion is divided on ways of encouraging behaviour



Thinking about these two different ways of encouraging responsible environmental behaviour, which do you prefer from a corporate point of view?

Base: Total (654)

Many business leaders outside the EU share the fear that trading schemes will require a new, complex and costly infrastructure. They also agree that a carbon tax would be “easier to understand,” “more equitable” and “more difficult to falsify.” A significant number of executives believe that market trading will simply not reduce emissions despite the contrary evidence of the EU ETS and the North American acid rain program. They fear trading schemes will simply shift allowances across borders, as opposed to reducing total emissions. A South African executive says, “Emissions trading will be abused. Europe and the US will dump it into the sky and buy the credits from Africa.” Executives in Russia and Australia show particularly strong support for a tax.

Carbon trading supporters make similar arguments (see fig. 21 on page 31). An Australian trading supporter believes, “Taxes have no impact on reducing emissions. If you can afford the tax...you keep emitting.” “Tax,” according to a Brazilian executive, “is subject to tax dodging and corruption.” Trading advocates emphasise the flexibility to purchase allowances when the technologies that reduce emissions are not available or affordable. They also believe that a rewards-based market system is the most efficient method of directing investment towards the reduction of greenhouse gas emissions.

Outside of the EU, the majority of companies prefer a market trading mechanism to a tax as the best way to encourage responsible environmental behaviour. Worldwide 68 per cent of businesses support the idea of emissions trading (four per cent more than support a carbon tax) (see figs. 9

Figure 21

Reasons for supporting emissions trading schemes

Actively support emissions trading

Impact:

- Allows government to set a ceiling on emissions levels

Flexible:

- Gives companies choice over what's best
- Accommodates companies that cannot reduce emissions in absence of right technology

Market-based:

- Belief that market is a better mechanism for developing the most efficient solutions

Voluntary (not mandatory):

- More acceptable to private sector

Reward-based (not penalty):

- Scope to reduce cost/make money, opportunity to be cost neutral
- Brings competitive advantage
- More acceptable to private sector

Stimulus:

- If money is saved, investment in cleaner/greener technological solutions will inevitably follow

Concern over carbon tax

Impact:

- There is no specific ceiling set for emissions - government must estimate the appropriate carbon price.

Burden:

- Already feel over-burdened with tax

Enforcement:

- Requires government control to prevent tax evasion/avoidance

Lost opportunity:

- Revenue raised would not be used for environmental initiatives

Impact on products and services:

- Companies would try to recoup by passing cost onto consumer

Demotivating:

- No opportunity to benefit, only a cost
- Disincentive to growth, bad for economy

and 11 on page 19). Companies in India, Brazil and China have a very positive attitude. They are not currently subject to emissions targets but many profit from emissions trading by selling carbon credits through the Kyoto Protocol's clean development mechanism. In China, 28 per cent of businesses participate in an emissions trading scheme, and 92 per cent of all businesses support the idea (see fig. 10 on page 18 and fig. 11 on page 19).

Executives prefer the hypothecation of carbon and environmental taxes, i.e. the use of taxes to fund environmental and low carbon programmes. New tax proposals always raise concerns about increasing costs and competition from lower-taxed regions, but there is a strong case for balancing carrots and sticks in environmental policy.

Business leaders would of course prefer that new environmental taxes do not increase their tax obligations. In the EU, offsetting environmental taxes with other tax reductions is formally called Environmental Fiscal Reform (EFR). Evidence from Denmark, Germany, the Netherlands and Sweden suggests that EFR usually makes the tax system more business-friendly, according to the European Environmental Bureau. Sweden, for example, revised its energy tax system in 1991. The Swedish government credits the resulting combination of credits and incentives with reducing carbon emissions by nine per cent (as of 2006), while the economy was growing by 44 per cent.¹⁶ The carbon tax was accompanied by a reduction of general energy taxes by 50 per cent and new exemptions to further incentivise the use of low carbon energy.¹⁷

Executives prefer the hypothecation of carbon and environmental taxes

¹⁶ Gwladys Fouché, "Sweden's carbon-tax solution to climate change puts it top of the green list," guardian.co.uk, 29 April 2008.

¹⁷ Bengt Johansson, "Economic Instruments in Practice 1: Carbon Taxes in Sweden," Swedish Environmental Protection Agency, 8.

Section 4

How can policies find support?

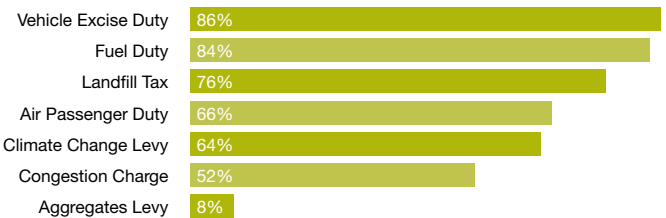
The success with offsets in Denmark and Sweden occurred before the financial crisis. In this period of enormous government deficits, it is probable that governments will need to increase taxes. The best chance for garnering business support for new taxes is to combine them with either offsets or some measure of hypothecation.

Business executives are unlikely to support environmental taxes... which are designed primarily to raise general revenue.

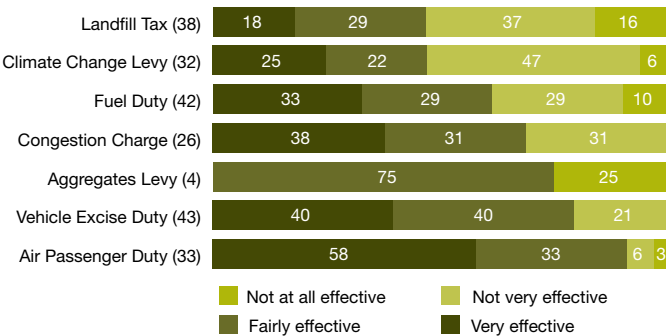
Business executives are unlikely to support environmental taxes, such as the UK's air passenger duty (APD), which are designed primarily to raise general revenue. In 2007 UK business leaders rated the APD the least effective environmental tax,¹⁸ and they remain sceptical today. Only nine per cent of UK businesses currently believe the APD is effective (see fig. 22 opposite). When increases in the APD were announced recently, Willie Walsh, the chief executive of British Airways, was quoted as saying: "The Government's own figures show that British airlines already meet their environmental costs, so there can be no 'green' justification

Figure 22

Taxes are paid by many organisations, but effectiveness is felt to be low



Which of the following specific taxes are paid by your organisation?
Base: UK only (50)



How effective do you feel the following specific taxes have been in changing your organisation's environmental behaviour? Base: UK only (base sizes in brackets for those paying each tax)

for these additional taxes.”¹⁹ The UK government has, in fact, already concluded that the APD did not produce significant reductions in air travel.²⁰

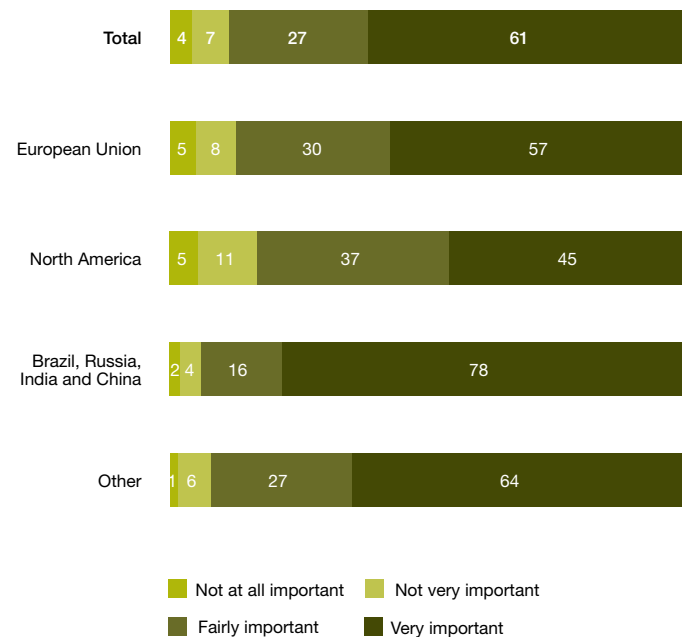
Taxes that are labelled and promoted as ‘environmental’ are qualitatively different than those designed to raise general revenue. Pollution taxes not only compensate for the failure of the market to price pollution, as on a more fundamental level, the goal is to reduce pollution.

If a pollution tax is not offset by a tax reduction, it is reasonable to expect that governments should seek to gain the maximum environmental benefit by investing the funds into further pollution reduction measures, which support the overall policy objective. Hypothecated (or reserved) tax proceeds could fund tax and other incentives as well as direct investments that balance the perceived penalties of tax charges and thereby generate support for and confidence in tax policy.

Between 1990 and 2005, Denmark reduced per capita CO₂ emissions by 15 per cent, using a combination of taxes, incentives and significant investments in renewable energy (especially wind power) that help provide affordable alternatives to heavily taxed coal power.²¹ Eighty eight per cent of businesses would like to see similar investments and incentives in their regions; however, only 31 per cent are confident that monies raised from environmental taxes are directed to environmental initiatives (see fig. 23 opposite).

Figure 23

Majority feel that the ‘giving back’ to the environment from taxes is important



How important do you feel it is for business to see that monies raised from environmental taxes and regulation are being/would be directed to ‘green’/ environmental projects and initiatives? Base: Total (654)

¹⁹ Budget 2009: how changes to Air Passenger Duty will affect passengers. By Charles Starmer-Smith, Telegraph.co.uk 22 Apr 2009

²⁰ Source: Antony Seely, ‘Air passenger duty: introduction’, House of Commons Library, Standard Note SN/BT/413, Last updated 16 June 2009

²¹ Charles Komanoff, “Revenue Recycle: Lessons (or not) from Europe,” www.carbontax.org, 25 March 2008

Section 4

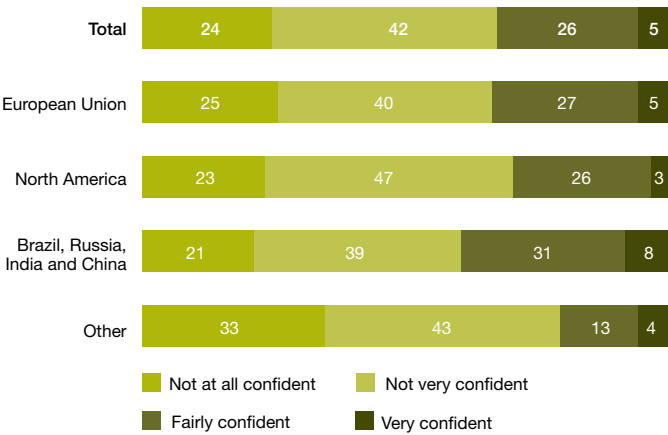
How can policies find support?

In some cases, hypothecation may not be the most efficient way to direct funds into environmental projects. It may also not generate sufficient funds for green initiatives. On the other hand, for governments that shift a significant portion of their revenue to green taxes, hypothecation of all the revenue from those taxes will simply be impractical. But whether through hypothecation or other means, governments that link new taxes strongly with environmental outcomes have a much better chance of garnering business support. As one respondent indicated, “If designed properly, a carbon tax can work. The key design element is that it has to be linked to environmental progress.”

“If designed properly, a carbon tax can work. The key design element is that it has to be linked to environmental progress.”

Figure 24

Fewer than a third are confident that ‘giving back’ will become a reality



How confident are you that monies raised from environmental taxes and regulation are being/would be directed to ‘green’ or environmental projects and initiatives?
Base: Total (654)

Governments that link new taxes strongly with environmental outcomes have a much better chance of garnering business support

Section 5

What will new policies mean for business?

Government action on climate change will increase the importance of regulatory compliance, reputation management and stakeholder relations



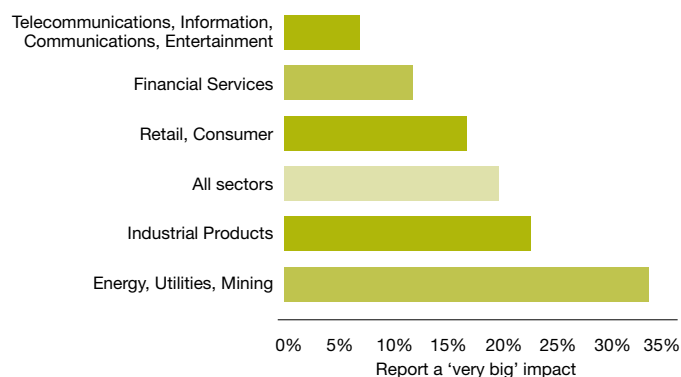
Government action on climate change will increase the importance of regulatory compliance, reputation management and stakeholder relations. Sectors that have already been heavily impacted by climate change are more likely to report that regulatory compliance, reputation management and stakeholder relations influence their environmental policies. These influences are likely to become more important among all industries as the impacts of climate change widen.

In this survey and in PricewaterhouseCoopers 2010 CEO Survey, executives in the entertainment, media, communications, technology and financial services sectors were some of the least likely to report a large impact on the way they conduct business as a result of climate change (see fig. 25 opposite). Executives in the energy, utility, mining and metal sectors were most likely to report that the climate change and environmental debate had already affected corporate strategy.

The power generation and transport sectors, for example, are expected to contribute 70 per cent of the projected increase in world energy-related CO₂ emissions to 2030.²² They have a triple role in climate change responses – increasing the share of renewable or cleaner generation in their own operations, participating in new business ventures to develop innovative cleaner energy solutions and, also, promoting better energy efficiency and cleaner energy initiatives among their customers.

Figure 25

Energy, utilities and mining firms are most affected by climate change



Base: Total (654); Telecommunications, Information, Communications, Entertainment (54); Financial Services (110); Retail, Consumer (118); All sectors (654); Industrial Products (203); Energy, Utilities, Mining (80)

The power generation and transport sectors are expected to contribute 70 per cent of the projected increase in world energy-related CO₂ emissions to 2030

²² Estimate by the International Energy Agency (IEA)

Section 5

What will new policies mean for business?

Utilities, along with other heavily impacted industries, are more likely to report the influence of regulation and legislation on their environmental policies (see fig. 26 opposite). There also appears to be a relationship between compliance and reputation; heavily impacted firms are more concerned with reputational management and stakeholder pressure. One possible reason is that laws and regulations establish minimum standards, penalties and incentives that impact competitiveness and corporate reputations. Mining executives, for example, need to maintain a good reputation with local communities in order to gain and retain access to resources. As Anders Lundkvist at LKAB in Sweden explains, “We need good relations with the authorities so we are sensitive to public opinion.”

In the industrial products sector, many companies are relatively energy intensive, and source natural raw materials and create emissions and waste during production. As a result, they are generally familiar with the need to comply with regulation and maintain a good reputation. This has been the case for at least 20 years in most jurisdictions, and has increased significantly in the last few years as the climate change debate has gathered momentum. In the next two to three years, for example, proposed EU standards

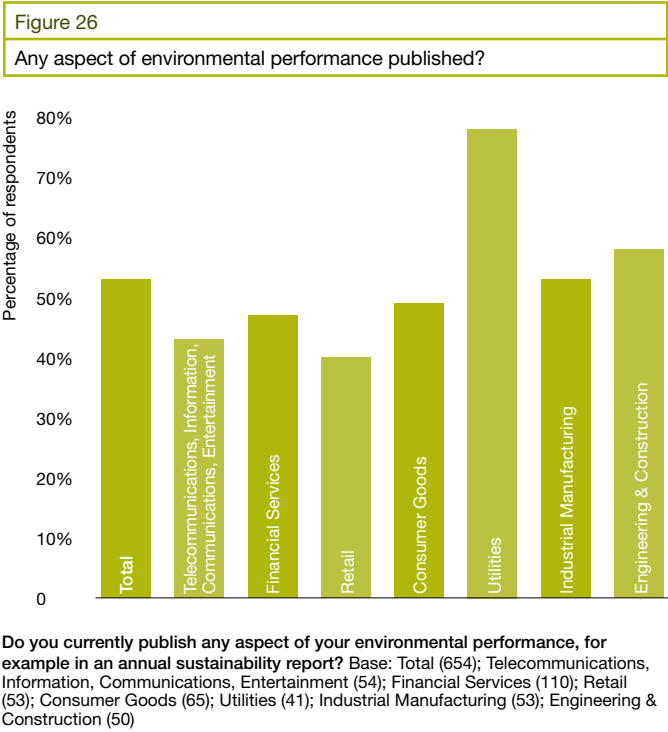
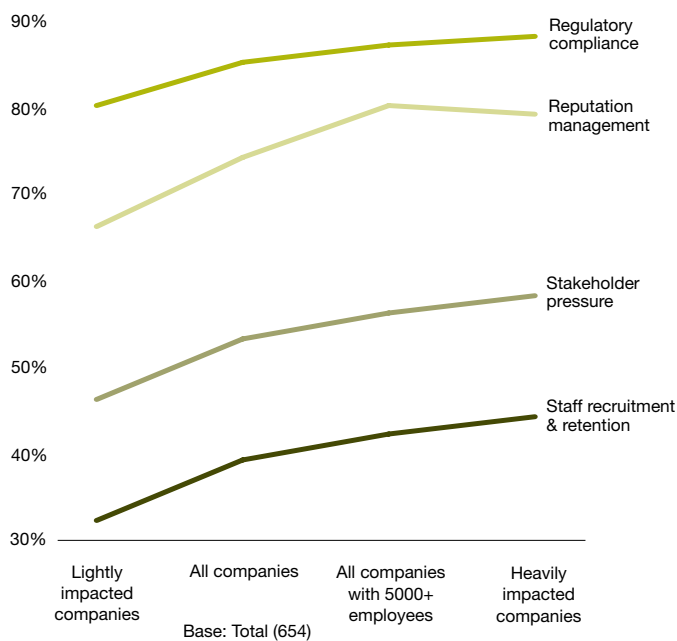


Figure 27

Related influences on environmental behaviour



will require engineering and construction companies to produce what approximates to ‘carbon neutral’ domestic and commercial buildings. Also, various national stimulus packages announced at the G20 summit in London in March 2009, contained significant investments in infrastructure that were associated with the need for climate change mitigation and adaptation.

Large local employers share a heightened sensitivity to reputation. Firms of more than 5,000 employees are also more likely to report a connection between environmental behaviour and attracting or retaining staff (see fig. 27 opposite). Almost 40 per cent of executives consider employee recruitment and retention influential in their environmental policies, although this is the smallest percentage of all the influences covered in the survey.

“We need good relations with the authorities so we are sensitive to public opinion.”

Anders Lundkvist, Director,
LKAB

Section 5

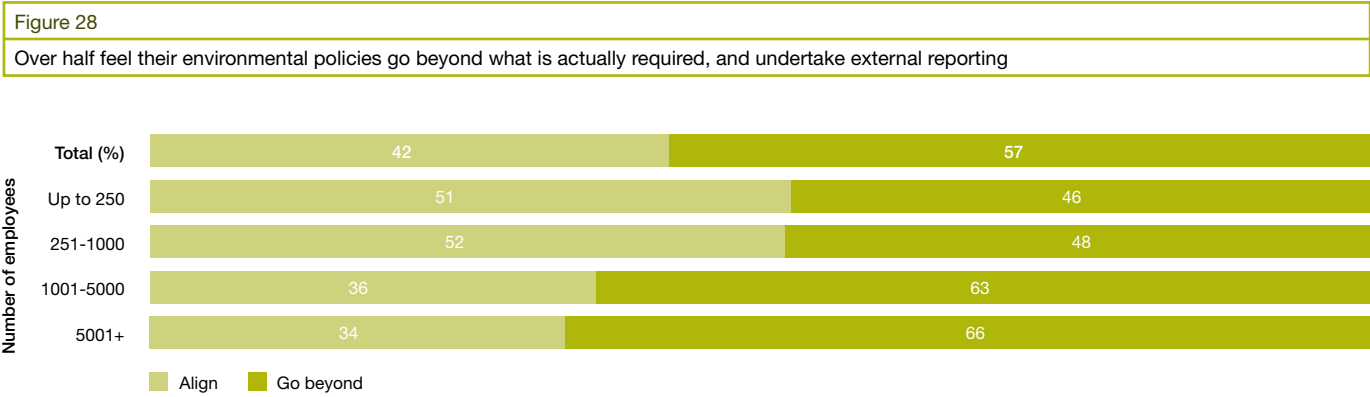
What will new policies mean for business?

Corporate climate change strategies will affect operations, key performance indicators, and innovations, around new products and services. Despite the paucity of clear signals from governments, large organisations are leading a drive in the business community to invest in environmental policies. About two-thirds of larger firms have environmental policies that exceed requirements, compared with only about half of companies with fewer than 1,000 employees.

Larger organisations, for example, are much more likely to be changing their operations as a result of climate change. Sixty two per cent of executives at firms with more that 1,000 employees, for example, say they are becoming carbon

neutral compared to only 35 per cent of organisations with fewer than 251 employees. “There are many areas where we go beyond the mandatory level of legislation on a voluntary basis,” according to an interviewee, “We wouldn’t do that of course if we didn’t see value in it.”

Corporate climate change strategies will affect operations, key performance indicators, and innovations, around new products and services.



Would you say your environmental policies are set to align with your legislative or regulatory responsibilities or do they go beyond these requirements? Base: Total (654)

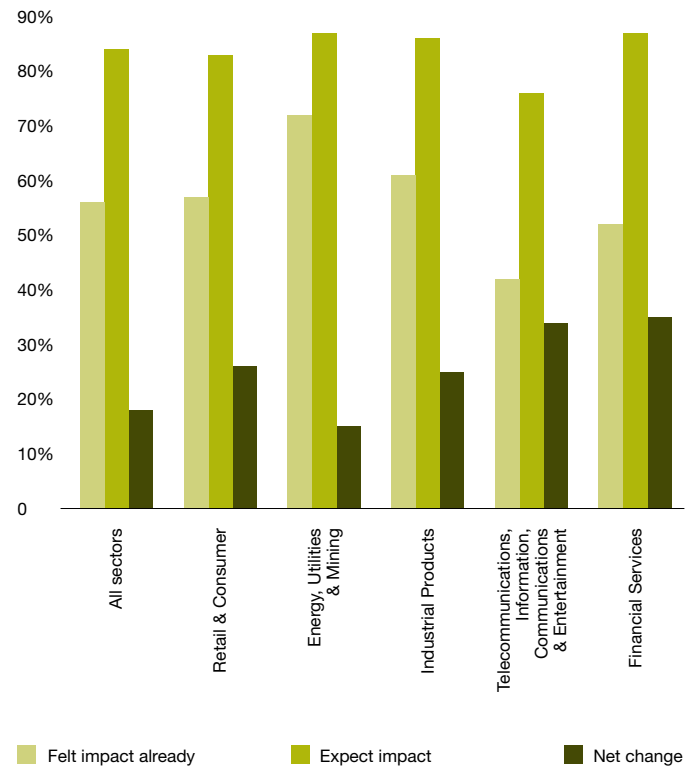
For most businesses, becoming carbon neutral will require the integration of carbon and energy management systems with operations and key performance indicators. Rather than being just an annual number crunching exercise, these systems will inform investment decisions and therefore need to be readily available and reliable. For long term or strategic investments in infrastructure or energy projects (producing and consuming), companies need to understand sensitivities to different policy, carbon price and climate scenarios.

Business executives currently consider reputation the second most important influence on environmental behaviour after compliance (see fig. 1 on page 9), but the influence of other operational and strategic issues is likely to grow. Cost savings is already the third most important influence. One cost being targeted by an increasing number of businesses is energy. Across sectors, pressure on margins and cash flows has reinforced the need for energy efficiency. New technologies and shorter payback periods (of two to four years, for example) are creating many options for businesses as they try to identify projects that are competitive within their portfolios.

While 58 per cent of business leaders say they have already changed the way they conduct business as a result of climate change, 84 per cent expect changes in the next two to three years (see fig. 5 on page 14 and fig. 7 on page 17). The increase in activity will be greatest in some of the sectors which are least impacted to date, such as financial services, communications and entertainment.

Figure 29

The impact of climate change on different sectors



Section 5

What will new policies mean for business?

The results of PricewaterhouseCoopers 2010 Global CEO Survey suggest the changes are likely to be related to new products and services, reducing emissions and allocating capital. There is an increasing realisation among business executives that climate change presents both risks and opportunities, but that it is fundamentally about change that will create demand for innovative products and services. The first to market with these innovations are likely to be at a clear advantage.

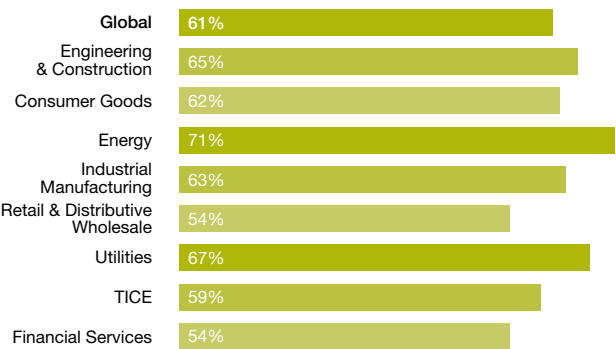
Today’s heavily impacted industries consider new products and services the second most likely outcome of climate change policies such as emissions trading schemes, carbon taxes, energy efficiency standards and reporting requirements. Many heavily impacted sectors also expect compliance with these policies to be costly. Energy CEOs, for example, foresee more cost and barriers to growth than utilities CEOs.

To prepare for these changes, 61 per cent of CEOs that had a climate change strategy last year maintained their climate change investments through the financial crisis. Seventeen per cent actually increased funding. New regulations, taxes and trading schemes are likely in the next few years. Businesses that are not already monitoring these policies and planning for their likely consequences will not be able to adapt as quickly.

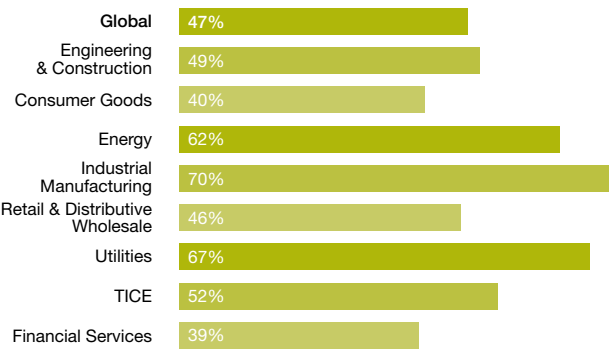
Business executives revealed they were, in fact, counting on outpacing their peers through environmental policies. Sixty seven per cent of all the executives in this survey said they expect to create a competitive advantage (see fig. 1 on page 9). For those already exceeding environmental requirements, the number increases to 74 per cent.

Figure 30

Potential impacts of climate-change initiatives



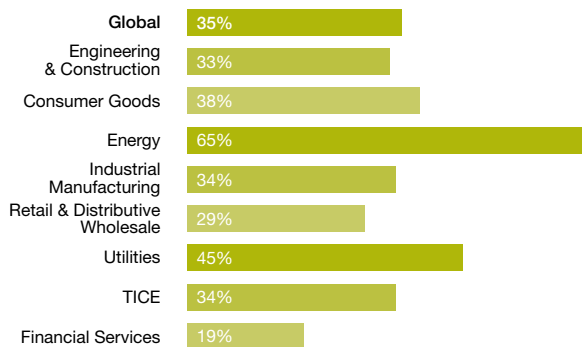
Our response to climate-change initiatives will provide a reputational advantage for my company among key stakeholders, including employees. Respondents who stated 'agree' or 'strongly agree'. Base: Total (1198)



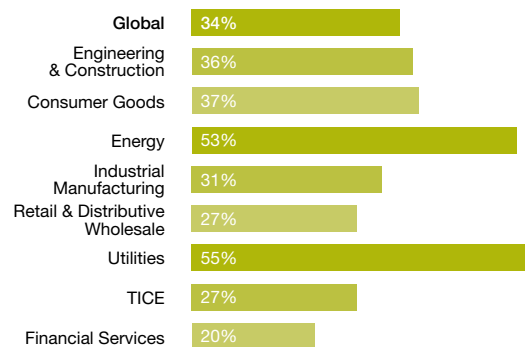
Climate change initiatives will lead to significant new product and service opportunities for my company. Respondents who stated 'agree' or 'strongly agree'. Base: Total (1198)

Figure 30

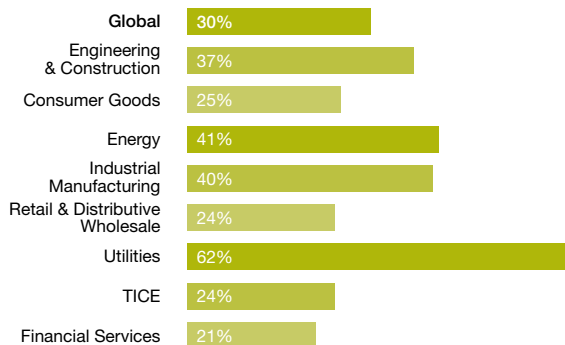
Potential impacts of climate-change initiatives



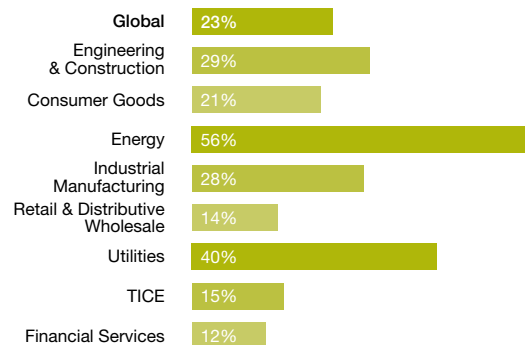
My company will need to reduce its emissions significantly. Respondents who stated 'agree' or 'strongly agree'. Base: Total (1198)



Compliance with climate-change initiatives will be a significant expense for my company. Respondents who stated 'agree' or 'strongly agree'. Base: Total (1198)



My company will benefit from government funds or financial incentives for "green" investments. Respondents who stated 'agree' or 'strongly agree'. Base: Total (1198)



Climate-change initiatives will slow growth in my industry. Respondents who stated 'agree' or 'strongly agree'. Base: Total (1198)

Base: Total (1198)

Section 6

While managing uncertainty, businesses remain hopeful

Businesses have
proven through action
and investment that
they are committed to
reducing their impact
on the climate



Businesses have proven through action and investment that they are committed to reducing their impacts on the climate. They are improving energy efficiency, driving down carbon emissions and seeking out low carbon business opportunities in an effort to secure their own futures.

The speed of transformation is increasing, as many executives report pressure from customers, investors and employees to make their businesses more sustainable. A growing number of businesses expect to be affected by climate change, and they are developing strategies to respond, even though government policies remain uncertain. The results of this survey, combined with larger trends in politics and business, suggest some important inputs for those strategic calculations.

- **Political momentum is building for carbon-related taxes.** Supporters of environmental taxes share the perception that they are a simple and effective policy tool. The recent announcements of carbon taxes in Ireland and France and the revisions to the European Union Energy Tax Directive, currently out for consultation, reflect a growing level of support. If progress slows in the US and at the international level, pressure will also increase on governments in Europe and North America to introduce border taxes in sectors covered by carbon regulations. In response to the growing momentum for tax changes, businesses are more closely monitoring tax policy developments and engaging with policymakers.

- **There will not be a common global price for carbon in the short to medium term.** Emissions trading is viable and popular among participants, especially in the major emerging economies of India, China and Brazil. But the creation of a global price is a long-term enterprise. In the short and medium term, businesses are appraising investments using a shadow price of carbon that covers a range of scenarios and varies for different national outcomes.

Emissions trading is viable and popular among participants

- **New regulations and standards are likely.** Governments are expected to complement market measures with non-market regulations, such as stricter standards on fuel and energy efficiency in transport, appliances and homes, and encourage more sustainable practices. Business executives have concerns that such measures will hinder growth through new costs and inconsistent implementation. However, they also recognise the effectiveness of well-designed regulations and are trying to anticipate how regulations may change the competitive landscape. For example, businesses are looking for climate change and environmental investments that reduce costs, such as energy efficiency.

Section 6

While managing uncertainty, businesses remain hopeful

- **The requirements for business to report credible or verified greenhouse gas data are increasing.** The foundation of climate change policy is credible data about greenhouse gas emissions. Unfortunately, as business executives have noted, governments do not have a good record of coordinating environmental policies. As a result, companies may already submit emissions data in multiple formats for different purposes or regulations, even within the same jurisdiction. To meet these obligations efficiently, organisations are investing in good data management systems.

Businesses are actually hoping for more government action on climate change

- **The lull in public interest is temporary.** Public interest and engagement in climate change has lost out to concern about the economy and jobs since the credit crunch in late 2008. As economies come out of recession, climate change will increase in importance as a consumer issue. Many businesses are preparing by maintaining investments to strengthen their environmental credentials and create new products and services.

- **Global warming of three or four degrees is possible.** The scarcity of clear, long-term public policies combined with tight public purses will continue to inhibit investment in low carbon infrastructure. This jeopardises the goal of holding global warming below the two degrees Celsius target referenced in the Copenhagen Accord. Businesses trying to anticipate the potential risks of climate change are considering warming of three or even four degrees Celsius, particularly where markets, longlife assets or supply chains are vulnerable to climate impacts, such as in regions that are coastal, highly reliant on water availability or vulnerable to extreme weather events.

Despite the rising tide of corporate action, business leaders worldwide want their governments to help lead the transition to a low carbon economy. For over a decade, global CEOs have picked over-regulation as one of the top three threats to their organisations. Yet, businesses are actually hoping for more government action on climate change. There is widespread support for all the major policy options – carbon taxes and regulation, in addition to incentives and emissions trading – and the support is strikingly consistent across regions.

This is an opportunity for government. Business leaders are eager not only to be involved in developing smart environmental policies, but also to see more policy coordination at the national and international levels. They remain hopeful that governments and business can halt climate change together.

This is an opportunity for government. Business leaders are eager not only to be involved in developing smart environmental policies, but also to see more policy coordination at the national and international levels

Section 7

About the survey



The survey comprises almost 700 interviews worldwide, covering 15 countries: US, EU (UK, France, Germany, Netherlands, Spain, Sweden and Czech Republic), China, Canada, Russia, Brazil, India, South Africa and Australia. The sample was drawn from the top companies in each territory by turnover, with a particular focus on industries likely to be most affected by existing environmental policy and legislation.

Respondents are the 'person in the organisation responsible for setting company policy and strategy towards managing its environmental impact and the main costs associated with this', which, for most companies, tends to be the Corporate Social Responsibility Director, Sustainability Director, the Environment Director, the Financial Director or the Head of Tax.

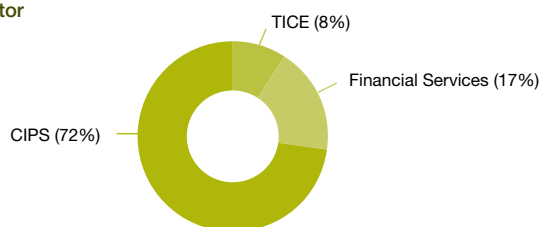
Fieldwork commenced in September 2009 and concluded at the end of November 2009.

Market		Qualitative	Quantitative
EU	UK	3	50
	France	2	50
	Germany	2	50
	Netherlands	1	28
	Spain	1	28
	Sweden	1	30
	Czech Republic	1	28
BRIC	Brazil	3	50
	Russia	2	30
	India	3	50
	China	3	50
North America	USA	3	90
	Canada	3	50
	Australia	3	40
	South Africa	1	30
Total		32	650

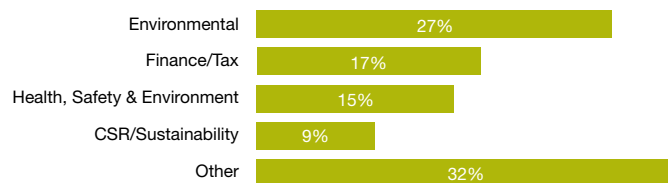
Figure 31

Respondent profile

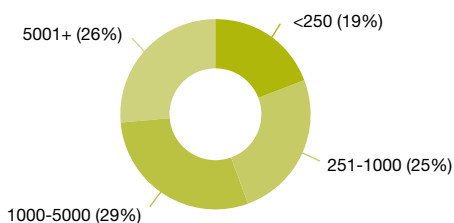
Sector



Role



Company size



Foreign operations



About PwC: Global Sustainability & Climate Change Tax Network

The global financial crisis has created extreme short-term pressures on businesses, but they remain focused on understanding the implications of climate change and developing sustainable business strategies.

Tax considerations are critical as businesses and governments collectively look to address these challenges. As governments around the world start to introduce taxes, incentives and regulation as a key component of their policies around sustainability and climate change, this presents businesses with a range of new opportunities and risks. The tax implications of these opportunities and risks require assessment.

Opportunities include the chance for businesses to gain competitive advantage, for example by adapting their business models, technologies and product ranges in order to become more sustainable, and in doing so, benefiting from the various incentives available to them. Risks include the inability to adapt to what is required of businesses by consumers and governments, the costs of emissions trading, and the reputational and financial risk of penalties for failing to observe, or comply with, environmental taxes and regulation, which are increasingly coming into play in different jurisdictions worldwide.

From a business perspective, it is hard to keep track of these taxes and regulations emerging in response to climate change, as in most territories, they are still evolving. In many cases, the measures introduced are complex, not yet harmonised with other international legislation, and uncertain in terms of the potential tax impact.

This is, perhaps, even more of an issue for businesses in the current economic climate, with the added pressures on cost-control and risk management. Businesses need to be fully aware of potential tax liabilities or implications in order to be able to manage these effectively, and should undoubtedly be asking themselves questions such as:

- Which environmental taxes do we (or should we) currently pay? How much are we paying in environmental taxes as a proportion of our total tax contribution?
- Which environmental regulations do we need to comply with, around the world?
- Are we proactively managing our exposure to environmental taxes and the tax impact of environmental regulation?
- Are we using the tax incentives available to us in each country / region, and are we considering these as part of our investment strategy?
- What is the impact of changing consumer and business preferences in relation to our supply chain, business model and product range? What are the tax implications of this?
- Do we understand all the tax implications of the emissions trading schemes which we (or one or more of our global subsidiaries) are part of, or have obligations under?
- Have we properly scoped the tax implications of any investments or projects either at home or in foreign jurisdictions (e.g. under the CDM) which have been entered into as part of the corporate response to climate change and sustainability?

At PwC, we have a dedicated team of advisers to support businesses with these and many other important strategic and ethical challenges they face around climate change and sustainability in its broadest sense.

PwC is the leading tax adviser globally by reputation, with a very strong lead over the competition¹ working with a number of the world's leading organisations and institutions on their tax issues in relation to sustainability and climate change. We have a specialised global team of tax experts working as part of our wider cross-functional network, who are already well-versed in sustainability and climate change taxes and regulation. Our specialists have built up their experience through their involvement with governments and businesses on the successful establishment, implementation and management of climate change taxes and regulations in different territories around the world.

At PwC, our approach is to go to market through industry specialisms, as we believe that each industry sector has its own unique set of issues and opportunities. As such, our Sustainability & Climate Change Tax network draws on the in-depth knowledge and experience of our industry specialists, which covers all industries affected by environmental taxes and regulation, including renewable energy.

In summary, what we bring to you is a combination of our established leadership reputation for tax advice, our global team of cross-functional specialists, our relevant, in-depth industry knowledge and expertise, added to the experience that we have built up in this area over the 20 years that our Sustainability & Climate Change practice has been in operation.

Perhaps most importantly, we have a passionate belief in the ability of taxes and regulation in response to climate change to make a difference to the behaviours or businesses and consumers, and ultimately to help save the planet, without damaging the global economy. For further information or to contact us, please see the inside front cover.

A powerful combination
of qualified tax specialists,
cross-functional capability,
industry expertise, in-depth
experience...and a passion to
make a difference.

¹ The Global Tax Monitor recognises PricewaterhouseCoopers as the leading tax adviser globally by reputation, with a very strong lead over the competition. These results are based on the year-ending Q3 2009 figures, with a sample size of 3,282 primary buyers of tax services globally.

Launched in 2000, the Global Tax Monitor (GTM) is an independent survey conducted by research agency TNS, that examines the competitive position of the top firms in the tax advisory market - globally, regionally, nationally and on an industry basis. It provides a comprehensive measure of firm reputation, client service and brand health, gained currently from just over 3,000 telephone interviews annually with key decision makers (CFOs and Tax Directors) in 31 key markets.

This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, PricewaterhouseCoopers does not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.

PricewaterhouseCoopers (www.pwc.com) provides industry-focused assurance, tax and advisory services to build public trust and enhance value for our clients and their stakeholders. More than 163,000 people in 151 countries across our network share their thinking, experience and solutions to develop fresh perspectives and practical advice.

© 2010 PricewaterhouseCoopers. All rights reserved. "PricewaterhouseCoopers" and "PwC" refer to the network of member firms of PricewaterhouseCoopers International Limited (PwCIL). Each member firm is a separate legal entity and does not act as agent of PwCIL or any other member firm. PwCIL does not provide any services to clients. PwCIL is not responsible or liable for the acts or omissions of any of its member firms nor can it control the exercise of their professional judgment or bind them in any way. No member firm is responsible or liable for the acts or omissions of any other member firm nor can it control the exercise of another member firm's professional judgment or bind another member firm or PwCIL in any way.