Building climate change resilience in cities

The private sector’s role

EXECUTIVE SUMMARY OF A 2014 SURVEY
In August and September 2014, the Economist Intelligence Unit (EIU) queried 248 executives at companies around the world about the role of business in building urban climate resilience. Slightly more than half are from organisations with significant operations or markets in Asia. Most (more than 85%) are members of the C-suite and the rest are heads of departments or business units or managers.

The largest groups surveyed are from the construction and real estate (18%), financial services (14%), professional services (12%), agriculture and agribusiness (11%) and IT and technology (11%) industries—all fields that are directly or indirectly affected by or play a role in resolving issues posed by climate-change shifts.

Executives at firms of all sizes responded, with more than 12% from companies with annual global revenues of $10bn or more. About 40% are from companies with annual sales of $500m to $10bn, while almost half (47%) work for companies with annual revenues of $500m or less.

The survey covered all major regions, with 30% of respondents based in Western Europe, one-quarter in North America and 28% in Asia Pacific. The rest hail from Latin America (6%), Africa (4%), Eastern Europe (3%) and the Middle East (3%).

**Here are the survey’s top findings:**

- Companies now consider urban risks that lie beyond the immediate effects of climate change as threats to their business. They also worry about civil unrest and political instability, rising crime and corruption levels, and the growing urban wealth-poverty divide.
- Executives based in Asia—where cities are expanding at a rapid rate—are more concerned than most about the increased pressure on urban infrastructure and how this will affect their operations.
- In terms of preparedness, regional differences emerge, with executives seeing Asia as less well-prepared than the rest of the world.
- The private sector still sees government shouldering the lion’s share of the burden for the loss of livelihoods and the breakdown of essential services as a result of climate-related shocks.
- Among resilience-building efforts, executives prioritise efforts to shore up the resilience of their own operations.
- However, this may be shifting, with 90% of executives acknowledging the role of business in resilience-building; a view most strongly expressed by those based in Asia.
- Notably, reputation is no longer a primary driver for corporate...
investment in climate-resilience-building. Increased competitiveness, improved employee health, greater productivity and lower absenteeism, as well as cost savings, rank higher as perceived benefits.

• As the private sector seeks to expand participation in broader efforts to build urban resilience, companies plan to form partnerships with government and civil society. This anticipation of a new collaborative era marks a break from the past, when companies tended to focus solely on their own resilience.

• The business case for urban climate-resilience investments is strengthening, particularly among Asia-based respondents.

Overview

As a major investor in cities, the private sector needs to protect valuable urban-based assets. So it is not surprising that today, self-interest drives corporate investments in fortifying the sector’s climate-change resilience.

As such, business is expanding its view of resilience, and sees a need to address a broader range of interrelated risks. When asked to look across markets, supply chains and operations, executives surveyed by the EIU point to three urban concerns in areas beyond climate-related risks:

• The potential for rising civil unrest
• Increasing pressure on urban infrastructure; and
• Rising crime levels and corruption.

Moreover, among regions, Asia-based executives are more worried about issues such as rapid urbanisation and the pressure this puts on infrastructure.

To confront these challenges, the survey indicates that companies have made good progress in building their own resilience—from installing backup power supplies to training staff. But the private sector is not yet assuming responsibility for the loss of livelihoods, illnesses related to extreme weather or the increased vulnerability of communities.

Indeed, most executives still see government as shouldering the lion’s share of the burden for managing these urban climate risks. Finally, in terms of preparedness, Asia was singled out, globally, as the region least prepared to confront the challenges of climate change.

Yet, change is in the air. The overwhelming majority (90%) of respondents believe business has a role in resilience building—an observation that is most pronounced in Asia. Increasingly, companies place themselves among the members of a broader ecosystem of stakeholders, particularly when it comes to addressing urban climate change. Many executives polled in the survey express their willingness to participate in cross-sectoral partnerships on climate change, or to form alliances with non-governmental organisations (NGOs) in order to achieve results.

This may be because companies increasingly see long-term benefits in resilience investments. While once executives may have pointed to reputation as their main payback for such investments, today the priorities have changed. Instead, many of them rank increased competitiveness as a top benefit, with the largest group (51%) highlighting this, suggesting that the business case for urban climate resilience is finally taking shape.

Identifying the challenges

As executives consider the top threats to their business in their local, urban environment, they highlight a range of risks. However, the relative emphasis that respondents give to the different challenges listed varies according to perceived threats to markets, supply chains or operations.

• Markets: Notably, increased climate risks—such as severe storms, rising temperatures, floods and cyclones—do not top the list when respondents consider their markets. In fact, of nine challenges, these issues ranked a low fifth, trailing unrest, political instability, rising crime and corruption levels, and the growing urban wealth-poverty divide. This suggests that, when it comes to markets, there is a shifting and sharper private sector focus on non-climate-linked urban issues.

However, there are regional differences. Asia-based executives, for example, are more concerned than their global peers about the risk to their markets of increased climate change, civil unrest and political instability, the risk of disease and epidemics, and the pressure on urban infrastructure. Respondents in Asia are also the least worried about terrorist attacks, the rising urban wealth-poverty divide and natural-resources constraints.

• Supply chains: When considering the vulnerability of their supply chains, executives place a far higher emphasis on climate change as a risk. In fact, climate-related threats rank second in the list of nine challenges, just below the risk posed by increased pressure on urban infrastructure. This suggests that companies have seen the disruption caused by supply chains by climate-related shocks (from the 2011 floods in Thailand to Hurricane Sandy’s devastation in New York and New Jersey in 2012) and are taking note.

However, Asian respondents are least worried about the pressure on urban infrastructure and the impact of climate-change threats in their supply chains—and are significantly more worried about the rising urban wealth-poverty divide.

• Operations: Here respondents are most concerned about the increased pressure on urban infrastructure, and that’s not surprising, given the rapid rate at which Asian cities are expanding. Respondents based in Asia are most worried about how this will affect their operations (73% versus 51% of those in North America and 58% in Europe). In fact, across all private-sector
In your opinion, what is the biggest source of shocks and stresses your organisation faces over the next ten years in the cities where it has its markets, supply chains or operations? Please select up to three in each column.

- **Markets**
- **Supply chains**
- **Operations**

1. **Rising crime levels and corruption**
   - Markets: 86
   - Supply chains: 61
   - Operations: 69

2. **Increased incidence of terrorist attacks**
   - Markets: 48
   - Supply chains: 41
   - Operations: 49

3. **Rise in civil unrest and political instability**
   - Markets: 94
   - Supply chains: 70
   - Operations: 90

4. **Increased climate risks (severe storms, rising temperatures, floods, cyclones etc.)**
   - Markets: 68
   - Supply chains: 78
   - Operations: 91

5. **Risk of disease and epidemics**
   - Markets: 44
   - Supply chains: 40
   - Operations: 48

6. **Natural resource pressures and constraints (eg. water)**
   - Markets: 62
   - Supply chains: 60
   - Operations: 60

7. **Pressure on urban infrastructure (transport, housing, policing, water supplies etc.) from overcrowding**
   - Markets: 80
   - Supply chains: 93
   - Operations: 103

8. **Threats to urban food security**
   - Markets: 27
   - Supply chains: 19
   - Operations: 27

9. **Rising urban wealth-poverty divide**
   - Markets: 82
   - Supply chains: 43
   - Operations: 53

10. **Other (please specify)**
    - Markets: 8
    - Supply chains: 9
    - Operations: 15

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interests—markets, supply chains and operations—urbanisation, particularly due to the pressure this puts on city infrastructure, is a universally shared global concern.

Executives were also asked to consider the risk climate change poses to their markets, supply chains and operations. Across all their activities, physical shocks are what preoccupy executives most—particularly the loss of energy supplies, damage to physical infrastructure from extreme weather events and disruptions to transport and communications.

More specific observations include:

- **Markets:** Energy-supply disruptions top the list of concerns, followed by the potential damage to markets from the breakdown of transport and communications systems.
Supply chains: Similarly, the possibility of transport and communications disruptions, the threat to physical infrastructure and the threat of the loss of energy supplies are the main supply-chain-related concerns among executives. However, the top worry here is the threat of business interruption in the operation of companies’ suppliers.

Operations: Again, energy insecurity tops the list of concerns. As for supply chains and markets, the breakdown of transport and communications systems, as well as physical infrastructure feature prominently.

What is clear from the survey—across all three areas of business activity—is that companies are most concerned about the breakdown of essential services. They are less worried, for example, about changes to legislation or rising insurance premiums.

Notably, executives polled believe the cities in which they and their operations, markets and supply chains reside face many of the same climate-related challenges as companies, with top threats seen as disruptions to energy and water supplies, transport and communications systems, and the physical infrastructure.

**Shifting perceptions of responsibility**

When it comes to solving climate-change-linked problems, particularly in the operations area, most respondents say that...
the burden of responsibility rests squarely on the shoulders of government. This most applies to the breakdown of sanitation systems, the loss of water or energy supplies, and damage to physical infrastructure, according to respondents. Only in the task of maintaining transport and communications systems do companies perceive a shared responsibility with government.

Companies also believe that policymakers play the biggest role in preparing cities for climate change. More than half of executives polled point to the importance of a powerful leader, such as a mayor, in strengthening a city’s ability to prepare for climate-related shifts, while more than one-third view greater coordination of city departments as important in these efforts.

Government is viewed as a facilitator of urban climate resilience building. In a write-in response, one senior financial-services executive based in the US argued that “effectively targeted government incentives” would do most to strengthen cities’ resilience. Survey respondents also see zoning, building codes and resilience land use, and expedited permits for resilient infrastructure construction as powerful public-sector tools.

Meanwhile, a primary barrier to action on urban climate change is public perception. “The lack of clarity is the biggest impediment towards recognizing and tackling climate change and, therefore, creating resilience,” wrote a C-level financial-services executive from a Singapore-based company. “For increased urban climate resilience to take root, it has to be embraced by the community,” added a senior US-based financial-services executive in a write-in response.

What in your opinion are the biggest obstacles preventing cities from building urban climate resilience?
Please select up to three options.

<table>
<thead>
<tr>
<th>Obstacle</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>High costs</td>
<td>45%</td>
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<tr>
<td>Limited buy-in from the community</td>
<td>26%</td>
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<tr>
<td>Scepticism about climate change</td>
<td>33%</td>
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<tr>
<td>A business case that is not compelling to the private sector</td>
<td>25%</td>
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<tr>
<td>Barriers to organisations working across sectors</td>
<td>11%</td>
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<tr>
<td>Insufficient awareness or information about the effects of climate change</td>
<td>17%</td>
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<td>Lack of sufficient technical knowledge about ways to prepare</td>
<td>19%</td>
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<tr>
<td>Lack of leadership</td>
<td>24%</td>
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<tr>
<td>Lack of government support</td>
<td>17%</td>
</tr>
<tr>
<td>Scepticism of the benefits of investing in urban climate change resilience</td>
<td>20%</td>
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<tr>
<td>Poorly targeted government incentives</td>
<td>12%</td>
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<tr>
<td>More pressing issues in the city (poverty, education, healthcare etc.)</td>
<td>17%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>2%</td>
</tr>
<tr>
<td>None of the above</td>
<td>2%</td>
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</tbody>
</table>
Has your organisation undertaken any of these measures today? Five years ago? Or will it do so in five years?
Please select all that apply in each column.

**The business response**

Despite the belief of many respondents that shoring up urban climate-change resilience is the purview of government, some 90% acknowledge the role of business in resilience building, a view expressed by nearly all executives (99%) in Asia. This near-universal recognition of business as contributor to climate-change resilience building in the region suggests a shift in sentiment from focusing primarily on its own operations.

Of course, as the survey reveals, many companies still see their own resilience as a priority. When asked what the primary role of business is in preparing cities for the effects of climate change, the largest group of respondents (63%) point to measures such as investing in backup power supplies, using more renewable energy or training staff.

Respondents in Asia appear to feel more strongly than their global peers about the business sector’s role in building climate-change resilience. They rank encouraging customers and clients to engage
in resilience programs as the primary role of the private sector in preparing cities for the effects of climate change. Moreover, a larger percentage of this group say they have been implementing these programs in the past, do so currently and plan to continue in the future than do their global peers.

The survey provides evidence that a nascent global shift is underway, with business looking to take on a greater shared interest in and responsibility for building citywide climate-change resilience. Indeed this shift seems to suggest a maturing of the corporate approach to urban climate resilience.

First, the survey shows that companies feel more confident about their own business continuity. When asked about the measures they have undertaken, the number of respondents who cite shoring up their own organisation’s resilience is far higher when looking back five years than it is looking ahead five years.

As a result, many want to play a broader role in urban climate resilience. When asked about measures such as forming partnerships with governments and NGOs five years ago versus five years ahead, the number of responses rises. Again, some regional differences arise. Asia businesses have been historically more willing to form partnerships with metropolitan authorities and establishing cross-sectorial climate-change alliances than their global peers. In short, companies are looking ahead to a more collaborative era of resilience building.

For some, this new collaborative era may mean working with customers or clients and business partners. One Canada-based transport, tourism and travel executive, for example, argues in a write-in response that the primary role of business is “encouraging suppliers, customers and clients to engage in resilience programmes.”

However, companies are clearly taking their engagements in urban climate resilience beyond traditional stakeholders. Many (41%) see alliances with metropolitan authorities as important when it comes to helping cities prepare for climate change, while significantly more (75%) plan to participate in cross-sector efforts and form partnerships with NGOs (85%) in five years than was the case five years ago. Although respondents from Asia lag their peers in forming partnerships with NGOs, they are willing to make up for lost time. However if companies believe they should play a broader role in combating the effects of urban climate change, cost is their primary barrier. In the survey, 45% of respondents—the largest group—pick this as an obstacle.

As they continue to evaluate threats, companies are assessing their preparedness. In this area, some interim regional differences emerge. Respondents see Asia as less well-prepared than elsewhere to face urban climate-change challenges. And the number of respondents who consider Asia “very unprepared” is almost three times higher than those viewing the rest of the world in this light.

Making the business case

Looking ahead, few dispute the benefits of investing in climate-change resilience. Just 10% see no benefit to such investments, although North America-based executives are less positive (79%) on this than others. By contrast, nearly all (96%) of Asia-based respondents agree with this statement.

How would you rate the capacity of the Asia region to proactively prepare for climate change-induced challenges, versus the rest of the world?

Please select one in each column.

<table>
<thead>
<tr>
<th></th>
<th>Very prepared</th>
<th>Somewhat prepared</th>
<th>Somewhat unprepared</th>
<th>Very unprepared</th>
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<tbody>
<tr>
<td>Asia</td>
<td>28</td>
<td>25</td>
<td>44</td>
<td>30</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>20</td>
<td>55</td>
<td>41</td>
<td>11</td>
</tr>
</tbody>
</table>

How would you rate the capacity of the Asia region to proactively prepare for climate change-induced challenges, versus the rest of the world?

Please select one in each column.
In the past, many companies would have seen these investments as a means of burnishing their reputations. But, notably, this is not the top driver. In fact, the top benefits cited are increased competitiveness, productivity, efficiency, the improved health of workers and savings that contribute to long-term business success. Roughly one-half point to increased competitiveness by lowering the risk of disruption. On this point, North America–based executives are particularly positive, with 67% of them making this claim versus 49% in Europe and 36% in Asia.

Other benefits cited include cost savings, with almost half citing lower utility costs through energy efficiency or water conservation as the principal benefits of building climate-change resilience. Improved employee health, greater productivity and lower absenteeism due to cleaner air or access to green spaces were also selected by nearly half of respondents as the top benefits of building urban climate-change resilience.

Clearly, while business has yet to play a prominent role in building urban climate resilience, companies are starting to think more strategically about how they can participate. As awareness grows that climate-related risks such as the spread of disease and rising temperatures could directly impact business operations, the private sector appears poised to become a more prominent player in broader urban resilience-building efforts.

Simply put, what is good for cities is also good for long-term business success, according to the survey. In one write-in response from a US-based financial-services executive, the message is clear. In describing the benefits of investing in long-term climate-change resilience, the executive wrote: “Greater profits and gross margins.”

What do you believe are the long-term benefits of investing in climate change resilience?
Please select all that apply.

- The ability to attract and retain top talent: 31%
- Greater productivity and lower absenteeism due to improved air quality or the availability of green city spaces: 48%
- Improved health of workers: 49%
- Lower utility costs through energy efficiency or water conservation measures: 48%
- Improved supply chain efficiencies: 39%
- Improved stakeholder relationships as a result of collaborations with government, NGOs or others: 36%
- Ability to improve our reputation as a responsible business: 48%
- Improved competitiveness by preventing or reducing the possibility of disruptions: 51%
- Other: 2%