

16. Sustainable Development Agenda for APEC Cities

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The 21 APEC member economies located around the Asia-Pacific region make up almost 46 percent of the world's population and produce more than 58 percent of its economic output. Most of this output occurs in cities, especially large cities. With more free trade agreements signed between APEC member economies, the prospects for the region's future development and its cities appear good.

However, the development of the cities in the region have proceeded largely without regard for sustainability. Many cities face significant challenges in managing problems related to urbanization, the environment, human capital, governance and infrastructure shortage. There is rising income disparity, unemployment and an ever-present threat of terrorism. These pose significant threats to the future sustainability, prosperity and livelihood of people living and working in the region's cities.

This study set out to investigate the dynamics of the changes occurring in the cities and growing urban economic and trade development corridors of the region. Using an urban systems approach to analysis, the various chapters have identified issues and development partnership practices that support the operation and management of sustainable cities in the APEC region. The findings have added to the knowledge about cities in the region, and especially to the growing importance of fostering wide-ranging partnerships to support the sustainable development and management of cities. The findings and lessons gained from the research reveal opportunities for APEC to work with cities within an Asia-Pacific Partnership to support the sustainable development of cities in the region.

A rationale for APEC to lead the development of a new agenda and paradigms for developing sustainable cities in the region are outlined, followed by a vision, framework and roadmap for implementing an APEC urban agenda. The agenda calls for APEC to lead an initiative focused on **Building Better Partnerships for Inclusive and Sustainable Growth of Cities in the APEC Region**. This agenda will encourage more collaborative approaches to urban development and management; trade, economic and investment linkages and partnerships; knowledge sharing and problem-solving; and innovative ideas for green, inclusive and creative cities. The agenda will help make cities more dynamic, liveable and sustainable places for people to live, work and do business. The conclusion to the chapter calls for action by APEC to move forward on this agenda.

16.1 FINDINGS FROM THE CASE STUDIES OF APEC CITIES

The case studies presented in the preceding chapters identify some common factors affecting the sustainable development of cities in the APEC region and highlight the need and opportunities for action.

The findings of the case studies clearly indicate that, despite the overwhelming importance of cities to the economies of the region, there is still a poor understanding, at

all levels of government, of the structural base for local economies, and how to manage the economic base of cities to proactively support competitive, inclusive and sustainable urban development.

16.1.1 Key Issues Affecting the Sustainability of APEC Cities

The research shows that the analytic, policy and implementation shortfalls of national and city governments have resulted in many of the region's cities failing to achieve their potential as drivers of national economies. The current approaches to urban development are, in most cases, not having a significant impact on entrenched problems of inequality, poverty, under- and unemployment, and better living conditions for all. The cities of the region, in general, are not providing the economic and social infrastructure needed to create new enterprises and trade development, investment and endogenous job growth opportunities. These issues, together with poor metropolitan and urban governance and planning, severe congestion of networks and service failures, are adding to the transaction costs of production and externality costs in cities across the region.

Efforts to address climate change and environmental issues, and create greener economies, have been inadequate. Ways to scale up promising initiatives to address these concerns at national and regional levels must be found. Cities in the region are failing to make sufficient provision for the social infrastructure needed to maximize the productivity and inclusiveness of their human resources. They are also failing to preserve the social and natural capital on which they depend for future development. Sustainable development is recognized as an important issue for cities, but the efforts by cities to become more sustainable are not sufficient to reduce the negative externalities resulting from rapid urbanization, congestion, housing shortages and rising inequalities.

On the positive side, cities in the region are remarkably creative, innovative and competitive in attracting business and investment when compared to other regions. Many have shown remarkable resilience in the face of natural and man-made disasters, and global economic shocks, to recover and grow back into healthy and dynamic cities. Christchurch in New Zealand and Yogyakarta in Indonesia are examples of cities that have suffered severe earthquakes and had strong recovery pathways. Cities in the region have also come through the 2007 global financial crisis better than any other region, but the continuing economic downturn will continue to challenge them.

The case studies illustrate significant opportunities to improve the productivity and liveability of cities in the region. In many cities across the APEC region, a range of partnerships are emerging that demonstrate strong elements of sustainable city development. Some cities have advanced into developing collaborative networks for economic cooperation and trade partnerships. However, most cities do not realize their full development potential, which suggests that there is scope for new policies and initiatives that foster greater collaboration in leveraging resources and infrastructure so as to increase creativity and innovation and enhance the social contracts that give greater protection to the vulnerable and disadvantaged.

If the cities of the APEC member economies are to become more sustainable, ways to realize the latent potential of cities need to be addressed through a range of policies, plans and actions by governments, business and communities. The global economy is evolving rapidly under transformative social, technological and climate changes. Exogenous growth models, even in successful examples such as China, have been found to have limits in relation to propelling economies past ‘middle income’.

Endogenous growth models will be needed for the next stage of development. Such models rely on acquisition, adaptation, dissemination and adoption of new techniques and practices in key industry clusters. But, despite the far-reaching international relations of their enterprises, the strategic infrastructure of most cities does not support international learning and their links are mostly confined to symbolic sister city relationships. Fostering improved linkages is a national economic priority but, generally, is not seen as such.

Good policy depends on good data and analysis. In this area, shortfalls occur in the measures and dimensions of city assets, product data, trade data, and data on natural capital; and in the techniques of analysis that enable formulation of appropriate economic, environmental and social policy. Effective partnerships for gathering, sharing and assessing data are needed, but do not exist.

16.1.2 Challenges in Implementing Sustainability

On the implementation front, the major shortfalls identified by the study that are resulting in the mediocre performance of cities include:

- **Limited role of city-to-city partnerships:** While there appear to be many sensible theoretical reasons why city networks and partnerships could make a contribution to lifting regional and national economic outcomes, the case studies and other literature have found little hard evidence of them actually doing so.⁷⁹⁶ The case studies present good examples of sustainable development practices, but very few demonstrate how these could be applied at the scale of a city or national system of cities. Partnerships between and among cities and regions on trade and economic development, such as the Mexico City–Chicago trade agreement, are significant avenues for scaling up and applying the good practices that could improve economic and sustainable development outcomes for cities across the Asia-Pacific region.
- **Inefficient hierarchy of urban systems:** The dominance of one very large city, e.g. Jakarta, tends to multiply agglomeration diseconomies and intensify under-utilization of enterprise and human capital in smaller cities. The lack of institutions to manage trade corridors constrains national and international economic opportunities, and is also a contributor to such problems. The development of trade corridors comprising networks of linked and interdependent cities is an emerging phenomenon; the challenge lies in how these are developed and managed. The Jing-Jin-Ji Region, the Pearl River Delta, the Vancouver–Seattle corridor, the Bangkok to Ho Chi Minh corridor, and the Mercosur trade development corridors are vital to fostering trade and development between cities. However, managing, financing and developing these will be a significant

challenge, which is best addressed through partnership arrangements between the governments of APEC member economies and city governments.

- **Inappropriate urban form:** Many cities have evolved toward lower-density, high-carbon and dispersed forms of urban development which are environmentally unsustainable and economically inefficient. Poor integrated metropolitan planning of land use and transport, ineffective logistics solutions, and weak management and governance are the primary causes of such problems. The chapters on Mexico, Lima, Auckland and Manila all show that urban sprawl adds to the costs and challenges associated with congestion for business, government and communities. An increase in urban density and consolidation of development are vital to improving the sustainability of development across the region.
- **Ineffective development and implementation mechanisms for strategic infrastructure:** Infrastructure investment tends to be opportunistic and ad-hoc, and lacks the context of a 'nested' set of integrated metropolitan plans, asset management plans and local development plans. Private sector and community inputs are not systematically and properly canvassed in respect of such investments. Investments are also not subject to public and transparent analysis that would relate to performance criteria established under the plans. Established cost-benefit techniques and implementation mechanisms are also neither inclusive nor do they have the necessary mandates to effectively implement the planned investment.
- **Systemic issues in meeting financing needs:** Financing is an important element of sustainable development plans, but one that systems at all levels do not appear to be adequately prepared to address. Many city governments do not have revenue-raising mandates in line with their city infrastructure needs. Local governments also have no incentive to maximize tax yields or to leverage private and community resources. Many of them do not have strategic and asset management plans; but where such plans exist, the financing required to realize those plans have seldom been fully estimated. In the case of enterprises, those in secondary cities often have less access to funding for investment; and micro, small and medium enterprises have restricted access to investment no matter where they are located.
- **Poor information and data:** Information and data are the new energy required to manage and operate the world's cities in the twenty-first century. However, there is a lack of good data on cities in the APEC region, especially the smaller cities. Without reliable data, especially economic data (e.g. trade, value of public and private investment, value of private transfers), it is difficult to conduct market research and achieve better planning. It is not just government and larger corporations that need better access to data. Micro business and the urban poor also need better and more equitable access to information and data to play a more direct role in service-orientated urban economies in the region.
- **Equity, social justice, and inclusiveness:** The right of citizens to participate equitably in their city's development and to benefit from it, especially in APEC cities in middle-income economies, has been denied to many. The poor, women,

children and the poorly educated are barred or severely restricted from access to essential services, justice, training and other needs that could significantly enhance their employment prospects, incomes and wellbeing. Many are marginalized and excluded from meaningful participation in governance and other decision-making processes that shape the development of their cities. Many just live in urban areas because there is nowhere else to go, but feel little sense of ownership, pride or belonging to the cities in which they live. These urban residents are usually a silent majority. However, the distaste of being forced to live in low-cost housing estates, ghettos and slums, and the sense of being forgotten and hopeless, could turn into an urban cancer that could develop into violence and anger. Recent elections in several APEC economies bear testimony to how the failure of governments to address equity, social justice, and inclusiveness could destabilize markets, economies and social systems in cities across the region.

The approach used in this report to analyse the sustainability of the region's cities involved an extensive literature review and case studies. Case studies are an excellent learning tool for studying the way cities in the APEC region address and adapt to problems that impact on the sustainability of urban development.

Fourteen case studies were prepared, each of which investigates the five elements for sustainable city development, namely, governance environment, physical environment, economic environment, social environment and natural environment. The case studies identify examples of good practice in cities and economic development corridors in the APEC region, and a selection of these are summarized in Table 16.1. There are, however, too few such examples of good practice. A survey of the literature finds that most good practice examples are found in only a few cities and in limited sectors of the economy, e.g. urban finance in Auckland, and very few are documented for smaller cities.

Gathering more examples and knowledge of good practices is vital to enable the APEC member economies to learn how to adapt better to disruptive technologies, 'megatrends', and social, climate and technological change, and to support the development of ideas, policies and actions to underpin a more broad-based approach to urban development that could have a transformative impact on APEC cities.

In each of these areas, partnerships among APEC economies and cities could facilitate better knowledge and practical action to improve outcomes. Limited examples of such partnerships exist and have been discussed in this report, and the preceding 2014 APEC report document.⁷⁹⁷ However, there is not, as yet, a systematic effort to address the scope of issues required to promote sustainable urban development in APEC. APEC, as the representative organization for 21 economies in the Asia-Pacific region, should play a leading role in facilitating partnerships for the development of sustainable cities.

Table 16.1 Examples of Development Partnerships from the Case Studies of APEC Member Economies

City	Economic	Physical	Social	Environmental	Governance
Auckland	Regional Business Partnerships: Established by New Zealand Trade and Enterprise to support SMEs throughout the region	Auckland North West Transportation: Auckland Council and Royal New Zealand Air Force collaboration to redevelop unused air force base	Auckland Regional Settlement Strategy: Collaborative strategy and partnerships for migration and integrated public relations	Auckland Environment Observatory: University of Auckland and Auckland Council partnership for regional natural resource management	Core Cities Network: Removes barriers and allows business to grow develop and create high-value jobs
Bandung	Sister Cities Partnership Programme	High Speed Train (Jakarta–Bandung): Public–private partnership project to reduce travel time, vehicle emissions and private travel between the two cities	Bandung Social Media Command Centre: Partnership with IBM and Bandung Institute of Technology (ITB) to improve public services		Bandung Integrated Resource Management (BIRMS) is an integrated governance system for managing development
Brisbane	Free Trade Agreements: International partnerships encouraging trade and economic competitiveness	Public-Private Partnerships: To improve the sustainable development of strategic infrastructure and physical development	Local Area Multicultural Partnership (LAMP): Integrates multiculturalism and promotes intercultural relations in the region	Healthy Waterways Network: Multiple levels of authorities and communities working to improve river water management	Local, State and Federal Government Collaboration: Holistic governance leading to sustainable development.
Kitakyushu	Yellow Sea Partnership: An East Asian network for economic interaction	Marine Transportation Network: Maintains 'sister-port' relationships nationally and internationally		Kitakyushu Asian Centre for a Low Carbon Society: International partnership to promote a low carbon society	The City Assembly: Members of the board from seven wards to address sustainable development challenges and policy responses
Lima	Alliance for the Cooperation of Euro-Latin American Cities. Strengthening city cooperation to improve public policy and development in LAXC cities		International Gastronomic Fair: The Annual International Gastronomic Congress, Qaray, attracts renowned international chefs		
Manila	Philippine Competitiveness Council: Boosts innovation and business support for sustainable development	Public-Private Partnerships: To increase and aid the sustainable development of strategic infrastructure and physical development	STEP-UP: Private-sector partnership for slum upgrading in Metro Manila.	The Philippine Agenda 21: Collaborative initiative to address broad sustainable issues with particular attention to clean water and sewerage PROAIRE: Intergovernmental partnership to improve air quality and reduce pollution	Metro Manila Green Print 2030 Integrated Strategy for Development Partnership: Between 17 cities and municipalities in the megacity region Mexico City Green Plan: Backed by the UN and the World Bank, the initiative with the government is to make the city more sustainable
Mexico	Global Cities Economic Partnership: Sister city alliances, both international and cross-continental	Suburban Train: Federal Government, Estado de Mexico and Federal District partnerships to build a significant infrastructure project			
Santiago	Free Trade Agreements: International partnerships involving free trade and encouraging trade and economic competitiveness	Private-sector Partnerships: To provide sustainable strategic infrastructure development including toll-free transport networks		Santiago Transportation Green Zone Initiative: Collaboration between the Chilean and UK governments that aims to reduce greenhouse gas emissions Sustainable Policy Initiative: Focuses on environmental management, economic	
Seoul	International Sister City Partnerships: With 23 sister cities globally	Private-sector Partnerships: To provide sustainable strategic infrastructure development – Nambu Express Line			Collaborative Government Initiatives: Collaborative initiatives in all areas of governance

City	Economic	Physical	Social	Environmental	Governance
Taipei				development and improved social equity Taipei Clean Air Initiative: Aims to reduce air pollution and create a more sustainable city	Metropolitan Partnership: Taipei to New Taipei collaborative governance partnership to ensure smooth running of the cities in parallel
Ho Chi Minh City	Southern Economic Corridor: An important trade corridor between Bangkok and Ho Chi Minh–Vung Tau				
Beijing	Free Trade Agreements: International free trade agreements promote trade and encourage competitiveness	Public-Private Partnerships: To increase and aid the sustainable development of strategic infrastructure and physical development			Government-to-Government Partnerships: Cooperative governance and administrative autonomy
Pearl River Delta	Hong Kong SAR CEPA: Free trade agreement between Hong Kong SAR and the PRC government	Public-Private Partnerships: To improve the sustainable development of strategic infrastructure and physical development	Institutional partnerships: Information and knowledge sharing, interconnected university systems and research	NGO Partnerships: World Bank funding to address water pollution in the Pearl River Delta; Greenpeace researching Pearl River Delta poisoning levels Climate Action Plans: Corporative structure to mitigate and adapt to climate change	
Vancouver	2015 Seaport Alliance Partnership: For unifying the operations of terminals in the Port of Seattle and the Port of Tacoma	Interstate I-5 Corridor: Cross-border highway involving public and private partnerships and intergovernmental management			Beyond the Border: Intergovernmental partnership for managing cross-border threats, security and people and good movement

Source: Authors.

In shaping an agenda for such partnerships, the key economic, spatial, social, environmental and governance dimensions need to be addressed. Cutting across these are the issues of climate change, public–private partnerships, community involvement, risk and resilience, and knowledge sharing. The potential form of such an agenda is presented in the following section.

Finally, partnerships must be flexible, especially when dealing with the need to respond to change and destabilizing events. The best-case studies examined by the research show that partnerships need to be innovative, focused, responsive and progressive. They need to be inclusive and accountable in their governance arrangements. Partnerships for sustainable urban development also need to recognize that there comes a time for renewal and closure when a better solution comes along.

16.2 NEED FOR A NEW AGENDA FOR APEC CITIES

The case studies presented in this report highlight some of the significant development difficulties facing many cities in the region. The current economic model – based on Kuznets’ 1955 postulation that increasing levels of economic output over time will eventually reduce income disparity – is being challenged.⁷⁹⁸ The relationship between the level of urbanization and GDP per capita growth does not seem to follow the model in the case of some economies and cities.⁷⁹⁹ Many cities are experiencing rapid population growth, but without commensurate reduction in income disparity.⁸⁰⁰

Significant revenue and wealth disparities are also occurring between cities, especially in economies where more than one-third of national economic output is produced by one or two very large cities. Such concentration of wealth and economic output in a small number of large cities has the advantage of creating strong agglomeration economies, where scale can reduce transaction costs and offer a competitive advantage. However, the over-concentration of economic activity in one large city is a very high-risk urban development strategy, as was shown in Bangkok in 2011 when the production system was severely affected by a major flood event. Many large coastal cities in Asia and Latin America are among the most vulnerable in the world to the impacts of natural disaster and climate change.⁸⁰¹ In the event of a major disaster in the capital cities of the Philippines, Indonesia, Chile, Mexico or Japan, the national economies would struggle to recover. Existing insurance and reinsurance arrangements would not be able to meet the full recovery costs of a disastrous event that destroys as much as 50 percent of a nation’s economy.

The current economic development model for cities in the APEC region, based on ever-increasing levels of investment pouring into megacities and large metropolitan areas, is also severely disadvantaging the development of secondary and smaller urban settlements which make up the national and regional system of cities. As a consequence, inequalities are widening throughout the region.

Given the problems with the current development model, new thinking and new approaches are called for. In arguing the need for APEC to play a lead role in setting a new agenda for the sustainable economic and physical development of cities in the region,

it is recognized that this will be challenging. The agenda will need to apply the principles of collaboration, cooperation and openness that ensure mutual benefit, respect and equality among the cities of member economies. It will also have to account for change and reform taking place over an extended period of time.

While there are no short-term solutions to the development problems of cities in the region, many efficiency gains can be made through improvements in technology, maintenance practices and governance. Given improved governance and financial arrangements, it may take 30 to 40 years to replace existing inefficient urban and energy systems, infrastructure and utilities, based on the average lifecycle for replacement of the built environment and the ability to raise capital to fund improvements. No city has all the answers, but many exhibit areas of good practice. To consolidate, draw on and adapt these practices, the agenda will also need to support an exchange of knowledge, peer learning opportunities, joint projects and investment opportunities in activities of mutual benefit.

16.3 PRINCIPLES UNDERPINNING A SUSTAINABLE DEVELOPMENT AGENDA FOR APEC CITIES

If the development of cities in the APEC region is to become truly sustainable, member economies need to agree on a set of principles to guide development. Cities and economies of the region are becoming increasingly interconnected and interdependent and can no longer act independently without affecting the activities of other cities. Cities in the region are linked to intricate networks of cities, where political boundaries are becoming less relevant in decisions that affect trade, investment, travel, and environmental issues such as climate change. The region is moving very rapidly towards a new model based on a shared economy, which requires all cities to be much more responsible for their actions and the impact these have on people, economies and the environment.

A principle is a set of conventions, practices or behaviours that has to be, or usually is, followed in a way that actions and decisions taken by governments, business, communities and individuals are intended to realize benefits for all. Principles enshrine ethics, customs and good practices that should be adopted and enacted when the consequence of a predictable event occurs that will be harmful to a city's urban systems. The principles of sustainable urban systems must be understood by those responsible for planning and managing the cities of the APEC member economies. This understanding is essential to maintaining the order, balance and stability of the system and its effective operation.⁸⁰²

While there are no universal principles for developing sustainable cities, several cities have established principles to provide a foundation for the sustainable development of their cities. The Metropolitan Green Plan for Manila, for example, sets out 10 principles covering a common vision, mobility, good governance, empowerment, smartness, etc.⁸⁰³ Other studies document various principles for the development of sustainable cities.⁸⁰⁴ Drawing on the examples and lessons gained from the case studies in this report and the

literature, some guiding principles can be developed for a sustainable development agenda for cities, as outlined below.

- In respect of **economic** issues:
 - Progressively moving to a model of urban economic development based on the sharing economy and collaboration, and providing individuals, corporations, non-profit organizations and governments with information that enables the optimization of resources through the redistribution, sharing and reuse of excess capacity in goods and services.
 - Enhancing the investment environment through improving human capital productivity, providing value-for-money infrastructure services, and keeping bureaucracy to a minimum.
 - Fostering innovation by providing the research and development support appropriate to the industry clusters in the urban area.
 - Building a strong framework of business support services and encouraging the establishment of a full range of financial services accessible to the spectrum of the enterprises in the city.
 - Planning, financing and building resilient strategic infrastructure appropriate to the industry clusters in the city and the systems and institutions for managing that infrastructure efficiently.
 - Fostering collaboration between cities in response to the development of the emerging sharing economy.
- In respect of **physical development** issues:
 - Fostering increased urban density and polycentric structures for the development of cities.
 - Fostering public transport orientated development along urban development corridors.
 - Encouraging the growth of economic and trade development corridors but ensuring also that secondary and smaller cities have the opportunities to advance as economic and logistics hubs to ensure a wider distribution of development benefits.
 - Fostering improvements in infrastructure that improve the efficiency of logistics, movement and business systems and increase safety in cities.
 - Fostering integrated development planning for cities, metropolitan regions and corridors.
- In respect of **social** issues:
 - Building a model of collaborative governance and consumption in which urban societies have more equitable access to products or services, rather than ownership and wealth being tied up in the hands of a few.
 - Building community consensus on safety, social inclusiveness and environmental objectives.
 - Developing a safe, healthy environment; educated, engaged and empowered citizens; and enabling frameworks conducive to knowledge and enterprise development.

- In respect of **environmental** issues:
 - Delivering the environmental infrastructure, healthcare, education, water and power, and management systems to support innovators and investors.
 - Fostering low-carbon development.
 - Bolstering enterprise and community resilience in the face of climate-related and other types of disasters.
- In respect of **governance** issues:
 - Building transparent, accountable and collaborative urban governance systems that can span the spatial scope of the economic organization from cities to economic corridors between economies.
 - Undertaking planning, programme and project development, financing and implementation oversight for inclusive, resilient and climate-change responsive development.
 - Encouraging partnership programmes that support the sustainable development of cities in terms of both scope and scale.

The above principles provide the foundation for developing more sustainable, inclusive and equitable economies across the region. Not all cities in the APEC region will be able to apply these principles in the short term, but all cities in the APEC member economies have agreed to work toward achieving the UN Sustainable Development Goals, especially Goal 11, which is to ‘*make cities and human settlements inclusive, safe, resilient and sustainable*’.⁸⁰⁵

16.4 FIVE AGENDAS TO SHAPE PARTNERSHIPS FOR SUSTAINABLE CITIES

The framework for sustainable city development used to analyse the economic, physical, social, environmental and governance systems of cities in each of the case studies can be used also to shape the agenda for creating partnerships for the sustainable development of cities in the region. Using a systems approach to shaping an urban agenda for APEC that supports partnerships for sustainable development of cities is entirely consistent with the approach being taken by international development agencies like the World Bank, regional development banks and the United Nations.

The issues and challenges facing the development of cities in the region can be grouped under the elements of the framework for sustainable city development as **five primary agenda areas: economic, physical, social, natural (environmental) and governance**. These agenda areas are described below.

All agenda areas are equally important to improving the sustainability of cities in the APEC region; none can be said to dominate, or be of lesser importance, when formulating strategies and actions for the sustainable development of cities in the region. While many agenda items will be common to national systems, priorities for implementing urban agendas will be city-specific. Many of the items listed for attention or action in each agenda system have been identified by the case studies. Others were identified from published research and reports. Most will require implementation in tandem with other

agenda items. Complementarity in implementing agenda items will be vital if more sustainable development outcomes are to be achieved. In practice, this means addressing problems in an integrated, cross-sectoral manner.

16.4.1 Economic Development Agenda

The economies of cities are their existential backbone. Strong local economies are key to sustainable urban growth, and the ability of cities to innovate and transform. In the advanced cities studied in this report, such as Auckland, Vancouver, Seattle and Kitakyushu, all levels of government were very actively engaged in local economic development. Such multilevel engagement will be required on a range of issues.

Reliance on one factor, e.g. real estate. The competitiveness of cities is being undermined by poor urban services and governance systems, a slowness in embracing economic reforms, and high business transaction costs. Many cities are not competitive and rely on real estate to boost economic development. Examples include Manila, Lima, Auckland and Brisbane, where significant amounts of domestic and foreign direct investment into land and property are driving the value of property markets up to unsustainable levels, leading to housing affordability problems and increasing wealth and income disparities. The trends are similar in other major cities in the region. Land speculation has become a significant problem for cities in the region because of the failure of governments to tax wealth.

Over-investment in real estate has the disadvantage of directing investment away from less prosperous industry sectors and is costing the region millions of jobs and depriving governments of potential revenue to provide public infrastructure, goods and services. These are arguments developed by Piketty on the need for the redistribution of wealth.⁸⁰⁶ Wealth capture and ensuring that more funds are directed into productive, albeit lower-return, industry sectors are vital to enhancing competitiveness, ensuring economic diversity and expanding urban capital markets and jobs in the region's cities. These are important economic agenda items that an APEC partnership for urbanization and sustainable cities must address.

Trade barriers. National governments have a crucial role to play in removing barriers to trade, encouraging cities to become more competitive and addressing blockages in logistics systems. However, it is in the cities that barriers to trade are much more difficult to remove, especially in metropolitan cities, which have different tiers of government, some of which are on opposing sides politically. Efficient intermodal freight and passenger logistics systems are critical to enhancing opportunities for trade and investment. Brisbane's, Vancouver's and Singapore's logistics systems are among the most efficient in the region, adding to the competitiveness of these cities. However, in many other cities, poor local regulations, slow issue of permits and licences, and inefficiency of land administration systems affect local business transaction costs.

Investment. National government support for foreign direct investment in many of the leading APEC member economies is strong, but on balance, most cities do not benefit from this. In Asia and North America, the bulk of foreign direct investment flows into the major port cities.⁸⁰⁷ Secondary (and inland) cities, in particular, are struggling to establish the enabling conditions for investors, developers and visitors. Consequently, many of the

development indicators for these cities are falling behind the larger cities, creating an equity gap in the systems of cities. The sustainability of APEC cities could be improved by tapping into the resources generated by their economies and by focusing on initiatives that facilitate the creation of competitive advantages attractive to capital, skills, development and visitors.

Innovation and business support. Innovation and support for business are critical to supporting sustainable city development. Without mechanisms and support services to grow, develop, diversify, manage and respond to risks and shocks, cities can easily enter a stage of decline, from which recovery is difficult. Some cities in the APEC region are finding it difficult to accommodate structural adjustments. Governments of many member economies provide incentives, grants and other support to business development through the development of export processing zones, business parks, eco-parks and innovation/research and development centres. However, there is a lack of a coordinated effort, and resources are spread too thin. More needs to be done to encourage greater coordination and collaboration, through the development of competitive industry clusters, collaborative research by public-private partnerships, reforms to intellectual capital regulation, targeted industry grant schemes and risk management.

Collaborative networks and systems. There is a need also to support city-to-city learning in respect of innovation and collaborative business development. The lessons that could be drawn from regional experiences with projects that take advantage of improvements in communication, transport and logistics systems need to be synthesized and disseminated. The world is moving into the age of the shared economy. Developing network partnerships for trade and investment; open platforms for access to data, knowledge and information sharing; and co-investment in infrastructure, utilities and services are vital to the development of collaborative networks and systems.

The sharing economy. This is a new paradigm of economic development, as business and governments seek ways to reduce transaction costs, and minimize energy consumption and use of non-renewable resources. ‘Access over ownership is the mantra of the sharing economy: a sector based on peer-to-peer lending, borrowing, exchange and collaboration. The idea is not new. But the technology which now facilitates and formalises these exchanges is.’⁸⁰⁸ It is no surprise therefore that ‘Uber, the world’s largest taxi company, owns no vehicles. Facebook, the world’s most popular media owner, creates no content. Alibaba, the most valuable retailer, has no inventory. And Airbnb, the world’s largest accommodation provider, owns no real estate’.⁸⁰⁹

Whole-of-government approach. Key agenda items needed to support the development of sustainable urban economies in the APEC region include: a whole-of-government approach to creating strong, dynamic and flexible business enabling environments; support for innovation, research and development; a focus on city-to-city partnerships; and the need to embrace the shift toward the shared economy.

Intersections with other agendas. Education and health in particular cross-cut the economic agenda, largely determining the productivity of the labour force; but increasingly the environment plays a role in determining a city’s attractiveness to investment.

16.4.1.1 Action Agenda Items – Economic Development

The city and corridor studies show that many reforms and changes in approach are needed to support a more sustainable economic development agenda for APEC cities. Major action items are described below. All will need to be actioned at both the city and regional or systems-of-cities levels.

- ***Economic Development Corridors***

It is essential to understand the economy of corridors with a focus on: (i) major transit corridors within cities; (ii) city regions or urban areas; and (iii) emerging trade development corridors. More comprehensive spatially tagged statistics on the labour force, production and trade are needed as the basis for such analysis.

- ***Industry Clusters***

The various stakeholders involved in cities must be identified. Ways of engaging these players in policy dialogue on economic development need to be designed and an analysis carried out of the driving factors and supply chain systems supporting each major cluster. In the absence of comprehensive data, stakeholders can provide significant and useful information as a basis for preliminary assessments.

- ***Investment Enabling Actions***

Given the opportunities and constraints identified for the major clusters, the next step is to determine priority investments and enabling actions and to assign responsibility for implementing them. In this activity, all levels of government should be involved, as action will be required at all levels. A public–private body should be the focus for oversight of this implementation process. Such collaborations already occur in cities such as Seattle, Vancouver and Sydney.

- ***Competitiveness of Cities***

Enhancing the competitiveness of cities will require an analysis of:

- The changing nature of city competitiveness in APEC cities
- Collaborative advantage, being the new agenda for sustainable cities.

- ***Value Adding***

Urban economies will require greater support for:

- A stronger focus on fostering endogenous growth and import substitution
- The growth of innovative, creative and smart industries.

- ***Property Markets***

Property markets require reforms to ensure:

- Better security of tenure, especially for tenants

- Transparency and accountability in land administration and management
- Fair market value applied to all land and property.

- ***Financial Markets***

Financial markets need to be assessed on their ability to deliver:

- Access to enterprise finance, particularly SME finance
- Access to more affordable microfinance
- Regulated bond markets
- Leveraging/sinking (future) funds, e.g. the Chicago Infrastructure Trust.

- ***The Third Industrial Revolution Economy***

There is a need to plan for the major changes in technology that will fundamentally change the way of doing business in all member economies, especially relating to the introduction of 3D printing; advanced computer usage in manufacturing and design; artificial intelligence systems; robotics; distributed energy generation and storage; and new materials.

16.4.1.2 Partnerships – Economic Development

Partnerships among APEC cities can foster a consistent and rigorous approach to the above processes and support the public–private collaborations central to implementing them. Such partnerships already exist; an example is the International Regions Benchmarking Consortium. These can be developed with the assistance of the governments of APEC member economies.

16.4.2 Physical Development Agenda

Infrastructure deficits. Infrastructure is crucial to the development of cities. However, some types of infrastructure are more important to the development of urban economies than others. Strategic infrastructure consists of hard infrastructure, such as physical assets and equipment, that are necessary for cities to develop the export sector or rapidly growing sectors or clusters of the local economy. It also comprises the software to run the hard infrastructure. Soft infrastructure includes the technologies, institutions, utility services, knowledge capital, administrative quality assurance, research, and the operations and maintenance systems for hard infrastructure.

Nearly all cities in the APEC region have a shortfall in strategic infrastructure. In Asian and Latin American member economies, the deficit in infrastructure runs into trillions of dollars. In developed member economies, logistics, enabling environments and integrated planning are priority areas for addressing issues such as ageing of infrastructure, congestion and capacity. In developing member economies, high priority concerns for sustainable city development include integrated planning and development, provision of strategic infrastructure, management of peri-urban areas, the protection of utility corridors and value capture. The alignment of soft infrastructure to support city-to-city trade and investment is generally poor across the region and needs improvement through shared standards, systems integration and removal of trade barriers.

Asset management and maintenance. Many cities have no record of the infrastructure they own, where it is located, and its age, condition, replacement value and real operational costs. Some parts of the urban infrastructure systems in the developed economies of the region are over 100 years old and in urgent need of retrofitting or replacement. The lack of attention to asset management and maintenance is leading to a rapid deterioration of urban infrastructure and the quality of the services they provide. It is costing cities in the region billions of dollars in lost production, and having a significant impact on quality of life and public health in many cities.

Land development and taxation. The failure of urban governments to ensure a proper mechanism for the release of land for development and for extensions of infrastructure, and the lack of land-based taxation systems, is creating patterns of urban development that are not sustainable. The failure of cities to protect urban utility corridors from development, or to designate land for expansion of road corridors, is adding more than 50 percent to the cost of urban road and infrastructure projects to improve access or provide basic urban services. Falling urban density in both population and patterns of development could be expected to add to long-term operations and maintenance costs. The redevelopment of inner city areas and urban corridors calls for new partnership mechanisms in cities across the region.

Intersections with other agendas. Economic development issues and governance, in particular, cross-cut the physical development agenda, largely determining the priority of, and the ability to pay for and implement, investments. Increasingly, environmental and resilience issues also play an important role in determining the priority, form and implementation strategy for investment.

16.4.2.1 Action Agenda Items – Physical Development

- ***Integrated Capital Works Development Plans***

The preparation of integrated capital works development plans is vital to the long-term planning and sustainable development of cities in the region. Such plans need to address long, medium and short-term needs for infrastructure and other capital works.

They must be linked to city departmental and corporation budgets. They should also be linked to capital financing plans that identify the levels of capital required by a city and how the capital will be raised through local revenue sources, taxes, user charges, loans and bonds.

Capital works development plans should identify developer and value capture contributions. Capturing revenue from these sources is critical to the funding of works programmes. They should also indicate opportunities for privatization or public–private partnerships to support capital works programmes where these are considered feasible and acceptable to city governments and communities.

- ***Asset Inventories and Registers***

It is necessary to understand the current state of the physical assets of urban areas, city regions or development corridors. Backlogs in the provision of infrastructure and

shortfalls in maintenance need to be rigorously and comprehensively assessed as the basis for analysis to determine priority investments.

Registers that include information on ownership, description, location, age, value and condition of assets are vital in preparing and updating city balance sheets, city maintenance programmes, establishing credit ratings for cities, and in the case of post-disaster situations, for assessment of disaster impacts and recovery costs.

- ***Investors and Stakeholders***

Related to the above, it is essential to identify the various stakeholders involved in key investment sectors and to assess: (i) potential synergies across sectors; and (ii) potential partners in the development of needed infrastructure.

The issue of who owns what assets and capital reserves must be clarified and documented, in order that these can be leveraged through various partnerships arrangements to support public and public–private capital works projects to develop infrastructure, buildings and other structures needed to increase levels of private-sector investment in cities. Ways of engaging stakeholders in policy dialogue need to be designed.

- ***Action Plans***

Given the opportunities and constraints identified across the major investment sectors, the next step is to determine priority investments and enabling actions, and assign responsibility for implementing them. In this activity, all levels of government should be involved, as it is inevitable that action will be required at all levels. The same public–private body discussed in the Economic Development Agenda section should be the focus for oversight of this implementation process as the economic and physical infrastructure investments are very closely linked.

16.4.2.2 Partnerships – Physical Development

Partnerships among APEC cities can foster a consistent and rigorous approach to the above processes and support the public–private collaborations central to implementing them. Such partnerships already exist. An example is the APEC Urban Infrastructure Network established in 2011 with the support of the Australian Department of Foreign Affairs and Trade. These can be built on and expanded with the assistance of the governments of APEC member economies.

16.4.3 Social Development Agenda

Health, education, legal and emergency services play important roles in determining the sustainability of a city. Access to such services is important to the economy of a city – in that healthy, better educated and safer workers are more productive – and also to the social stability of a city. Exclusion breeds crime and violence. Social development is thus closely related to improvements in security, education and health – and in housing.

Housing. Increasingly, housing is becoming a major issue for cities in the region. Housing affordability is declining in the region’s globalized cities (e.g. Sydney and

Vancouver) and access to any form of formal housing on the part of the poor in many APEC economies remains problematic. Adequate shelter enables low-income families to have a stable base and to develop their livelihood. More proactive policies for the development of housing are required to ensure that supply can meet demand for all levels of income. Such policies need to address the vested interests that benefit from high land prices.

Equality and inclusion. Assisting the urban poor and disadvantaged in the APEC region requires policy responses and strategies by cities and member economies that focus on job creation. Urban poverty levels are reflected in the inability of people to find work in the formal or informal economy, increased crime and discrimination, and inadequate health and education services. Women are the most vulnerable among those affected by income equality in the region. They are often paid lower wages than men, at any age. Community development and social inclusion are important considerations in addressing the needs of the poor, women, the aged and physically challenged, and children.

Intersections with other agendas. Economic and governance issues, in particular, cut across the social agenda, with inclusiveness and equity largely determining access to social services and employment. Environmental issues are also important to the poor as they are often the most vulnerable to pollution and climate-induced disasters.

16.4.3.1 Action Agenda Items – Social Development

- ***Socioeconomic Profiles***

Of critical importance to improving the social wellbeing and development of cities is to develop baseline profiles of the socioeconomic characteristics of citizens living and working in development corridors, city regions or urban areas. The profiling should include comprehensive, spatially tagged, gender-disaggregated statistics and data on families, incomes, shelter circumstances, skills and livelihoods; the levels of housing, health, education and security services provided; and the levels of risk associated with crime, disease and exposure to disaster by socioeconomic group and geographic location. These are needed as the basis for analysis of the level and inclusiveness of service provision.

- ***Social Services Audits and Inventories***

The various stakeholders involved in the provision of key social services, in particular, housing, health and education, for the region in question need to be identified. Ways of engaging them in policy dialogue need to be designed, and strengths, weaknesses, opportunities and threats (SWOT) analysis needs to be carried out for each major social service. In the absence of comprehensive data, stakeholders can provide significant and useful information as a basis for preliminary assessments.

- ***Engagement and Inclusiveness***

Participation has become an important tool for engaging communities in planning, resources mobilization and social services delivery. The extent to which citizens participate in community decision-making depends on the nature of formal

governance systems, which need to be respected but also need to be responsive to the dynamics of change.

Mechanisms for engaging communities in participatory planning, budgeting, service delivery and emergency management are important to reduce public-sector costs and outlays on social and community services, which are continuing to rise and are not always delivered efficiently.

Inclusiveness should be incorporated into meeting the needs of the poor, disadvantaged and segregated. These groups are often overlooked in poorer economies, but their right to improve themselves should be recognized when supporting the development of sustainable social systems in cities.

- ***Wealth and Income Disparity***

Almost all cities in the APEC region are experiencing increasing wealth and income disparities both within and between national systems of cities. This is linked to inequalities in access to social and community services, investment and development opportunities. Economies that have significant wealth and equity divides measured by Gini coefficients and other indicators need to look at ways to reduce these imbalances through national and local urban development policies.

Redistribution of wealth is essential to reducing Gini coefficients. One way to do this is to re-inflate the extent of the middle-income group living in cities. This is crucial to expanding overall levels of consumption and job creation, which is vital to the sustainable development of cities and national economies.

- ***Greater Equity for Women in Urban Development***

APEC could play a direct role in helping central and local governments to promote the right of women to play a more active and responsible role in the leadership and economic development of cities. Despite significant improvements in the participation rate of women in the workforce, especially in Latin American member economies, women still receive lower wages than men, face greater hurdles in gaining employment and are still not recognized for the many skills, competencies and ideas they bring to urban workforces across the region. APEC could encourage member economies to support equal opportunity for women in cities, especially in developing local and city business cluster networks and trade associations; improving banking and financial policies to support women entrepreneurs and micro business owners; and providing education and learning programmes to facilitate technology and knowledge transfer.

- ***Housing***

Shelter policy and housing development need to take into account affordability to the full spectrum of income groups, and provide delivery systems that are able to match appropriate housing types and finance to all parts of the spectrum. Housing is a vital element in a citizen's quality of life; distorted housing markets result in reduced quality of life for many.

Mechanisms to expand affordable housing and bring large numbers of vacant units of accommodation into the housing markets in larger Asian or Latin American cities are essential to addressing urban housing problems. For most cities, housing their citizens will only be feasible through the provision of mixed medium-density housing. Much of this could be achieved through the redevelopment of urban corridors and declining inner city industrial districts. Planning and facilitating urban resilience programmes that incorporate new forms of housing and modalities of construction is essential to developing sustainable housing models for the region's cities.

- ***Healthy Cities***

Ensuring the health of cities is vital to the wellbeing and productivity of workforces across the region. Creating healthy cities requires member-economy cities, collectively, to take action by applying multiple strategies to improve water, air and food quality, and ensure better urban living and working environments and better healthcare services. Healthcare has become an increasingly higher item of public expenditure in APEC member economies and city governments.

Better planning and location of health services is necessary to create healthier cities. This particularly applies to health programmes for the poor and the large numbers of people living on the periphery of cities. Health programmes must not only provide better facilities and services; they must also include policy measures for preventative health as well as social and mental wellbeing as these are important to reducing health costs and demand for services. Many of these programmes can be delivered through non-government and community-based organizations and cadres.

- ***Safer Cities***

Creating safer cities is essential to improving public and workplace safety, investment, and emergency and disaster prevention and management. Inadequate security and dangerous working environments, roads and utility services cost the cities of the region billions of dollars annually in lost productivity, premature deaths and disabilities, and damage to life and property through natural and man-made disasters. Creating safer cities requires multiple levels of planning, management and development coordination, improved laws and regulations, along with the enforcement of these.

- ***Investment Priorities for Social Services***

Given the opportunities and constraints identified across the major service sectors, the next step is to determine priority investments and enabling actions, and to assign responsibility for implementing them. In this activity, all levels of government should be involved, as it is inevitable that action will be required at all levels. A public community body should be the focus for oversight of this implementation process.

Collaborations on social services are rare. Thailand's National Housing Authority is a good example of a partnership that supports community upgrading activity through non-governmental organizations and community-organized development organizations; however, this is fairly small-scale and focused on slum areas.

16.4.3.2 Partnerships – Social Development

Partnerships among APEC cities can foster a collaborative and rigorous approach to the above processes and support the public community dialogue central to implementing them. Building such partnerships will be a challenge, but can be done with the assistance of the governments of APEC member economies. Such activities could be linked to proposed support to public–private bodies, but would require a dedicated support stream.

16.4.4 Environmental Agenda

While standards of living have risen as APEC economies urbanize, paradoxically, the quality of the environment has degraded. Economic development without attention to the environment has resulted in air and water pollution, land degradation, higher carbon dioxide emissions and increasing vulnerability to climate-related disasters. The total cost of air and water pollution in China is estimated at 5.8 percent of GDP, with cities being the primary contributor to such environmental problems. Almost all cities in the APEC region face environmental issues, to a greater or lesser extent.

Climate change. APEC cities are particularly vulnerable to the potential impacts of climate change, which include an increase in extreme weather events; sea level rises; storm surges and flooding; and hotter temperatures – all with related public health concerns. Amelioration of environmental problems requires appropriate policies, improved skills and institutional arrangements, and adequate financial resources. It is difficult for governments of smaller cities to develop and mobilize these resources, particularly in areas facing relatively slow economic growth and rising populations.

Pollution. Environmental conditions in many APEC member-economy cities are having a significant impact on public health, water and air quality, and the general wellbeing of people living in cities. The cost of addressing environmental issues is high. Solving them will take many years and involve a change in consumer and personal behaviour. Many cities in the APEC region are turning to low-carbon development approaches to deal with climate change impacts and the need to green their economies and environments. Living, housing and working conditions for more than 40 percent of the population of the region are poor. Solving these problems will require improvements in the productivity, liveability and health of cities.

Intersections with other agendas. Increasingly the environment plays a role in determining the planning, design and implementation of investment related to, or by, enterprises, government and households. As environmental awareness spreads throughout member economies, this influence will grow. Further, the sustainable harvesting of natural resources will play an increasing role in economic development.

16.4.4.1 Action Agenda Items – Environmental Development

- ***Restoration of Natural Capital***

Environmental pollution across APEC member economies' cities represents a significant proportion of GDP as well as adding to greenhouse gas emissions. First, it is necessary to understand the state of the natural capital, its vulnerabilities and the

pollution sources within the corridor, city region or urban area. More comprehensive and spatially tagged statistics on water, forest and other natural resource stocks and usage are needed as the basis for such analysis. For this, cities need to develop measures of natural-capital stock, depletion and restoration rates. Restoring natural capital is fundamental to the sustainability of cities and to reducing ecological footprints.

- ***Stakeholders***

It is necessary to identify the various stakeholders involved in using and preserving key resources for the region in question. Ways of engaging them in policy dialogue need to be designed and an analysis carried out to determine sustainable management practices for the resources in question. In the absence of comprehensive data, stakeholders can provide significant and useful information as a basis for preliminary assessments.

- ***Priority Investments for Natural-Capital Restoration***

A key step in restoring natural capital depleted by the demands of cities is to determine priority investments and the enabling actions required to implement resource management plans, and assign responsibility for implementing them. In this activity, all levels of government should be involved, as it is inevitable that action will be required at all levels. A public–private body should be the focus for oversight of the implementation process. Collaborations of this nature already occur, but usually are focused on one resource in particular. A successful example is the Brisbane River Management Partnership discussed in Chapter 4.

- ***Climate Change Resilience***

Climate change leading to rising sea levels and intensification of climatic events has the potential to damage the economies of many cities in the region. Several very large cities – Bangkok, Jakarta, Manila and Shanghai for example – are among the most vulnerable cities in the world to the impacts of climate change. The threat of climate change calls for the future-proofing of cities, something that will be difficult to achieve, but vital if the most at-risk cities are to defend and maintain their economies against this threat.

Action plans for adaptation measures will have to be prepared for all cities in the region with average elevations of less than 10m. Cooperation is required at APEC member economy and city levels to reduce greenhouse gas emissions to below 1990 levels or lower if climate change threats to many of the region’s cities are to be reduced.

- ***Social Capital and Economic Resilience***

While importance must be given to fostering economic resilience in the face of climate-change impacts, the pathways to achieving this may well come through fostering interest in cultural heritage, and through natural and social-capital rebuilding. Social-capital rebuilding could make significant use of multimedia and virtual learning. However, this will require investment in hard infrastructure to enable

the networks and systems in cities to build local human capacity to recover from economic shocks and downturns, or from skills and population losses in some declining cities throughout the region.

- ***Circular Economies***

Cities must move to adopt circular economies where waste is treated, and energy and water captured and recycled or reused, as part of cleaner production processes. Cities in the region must begin applying industrial ecology as a common practice to reduce waste streams to the lowest levels possible.

The development of circular economies in cities requires a collective approach to waste and energy recovery. In many cases, collaboration between cities will generate the critical mass and volume of waste products to create economies of scale for resources that are competitive with virgin materials. Cities in the region must begin to factor in waste costs, in the same way that greenhouse gas emissions trading will be used to reduce atmospheric pollution in cities.

- ***Green Cities***

This concept embodies all the above concepts and adds a focus on the role of cities in mitigating the impact of people on the environment. The sustainability of cities in the region will, in particular, be very dependent on the creation of more energy-efficient, green cities.

Green cities will involve cities moving to renewable energy sources and developing local energy grids and energy storage buildings. Cities such as Kitakyushu (see Chapter 7) and Singapore are leading the way on this. The transition to green cities offers many opportunities to support more sustainable and less fossil-fuel dependent cities. It calls for priority to be given to a set of investments in green energy, the green economy and resilience as part of the progressive renewal of cities around the region.⁸¹⁰

16.4.4.2 Partnerships – Environmental Development

Partnerships among APEC cities can foster a consistent and rigorous approach to the above processes and support the public–private collaborations central to implementing them. APEC has established a Low Carbon Model Towns Project and a network of interested cities through a series of activities. As with the social agenda, building real partnerships from these initial contacts will be a challenge, but can be done with the assistance of the governments of APEC member economies. Such activities could be linked to proposed support to public–private bodies, but would also require dedicated support services.

16.4.5 Governance Agenda

The quality of city governance is one of the most important but difficult challenges to improving the sustainability of cities in the APEC region.

Challenges at different levels of government. At the central government level, urban strategies are often unclear, and decentralization policies are not well-aligned with the tax base of distinct levels of government. Issues of income inequality remain unaddressed by tax systems. At the city level, there can be confusion over responsibility for the urban fringe and the functional responsibilities for citywide delivery and maintenance of local services. Community and business involvement in city government are at an early stage of development.

Major issues. Equity in access to land, housing and urban services is worsening. Policy failures include inadequate city management, ineffective planning for urban growth, infrastructure and service shortfalls, and an inability to address the complexity of resource demand, financing and capacity constraints. City governments are having difficulty moving from a regulatory to a developmental role. Without significant improvement in approaches to city governance in the APEC region, the problems and negative externalities of today's cities will be magnified by the large scale of the projected urban population growth over the next 40 years.

Intersections with other agendas. Governance determines outcomes in the planning, design and implementation of investments in all agendas, and should be the focus of partnerships.

16.4.5.1 Action Agenda Items – Governance

- ***Governance Structure***

In order to formulate a governance agenda for APEC cities, it is necessary to understand the governance structure. The various elements of governance (e.g. participatory, collaborative, urban management, mode of services delivery, etc.) should be evaluated in terms of how they measure up to international best practice for the urban area, city region or development corridor in question.

- ***Stakeholders***

The various stakeholders involved in each area need to be identified and their capacity to improve performance for the region assessed. Ways of engaging them in policy dialogue and appropriate incentives for improved performance need to be designed. In the absence of comprehensive analysis, surveys of user satisfaction can provide significant and useful information as a basis for preliminary assessments.

- ***Priority Investments to Improve Governance***

Given the opportunities and incentive systems identified, it is important to determine priority investments and the enabling actions required to implement such governance improvements, and assign responsibility for implementing them. In this activity, all levels of government should be involved, as it is inevitable that action will be required at all levels. A public-private body should be established for oversight of this implementation process. These collaborations already occur, and are focused on the economic agenda.

The following items are considered important to supporting an action agenda for the governance of sustainable cities in the region:

- ***Collaborative Governance***

There is a need to foster:

- City-to-city trade partnerships
- A collaborative governance culture (planning, budgeting, resource sharing) to replace current ‘siloed’ systems which are inefficient and stifle innovation.

- ***Metropolitan Management***

There is a need for effective:

- Metropolitan governance arrangements
- Integrated strategic planning
- Integrated spatial multi-sectoral budgeting
- Integrated services delivery based on multi-sectoral planning
- Infrastructure investment prioritization processes.

- ***Public Revenue***

There is a need for improved efficiency and equity in:

- Intergovernmental fiscal relations – to provide incentives for local revenue mobilization and leveraging
- Property tax collection
- Land value capture
- Asset leveraging.

- ***Reform of Regulatory Systems***

There is a need for more:

- Realistic and responsive development and planning regulations, and enforcement of those regulations
- Effective environmental regulations, and enforcement of those regulations
- Respect for the rights of citizens.

- ***Anti-Corruption Culture***

There is a need for more transparency in:

- Political processes
- Government
- Business operations.

- ***E-Governance***

There is a need to introduce IT-based:

- Management information systems
- Public information systems.

- ***Monitoring and Evaluation***

There is a need for systems at regional and member-economy levels to monitor and evaluate:

- Policy environments relevant to the agenda areas
- Capital investment related to agenda areas
- Operation and maintenance programmes
- The performance of cities across the agenda areas and city competitiveness

- Longitudinal studies on the dynamics of and changes in urban economic, social and environmental systems.

16.4.5.2 Partnerships – Governance

Partnerships among APEC cities can foster a consistent and rigorous approach to the above processes and support the public–private–community collaborations central to implementing them. As with the social agenda, building such partnerships will be a challenge, but can be achieved with the assistance of the governments of the APEC member economies. Again, such activities could be linked to proposed support to public–private bodies, but would also require a dedicated support stream.

16.4.6 Cross-Cutting Systems and Issues

Urban systems in the region are integrated in different ways at local, national and international levels. Urban systems cross-cut all agendas, and need to be integrated for cities to function efficiently and effectively. For sustainable development to occur at all stages in the planning, design, development, operation and maintenance of cities, issues relating to these cross-cutting systems need to be considered carefully.

The following list of cross-cutting systems is by no means complete, and the importance placed on each at a local, national and regional level will vary. Nevertheless, these are the key systems that need support through partnership arrangements:

- *Integrated planning* – This needs to take into account all agenda priorities.
- *Project development* – This needs to integrate urban agenda priorities into the performance criteria used for appraisal of projects and procurement.
- *Finance* – This needs to be structured such that individuals, firms and governments of all types can access appropriate financing to pursue priority agenda investments.
- *Learning, research and development* – This needs to address the spectrum of data required for effective planning and implementation of the agenda investments.

16.4.6.1 Action Agenda Items – Cross-Cutting Issues

Addressing cross-cutting issues is challenging and time-consuming, especially when political economy issues come into play in dealing with development and redevelopment projects. It is important, therefore, for cities to focus on solving the issues related to the most pressing development problems and challenges facing the respective cities or groups of cities. From the case studies, the major development challenges include:

- ***Formation of economic corridors***
This would mean assessing the:
 - Potential for corridor development (urban and trade corridors)
 - Needs of implementing and financing institutions in fostering corridor development, inter-regional trade and economic development partnerships.
- ***Proactively managing the urban form and economy***
This would require:

- Collaborative metropolitan planning and governance
- Integrated planning, financing, budgeting and urban systems
- Disaggregated city trade data (industry classification by destination)
- Local economic development support.
- ***Providing appropriate governance structures for strategic infrastructure***
Such structures will:
 - Have viable systems of urban finance (financial management, revenue collection, long-term capital programmes)
 - Focus on physical and environmental sustainability
 - Protect infrastructure corridors
 - Improve urban logistics systems
 - Proactively manage assets, including their appraisal, valuation, maintenance and replacement/upgrading.
- ***Developing collaborative partnerships***
This means:
 - Moving beyond sister city relationships – to city trading partnerships.

16.4.6.2 Developing and Managing Secondary Cities

Many secondary and smaller cities find it more difficult to implement a sustainable development agenda compared to larger cities. The research shows that many of these cities are struggling to attract investment, create jobs and fund essential infrastructure to support local economic development.⁸¹¹ Governments in secondary and smaller cities do not take such an active interest or role in fostering local economic development. Often, local economic development is the responsibility of a level of government above the city. As a result, medium-sized and smaller cities feel less empowered, which makes it very hard for local governments to become more innovative, entrepreneurial and competitive.

Local governments in smaller cities must become more engaged in local economic development and help create business-friendly environments for business and investment. All levels of government must work more collaboratively and cooperatively for the economies of cities to function efficiently and effectively. With more than 50 percent of the region's urban population living in cities of less than 500,000, the management and development of secondary cities is an important agenda item for APEC economies.

16.5 VISION AND AGENDA FOR SUSTAINABLE CITY DEVELOPMENT

Cities are of overwhelming importance to the economies of the APEC region; and it is vital to support them through collaborative, inclusive and sustainable urban development. This requires that those cities be proactively managed, and that the structural base for local economies be strengthened by providing them with the required strategic infrastructure and viable financing structures.

This calls for a clear vision for managing urbanization and developing sustainable cities. Such a vision must be realistic, achievable and acceptable to the APEC member

economies and the cities they represent. It should also be capable of responding to the dynamics of change and be progressive and collective.

The vision for a sustainable agenda for managing urbanization and sustainable cities focuses on collaborative partnership arrangements to improve the development and management of cities in the region. The vision supports the development of a sharing economy, recognizing that future economies, built urban environments and governance arrangements require greater cooperation and collaboration between economies if sustainable development of cities in the APEC region is to become a reality.

16.5.1 The Importance of Cities

A collective effort is needed to address the challenges of climate change, which is primarily a city problem. Nearly all future jobs and investment underpinning the wealth and prosperity of the region's economies will be created in the region's cities. Cities will become increasingly reliant on better communications, and open platforms of data sharing and technology exchange, to function efficiently and remain competitive. Urban governance systems that are better integrated, responsive and transparent in supporting the development and efficiency of regional markets, supply chains and logistics systems are vital to the sustainability of cities.

The formation of a range of urban partnerships that enable cities to work collaboratively on solving problems and fostering innovation and creative ideas is central to the realization of sustainable urban development across the region. This calls for more open, collaborative, inclusive, competitive and equitable systems in the region's cities. Cities in the APEC region must be able to realize their development potential, and not be held back by barriers to trade and investment, inequities in the development of infrastructure, and economic and physical development policies that are biased towards larger cities. The failure of smaller cities (to function or perform as well as they could) impacts on the performance and the development of national economies. For primate and large cities to function more efficiently and sustainably, it is vital that inequities and inefficiencies in the national systems of cities are addressed across the region.

16.5.1 Innovation, Risks and Partnerships

It would be very easy for APEC to focus on the simpler problems and issues of urbanization and sustainable city development. However, the hard problems will not go away. They will only become harder to solve as the region develops and becomes more urbanized. Fixing the infrastructure, governance and financial problems of cities; tackling the impacts of climate change; recognizing and dealing with disruptive technologies such as computer-aided manufacturing and their effects on jobs; and addressing the problems of urban poverty and housing require APEC member economies to come up with collective solutions.

Complex problems require creative thinking and solutions, which means that innovation and experimentation are keys to the future development of the region's cities. However,

innovation involves risks, and inevitably, the possibility of failure. Governments and communities will need, therefore, to decide what level of risks and failures is acceptable. The risks need not be borne by member economies or cities alone. By entering into partnerships and collaborations, the risks of testing innovative and creative ideas can be shared. This is important if breakthroughs in tackling the difficult problems faced by cities are to be achieved.

16.6 PRIORITY ACTIONS FOR AN APEC CITIES PARTNERSHIP INITIATIVE

Formulating an agenda and activities to support the development of sustainable cities using partnerships is one thing. The challenge lies in setting priorities for implementation. Urban development issues and challenges are complex and notoriously difficult to resolve; ideologies, the political economy and public opinions seldom coalesce. Many actions are necessary to address key shortfalls and realize the opportunities identified by the report to improve the performance and sustainability of the cities of the APEC member economies.

APEC's mandate is limited to policy, but the organization can work with its members on a limited number of priority actions that could make a meaningful contribution to the sustainable development of their cities. It could do this by establishing an initiative focused on *Building Better Partnerships for Inclusive and Sustainable Growth of Cities in the APEC Region*.

Five key areas have been identified from the research which APEC and its Secretariat could support as part of the initiative:

(1) Partnerships to Lift Economic Performance and Trade

While there appear to be many sensible theoretical reasons why city networks and partnerships could contribute to lifting regional and national economic outcomes, the city case studies and literature have found limited evidence of them doing so. The case studies present good and outstanding examples of sustainable development practices, but very few have been scaled up and implemented at the city or system of cities level. Scaling up the individual lessons drawn from the case studies through partnerships (e.g. city-to-city clusters; or trade, economic development and investment exchanges such as the Mexico City–Chicago partnership) is vital to enhancing the performance and sustainability of APEC member-economy cities.

A critical element of development partnerships to enhance economic performance is the development of more specialised spatial clusters of industry and economic activities. Economic development strategies and government enabling support to the development of export-orientated industry clusters is important, but the focus on support endogenous growth is equally important. With the advancement in ITC and other technologies (especially 3 D printing), there are many opportunities for the globalization and localization of production of goods and services in the large, medium and smaller cities across the region.

The development of economic corridors and economic linkages across urban systems will be central to such partnerships. The dominance of one or two cities tends to multiply agglomeration diseconomies in the primate cities and to intensify under-utilization of enterprise and human capital in smaller cities. The lack of institutions to manage trade corridors, and facilitate access to national and international economic opportunities, is a major contributor to such problems. The development of trade corridors comprising networks of linked and interdependent cities is an emerging phenomenon, but the challenge lies in how to develop and manage these corridors. The Jing-Jin-Ji Circle, Pearl River Delta, Vancouver–Seattle, Ho Chi Minh City and Mercosur trade development corridors are vital to fostering commerce and development between cities in these regions; but the management, financing and development of these corridors will be a significant challenge, which is best addressed through partnership arrangements between cities and governments in each corridor region.

(2) Partnerships to Foster Sustainable Urban Forms

Many cities have evolved toward lower density, high carbon and dispersed forms of urban development which are environmentally unsustainable and economically inefficient. Metropolitan planning, in particular the integration of land-use and transport/logistics solutions, and governance shortfalls are the primary causes of such problems. The case studies on Mexico, Lima, Auckland and Manila show that urban sprawl adds to the costs and issues associated with congestion for business, government and communities. Increasing urban density and consolidation of development is vital to improving the sustainability of development across the region.

(3) Partnerships to Support Development of Strategic Infrastructure

The governance agenda should promote partnerships for strengthening programme development and implementation mechanisms for strategic infrastructure, and for addressing the systemic faults which occur at all levels in systems related to financing investments for sustainable development. Currently, in many cases, infrastructure investment tends to be opportunistic and ad hoc, and lacks the context of a ‘nested’ set of integrated metropolitan asset management and local development plans. Private sector and community inputs are not systematically and equitably canvassed in respect of such investments. In addition, and importantly, once a project has been implemented and throughout its life, investments are seldom subject to independent, transparent analysis that relates to performance criteria.

(4) Partnerships to Improve Systems Related to Financing Investments for Sustainable Development

Urban governments do not have revenue raising mandates in line with city infrastructure needs; local governments have no incentive to maximize tax yields nor to leverage private and community resources; funding requirements, in many cases, are unknown. Strategic and asset management plans seldom exist; where they do exist, they have not been adequately estimated. Enterprises in secondary cities often have less access to funding for investment; micro, small and medium enterprises suffer the same restricted access to funding no matter where they are located.

(5) Supporting These Initiatives will be Partnerships to Enhance City Information, Trade Data and Asset Management Systems

APEC member economies are becoming more closely linked to expanding trade, investment, tourism and other types of exchange. For trade and investment to grow, information, trade, services and infrastructure need to be more closely integrated, and the nature, volume, capacity and spatial identity of assets and value-adding inputs to production and waste streams better known. Currently, most cities in the region have incomplete information about their economies, what they import and export, where and how value-adding occurs spatially and the changing dynamics of technology and skills requirements for expanding service sector economies. The development of integrated city information and management systems is vital to improving the logistics for supply chains and movement systems, streamlining administrative systems and developing higher levels of risk assessment and preparedness in cities. It is also crucial that these partnerships and ITC systems are made more open to micro business and the urban poor to enable them to gain equitable access to new knowledge, technology and markets in the transformation to more service sector driven economies.

The economic planning ministries of the APEC member economies should develop dedicated units capable of analysing urban economic systems and fostering best practice in sustainable urban development. These units should focus on providing appropriate enabling frameworks for the acquisition, adaptation and implementation of best practices through supporting effective partnerships among cities, communities and the private sector. This should extend across systems of planning, development and assessment, project procurement and finance – improvement to only one area is unlikely to improve outcomes. APEC should support the development of such capacity. Responsible ministries should tap the substantial body of expertise in academic and policy institutions. The next section proposes a roadmap for how such support could be organized.

16.7 ROADMAP FOR APEC PARTNERSHIPS FOR INCLUSIVE AND SUSTAINABLE GROWTH

In shaping a roadmap to move forward on an agenda for Building Better Partnerships for Inclusive and Sustainable Growth of Cities in the APEC Region, it is essential, given APEC's pivotal position representing several of the largest and most influential economies in the world, that APEC identifies and agrees on how to develop the initiative, along with the scope and scale of the activities the organization engages in.

Figure 16.1 is a roadmap showing the structure and scope of a possible urban partnerships agenda and programme for APEC. The scale of these activities initially might be limited to a few member economies and cities. It is essential that the activities be designed as part of a learning experiment to identify how APEC can best support sustainable urban development activities within and between a few member economies and cities before attempting to scale up some of these. APEC should select activities that member economies feel confident will generate results and positive learning outcomes that can be shared, adopted or adapted by other member economies and cities. Even when there are experimental failures, much can be learned from these. In urban development, the margins

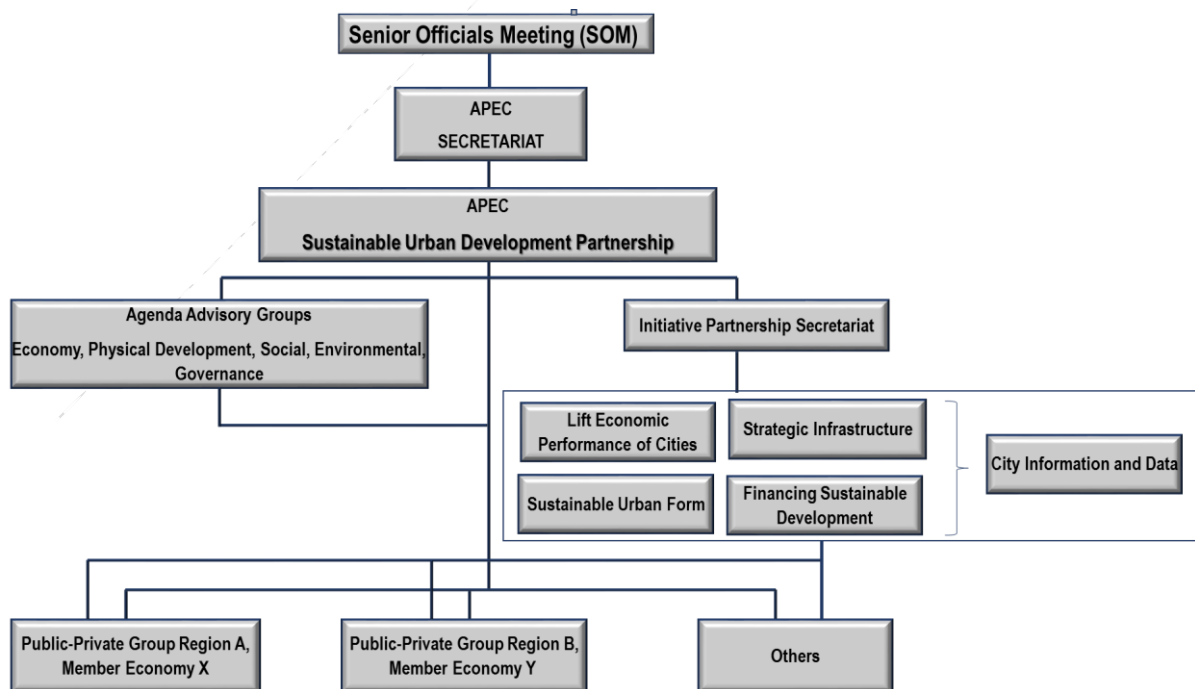
between success and failure are often small; what is a successful in one city will not always be successful in another.

It is envisaged that the APEC Secretariat would form a Sustainable Urban Development group to coordinate activities to implement an urban agenda. The representatives of this group would be drawn from the economic planning ministries of the member economies, or their nearest equivalent with a strategic overview of city infrastructure needs. The group would report directly to the Senior Officials Meeting (SOM) owing to its cross-cutting nature and the potential involvement of several committees of APEC. These activities would fall into two main and related areas.

The first would entail the formation of advisory groups for the five agenda areas shown in Figure 16.1. These groups would be voluntary, but specific studies could be undertaken with groups – depending on the availability of funds. They should meet at least yearly, and at these meetings, the focus should be on a particular topic – which can then be documented as a knowledge product.

The second activity area would concentrate on the priority actions for partnership initiatives. Again, depending on the funding available, an Initiative Secretariat could be established. This secretariat would have two primary functions. The first would be to service the work of the initiatives and the second would be to act as the repository of data on APEC urban systems.

Figure 16.1 Roadmap for Building Better Partnerships for Inclusive and Sustainable Growth of Cities in the APEC Region



Source: Authors.

The initiatives map to the action items set out in Section 16.6 and give substance to the Partnership. The Urban Economic Corridor Initiative can action much of the agenda set out in 16.6(1). The Urban Development Initiative can action the agenda set out in 16.6(2) to 16.6(4). The Governance Initiative would focus on actions set out in all five agenda items. Funding can be sought for part or whole of the agenda, but it is suggested that current development assistance support may be available for important parts of the initiatives. Much interest has been shown by agencies involved in the sustainable development of corridors such as the Silk Road (China and the Asian Infrastructure Investment Bank) and the Greater Mekong Subregion (Asian Development Bank). The Australian Department of Foreign Affairs and Trade is funding the development of an APEC Urban Infrastructure Network, which is addressing many of the issues under the Urban Development Initiative.

It is further suggested that the Secretariat seek to foster the formation of public-private urban groups in each member economy, linking interested persons into the Advisory Groups and the Initiatives.

16.8 IMPLEMENTING THE SUSTAINABLE CITIES AGENDA FOR THE APEC REGION

To implement an agenda supporting APEC partnerships for urbanization and sustainable city development in the region, the Secretariat will need to work with member economies to develop an action plan that identifies focus areas and priorities the organization can support for a range of partnerships with cities in the APEC member economies. It is essential APEC economies and their cities engage in activities of mutual benefit to the development of a network, or subsystems, of sustainable cities in the region.

There is considerable merit in APEC taking the lead role on this. No other peak organization acts as a bridge for the development of cities in the Pacific Rim economies and cities. While UN-Habitat is the peak international agency for cities and human settlements, it and the UN regional commissions do not have an integrating mechanism for cross-regional cooperation on urban development matters. APEC does, and can, play a very effective role in bringing together member economy governments on cross-regional partnerships between cities to foster trade and economic development; collaborative governance arrangements; information, data and technology-sharing on cities and urban systems; the linking of infrastructure, services and transport logistics systems; technology and urban management and other skills development.

There are many ways that APEC can action and build (or build on) the partnerships for the above. The Friends of the Chairs Meeting on Urbanization provides the administrative mechanism to begin the implementation of an APEC urban agenda. The establishment of thematic advisory groups is important in providing APEC with the technical and professional know-how to engage with key stakeholders on urban policy, planning, development and management. These can be broadened through the development of colleges of practice around urban themes. Colleges of practice are a very practical means of bringing together experts to work on and solve complex urban problems, or to foster

the development of creative ideas. Many colleges of practice are virtual and can easily be established as a mechanism to support APEC.

Support for and linking of national urban research institutions and universities to work on common cross-border issues is a very effective way for APEC to leverage research and development resources and experts to action an APEC urban agenda. It would enable knowledge and technology transfer to occur between economies and cities. It would also enable better ground knowledge of local situations and data collection, which can be aggregated into a national and regional open platform for knowledge sharing.

Face-to-face exchanges between mayors, city executives and urban development professionals and technical staff are valuable in sharing collective learning and for understanding urban development issues. They also facilitate the application of good practices and the adoption of technologies and policies to fit the local context of development. By leveraging on a range of seminars, workshops, high-level meetings and events, APEC could strengthen levels of collaboration and exchange between cities in the region. Major events, such as the annual meetings of APEC, the Asia-Pacific Mayors, ASEAN, or the Habitat III Conference in 2016, offer opportunities to enhance the level of exchange and engagement between cities, their public officials, senior management, professionals and business.

It is vital that the APEC Secretariat and Friends of the Chairs Meeting on Urbanization work with the Secretariats of APEC member economies. Member-economy Secretariats need to be informed about urban issues and development opportunities for them to be more proactive in influencing the development of city-to-city trade agreements, and in providing support for development aid assistance to cities in the lesser developed economies of the region. Many member economies have ministries or departments with specific responsibility for developing sustainable cities, and there are opportunities for APEC to engage with them.

Finally, non-governmental organizations, professional associations and unions are resources that can, and are willing to, work with APEC on implementing an urban agenda. Many local non-governmental organizations are linked internationally with sister organizations and regional networks. These organizations and their members have a key role in planning, designing and delivering services at the city level. They play a crucial role in policy formation and the sharing of knowledge and ideas. Through the Friends of the Chairs Meeting on Urbanization, APEC can engage with business and professional groups in the region. It is vital that these connections extend beyond trade and investment interest groups since the development of a sustainability agenda for cities in the region goes well beyond economic interests.

16.9 CONCLUDING REMARKS

This report has highlighted many good examples of sustainable development practices and partnerships between cities across the region. The region's cities, however, still have many challenges to overcome to become more sustainable. Addressing the challenges will require changes to the ways business, governance and trade function. There will have

to be a greater focus on sustainable use of resources; investment in people; and a more collaborative approach to developing innovative solutions. Cities will also have to move to green platforms of production. It will also require greater inclusiveness, involvement and transparency in public decision-making, and a higher level of consciousness in communities about providing for the needs of future generations.

While the expansion and development of trade will be important to supporting the growth of economies and cities in the region, new models of economic development with a stronger focus on endogenous growth will be necessary to address the impact of changes in technology on jobs and investment opportunities. Technology offers a tool to improve the sustainable development of cities in the region, but it will not solve all of the current challenges.

Cities in the APEC region must prepare for the age of disruptive technology⁸¹² – a term used to describe emerging technology that unexpectedly and often rapidly displaces an established one. Some examples of disruptive technologies are the automation of knowledge work and artificial intelligence, the Internet of Things, advanced robotics, autonomous or near-autonomous vehicles, next-generation storage, 3D printing, advanced materials and renewable electricity. These disruptive technologies will have a profound impact on the development and management of cities, and on trade, innovation and the way cities plan for the future.

Businesses and governments must prepare to respond to these technologies and the challenges and opportunities they bring. Cities, businesses and communities will need to continually adopt and adapt to new technologies, by looking for business-model innovations that can capture some of that value. Policymakers will need to develop and implement advanced technologies to improve and address their operational challenges. Future development plans for cities, such as the one prepared for the Calais region of France,⁸¹³ which embraces the Third Industrial Revolution, will need to become an integral part of planning for cities across the region.

A key aspect of change in cities across the region will be the evolving nature of work as the result of changes in technology. Adapting to new technologies will require continuous retraining programmes and investment in education, new sets of competencies and shared knowledge-based systems. Many of these new learning approaches will be conducted using advanced Internet platforms. Governments will also have to develop a more harmonious and useful view of technology impacts. They will need to consider new metrics that capture not only GDP effects, but also the social and environmental benefits, as part of sustainable development accounting systems for cities.

Reform of governance systems is vital to achieving sustainable development in the region's cities. Governance systems have an enormous influence in shaping the economic, social and physical environments of cities. They are critical to the management and utilization of natural resources and ecosystems. Many of the current governance systems can no longer accommodate the dynamics of change, the management of urbanization and redevelopment, and the way that cities engage more openly in trade, investment and other forms of exchange. Collaborative governance is emerging as a new tool in the management of cities.

Economies and cities in the region must also move toward a more collaborative and sharing model of economic development. The model of collaborative competition, involving cities coming together to look for opportunities to leverage resources to create a win-win situation that will generate jobs and investment and create a better quality of life, is important to the sustainable development of cities in the region. Embracing the sharing economy requires a significant paradigm shift. Such a model is already applied in the business sector, but it must be scaled up to embrace cities and economies across the region.

Finally, this volume has highlighted many promising initiatives by APEC member economies and cities to work with different levels of government, business and communities in developing better and more sustainable cities through a range of partnerships. Partnerships offer one way of using precious resources more wisely in developing and managing cities. It is important that partnerships are not just solely seen through a business lens; but also focus on developing social, governance and environmental capital; providing a more inclusive approach through improving gender equity; and engaging the disadvantaged so that they have a say in the way APEC cities are developed and managed.

Partnerships are a useful way of supporting future sustainable city development. They can be expected to occur on many diverse levels across the region. APEC, as a forum representing the interests of governments, can play a very influential role in fostering the development of partnerships between economies and cities, particularly in facilitating the sharing of knowledge, innovation and ideas for improving the management, development and transitioning of cities. It is vital that APEC takes this up as part of an initiative for **Building Better Partnerships for Inclusive and Sustainable Growth of Cities in the APEC Region.**