FINANCING SUSTAINABLE DEVELOPMENT — WHAT CAN WE LEARN FROM THE AUSTRALIAN EXPERIENCE OF REFORM?

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Finance is fundamental to supporting sustainable development. It drives investment and jobs, which is the way most people escape poverty. Countries in the developing world face significant financing needs as they seek to modernize their economies, hence the importance of mobilizing all forms of finance (domestic, international, public and private) and ensuring they are put to their most effective use.

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I. INTRODUCTION

Finance is fundamental to supporting sustainable development. It drives investment and jobs, which is the way most people escape poverty. Countries in the developing world face significant financing needs as they seek to modernize their economies, hence the importance of mobilizing all forms of finance (domestic, international, public and private) and ensuring they are put to their most effective use.

Financing sustainable development presents many challenges, including the need to balance the desire for growth today with the needs of future generations who face the impact of climate change and increasingly fragile ecosystems. It needs to ensure that growth is inclusive, allowing everyone the opportunity to participate in and

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benefit from growth. It also needs to ensure that the benefits of growth reach the
most vulnerable as new and innovative approaches to development finance are
pursued.

Respecting and striking the right balance in relation to each of those
challenges is critical to the global effort to secure sustainable development finance.

Both the private and public sectors play critical roles in this process, with the
private sector serving as an increasingly important source of finance and
development and the public sector being important for investment, the provision of
a social safety net, and for ensuring an enabling economic and regulatory
environment for development.

The experience of the Asia-Pacific region has been mixed with respect to
sustainable development finance. Despite the diversity and varying stages of
development in the region, there are issues and lessons that can inform and guide
how best to approach the 2030 Agenda for Sustainable Development in terms of
sustainable development finance.

The present paper considers a number of proposals that were made at the
Financing for Development meeting, which was held in Addis Ababa from 13 to 16
July 2015; and discusses the experience of Australia in pursuing sustainable
development. Some of these proposals relate to how countries themselves can
expand their access to finance for sustainable development, while others refer to how
developing nations, international agencies and other stakeholders may support
development in the Asia-Pacific region.

The experience of Australia is relevant to this discussion not only as a country
that has thus far successfully navigated economic fluctuations and change, but also
because of the challenges it confronted in pursuing reform. Despite having what are
widely considered to be the prerequisites for development, namely a relatively stable
investment and regulatory environment and the benefit of significant resources and
human capital, financing sustainable development in Australia has still proven to be
challenging.

The Australian experience suggests that mechanisms for sustainable
development finance alone are not enough to deliver the reform and investment that
developing countries require. Instead, a range of other considerations must be
incorporated into sustainable development finance, such as the process for achieving
domestic reform, managing diverse interests and accepting that first-best policy
options may not always be viable. Policy recommendations also need to reflect the
stage of development of local financial markets and the regulatory environment of
each country given the differences in the stage of development among the countries in the Asia-Pacific region.

There are opportunities and innovations available to finance development but the domestic and international constraints to achieving the objective of financing sustainable development should not be underestimated. These constraints and possible responses are considered here.

The present paper considers a number of priorities for sustainable development finance, namely domestic resourcing, financial market strengthening, infrastructure and climate financing options and overseas development assistance (ODA).

II. CHANGING SOURCES OF FINANCE FOR SUSTAINABLE DEVELOPMENT

The availability of finance and investment has been a critical factor in supporting the growth and development in the Asia-Pacific region in recent decades. However, the composition of finance and sources of investment continue to change, presenting both opportunities and challenges for financing development in the region.

Exploring the opportunities for financing development has become a global priority in the context of the development of the 2030 Agenda for Sustainable Development. Building on the Monterrey Consensus and the Doha Declaration, renewed commitments to ODA and more innovative approaches are essential for financing development beyond 2015. Public domestic investment remains critical to supporting the development agenda and strengthening financial markets to support international capital flows and foreign and private investment.

Dependence on various sources of finance and related regulatory environments in development countries is changing. A report by the Institute for International Finance notes the following: “Since the financial crisis, we’ve seen a retrenchment of cross-border flows and more fragmentation of financial markets, which jeopardizes the long-term outlook for global growth. The challenge now is to ensure that financial globalization regains momentum. Meeting this challenge will require a conscious decision by policymakers to shift back to global approaches in regulation, regaining consistency and convergence of local rules, and to encourage development of resilient market frameworks for investment in areas like infrastructure finance.” (Institute of International Finance, 2014)

Sources of finance for development are changing from being predominantly public investment to a range of potential sources, including the private sector, foreign
direct investment and trade. These sources of finance potentially present opportunities to fund the necessary investment in infrastructure, social services and the management of climate change that is necessary to achieve more inclusive growth in the Asia-Pacific region.

The rise of non-traditional donors such as the BRICS (Brazil, Russian Federation, India, China and South Africa), philanthropic initiatives and new development banks also present opportunities to meet the financing needs for development in the Asia-Pacific region.

III. SOURCES OF FINANCE FOR DEVELOPMENT — REFORM AND LESSONS

Domestic resourcing

Public revenue remains a critical source of funding for investment and infrastructure spending. It is the means by which countries fund education for children, basic health services and roads and other infrastructure. It is particularly important for ensuring the inclusion of the least well off in societies and economy.

Domestic public finance is the largest source of revenue available to countries. Recent analysis by the Brookings Institution has suggested that public revenues of about $300 per person per year in 2011 purchasing power parity (PPP) terms are necessary to provide the global social floor that is developing through the Sustainable Development Goals. “The International Comparison Program has worked with countries' national income accounts to derive a new database that permits cross-country comparisons on the amounts they spend on items that can be consumed individually by households. In high-income European countries, such as Denmark, Norway and Sweden, governments spend about $10,000 per person per year in 2011 PPP terms. The average for OECD [member countries] is about PPP $5,000 per person per year. Kharas and McArthur (2015, p. 11) estimate PPP $300 per person per year as the approximate amount required to deliver a package of basic services of education, health and other services consistent with the global social floor being established through the Sustainable Development Goals. This is consistent with the United Nations. Millennium Project’s estimates a decade ago of $120-$140 per capita in nominal 2003 dollars for minimum service delivery to achieve the Millennium Development Goals. The minimum necessary value will rise as economies grow into middle-income status and beyond. We therefore further estimate 10 per cent of average per capita incomes as a minimum reference point for economies with gross national income (GNI) per capita of PPP $3,000 or above.”
Given the role of public revenue to deliver essential services and ensure an inclusive economy, and in some cases the declining share of revenue to GDP, it is appropriate that the world’s attention is increasingly turning to strengthening domestic revenue.

**Figure 1. General government revenue (per cent of GDP)**

![Graph](image)

**Source:** IMF.
**Note:** *IMF forecast.

Domestic revenue strengthening is relevant to both developed and developing countries in terms of broadening the tax base and ensuring an efficient and equitable tax regime, but also with regard to strengthening the capacity of governments to raise revenue and avoid revenue leakage. Illicit financial flows alone are estimated at around $1 trillion per year, representing a massive lost revenue source (World Bank, 2013).

Domestic resourcing has domestic and international reform implications. Countries need to develop their tax regime and build institutional capacity to administer and collect revenue. For example, in Australia, the decline in taxation revenue as a share of GDP from 24.9 per cent in 2004/05 to 22.6 per cent in 2014/15 (Australian Government, 2014, Budget paper 1, table 9) requires reform to broaden the tax base and close tax loopholes and concessions.
The potential for countries to support these activities through development assistance should be expanded and prioritized in ODA. As the Brookings Institution notes and recommends, “Very little ODA is allocated for strengthening domestic revenue systems, despite a record of considerable success where it has been tried. On average, less than one per cent of ODA goes towards tax improvements. This should be expanded in line with developing countries’ needs to meet the target threshold for domestic revenues that might be agreed upon, focused on both efficient taxation and, where applicable, robust resource-royalty agreements.” (Kharas and McArthur, 2015, p. 14)

It is here that multilateral institutions such as the International Monetary Fund (IMF) have a particular role in strengthening the capacity of countries to design and implement an efficient tax regime.

Global efforts towards improving international tax arrangements and the treatment of multinational corporations must also continue to be prioritized. This includes the work of the G20 on Base Erosion and Profit Shifting and the automatic exchange of information between tax authorities, as well as the work of the Organisation for Economic Co-operation and Development (OECD) on multinational taxation and tax transparency.

The international agenda should also continue to pursue standards and agree to principles of open and transparent government. The Publish-What-You-Pay principles and Extractive Industries Transparency Initiative (EITI) present real opportunities to support global standards. Leadership among developed countries is required in those areas, including further progress in Australia particularly around extractives.

As Australia identified in its statement on the first drafting session of the Financing for Development Conference “This sort of global initiative, combined with greater focus on capacity development for national revenue authorities, plus national action on tax system strengthening and regulatory frameworks to combat corruption, can add up to genuine impact.” (United Kingdom, 2015)

One lesson from the efforts of Australia is that the strengthening of the Australian tax entailed the challenge of building the case for tax reform and dealing with opposition from various interest groups. In the case of Australia, this was particularly challenging in terms of reforming the taxation of the mining sector and resources, but also in other areas of tax expenditures in which existing beneficiaries sought to maintain the status quo.

Part of the solution to addressing opposition to tax reform in terms of communication is to link revenue measures to expenditures that the public values and
expects to be funded. The initiation in Australia of the National Disability Insurance Scheme (NDIS), a major investment in the services available to people with permanent and significant disability, had significant public support that enabled the existing Medicare levy to be increased to fund this major public investment. There was public support for the Medicare levy increase because the economic and social case had been extensively made for NDIS over many years. Only after the case for reform was made for the NDIS, and support built across a broad constituency, funding mechanisms were developed.

While the Medicare levy itself is not hypothecated to funding NDIS, or other health expenditure more generally, by linking the expenditure to the revenue, reform was achieved. This lesson can be applied to a range of other policy discussions. For example, in the case of climate finance, focus should be first placed on the required reform and investment and securing an agreement. After that has been achieved, the next step would be to formulate policy and rally public support for revenue sources. In Australia, a similar approach was adopted in linking action on climate change through a price on carbon in part to financing investments in alternative/sustainable energy (discussed further below).

Tax reform is challenging in the domestic political context. There is a need to link revenue reform to expenditure that the public values. Existing interests will challenge tax reform and an approach to manage these interests needs to be factored into the design and discussion of any tax reform. First best policy will not always succeed but other approaches and compromises that start the process of reform are still worth taking.

Domestic and international revenue reform is a win-win situation for all counties. It builds the capacity of countries to deliver basic and essential services while providing a foundation for inclusive growth.

Of course, the counterpart to mobilizing domestic revenue for development purposes is making sure that those revenues are allocated efficiently and effectively. Ensuring revenue is allocated productively and inclusive growth is achieved is critical to the success of domestic revenue strengthening. Public sector efficiency is particularly important here, as is strengthening domestic financial markets and economic governance, discussed further below.

**Financial market strengthening**

Strengthening financial markets is also necessary to prepare the Asia-Pacific region for future sources of finance for development. Having capital available to fund the significant infrastructure and other investment financing needs is critical to
sustainable development not only because it provides the means to fund infrastructure and other investments, but also because it attracts the private sector, which is critical to development.

A financial system that includes a stable and independent central bank and deep capital markets is a prerequisite for creating alternative sources of finance for development and attracting private sector investment.

This is particularly the case in many Asia-Pacific countries that lack sufficient domestic capital to finance infrastructure and development. The opportunities presented by international investment suggest the need for further liberalization of financial markets. The need for additional domestic finance sources is highlighted by the fact that many Asia-Pacific countries record deficits on their primary income account.

![Figure 2. Primary income account (per cent of GDP)](image)

Source: World Development Indicators.

Asia is expected to account for about half of the global economy by 2050 and projections suggest that the Asian financial system could be four times its current size by 2030, and more than twice as large as the United States financial system over the same period (ANZ, 2014, p. 47).
The rise of Asian financial markets and investment presents many opportunities for financing development, but the transition also presents challenges. Ensuring this transition takes place in a reliable and sound regulatory environment is critical. Clearly, countries throughout the Asia-Pacific region are at very different stages of development and therefore the process and sequencing of financial sector reforms must be analysed and recommended accordingly.

In the case of Australia, central to the sustainability of the country’s financial system is a strong, independent central bank and regulatory supervision. Maintaining and continuing to strengthen this independence in the central bank and supervision of the sector has been important in bringing down sovereign risk. The challenge for the Asia-Pacific region is to similarly reduce sovereign risk, which will not only involve institutional strengthening but also require a stable political environment, an improved policy environment, and an ongoing reform and regulatory effort.

The Central Bank Governor of Australia describes the challenges facing the region’s financial markets well:

Thanks partly to the painful lessons of the Asian crisis and other episodes, banks [in the Asia-Pacific region] had generally stronger capital positions and higher lending standards, while supervisors had also done their job in the years prior to 2007. Moreover, several banking systems in the region are among the earliest adopters of the new, tougher, Basel standards. It goes without saying that we want this prudence to continue. But unlike the case in some other countries, the financial sector in the region is well placed to play its role in supporting the sustainable growth of economic activity and trade. It is noteworthy that as European banks sought to pull back from some activities in the region, including trade finance, banks from within the region have stepped up. So this is a point for confidence. (Stevens, 2013)

Ensuring this “point for confidence” is well founded depends on the ongoing prudence and regulation of financial markets in the region. There is much reason for optimism in this regard with financial markets continuing to develop along with the strengthening of central banks and financial markets. China provides a good example of this, which is considered further in the case study below.
The liberalization of the financial system of China

The Chinese authorities have continued to make significant progress in liberalizing the country’s financial system. In addition to domestic financial market reform and development, the partial liberalization of the exchange rate and cross-border capital flows have been key elements of the reform process. While cross-border trade flows have been subject to relatively few restrictions for some time, the country’s cross-border capital flows have been managed much more closely. However in recent times, restrictions on direct investment flows have been relaxed, and the capital account liberalization process has also extended to portfolio investment flows. In particular, the Chinese authorities have started to open up the country’s debt and equity markets to foreign investment and have also allowed Chinese residents to invest more freely in offshore markets. The substantial effects of the country’s earlier trade liberalization process on the global economy suggest that its ongoing capital account liberalization process will also have significant implications for the global financial system. (Hatzvi, Nixon and Wright, 2014)

Related to the liberalization of financial markets of China have been efforts to make the Chinese yuan (RMB) an international currency. The region has identified opportunities to support this process. For example, Australian authorities have worked together with the Chinese authorities to facilitate the development of the local RMB market.

These steps recognize the already close economic relationship Australia has with China and the increasingly close financial linkages between the two countries. Most recently, these initiatives have included:

- The establishment of an official RMB “clearing bank” in Australia, which will make it easier for Australian residents to transact in RMB with their counterparts in mainland China;

- The establishment of a quota as part of the RMB Qualified Foreign Institutional Investor (RQFII) programme, which will allow Australian-domiciled financial institutions to invest RMB obtained in the offshore market in the onshore bond and equity markets of China.

These announcements are in addition to existing initiatives, including: the local currency swap agreement between the Reserve Bank of Australia
(RBA) and the People's Bank of China (PBC), signed in 2012; the commencement of direct trading between the RMB and the Australian dollar in interbank foreign exchange market in mainland China in 2013; and the investment by RBA of a portion of its foreign currency reserves in RMB-denominated assets in the past year. There has also been ongoing engagement on RMB internationalization between Australian officials (including RBA and the Treasury) and the private sector through forums, such as the Australia-Hong Kong RMB Trade and Investment Dialogue and the newly established “Sydney for RMB” working group, which is a private sector-led initiative. (Hatzvi, Nixon and Wright, 2014)

Capital controls remain a persistent challenge to the liberalization of the renminbi. In order to fully integrate the yuan, capital account liberalization, such as further financial market liberalization, market-determined interest rates and effective financial regulation and supervision, are necessary (Eichengreen and Kawai, 2014). This would of course expose the yuan to external risks and consequently reform would need to be introduced gradually. Given this, the yuan is still a number of years away from realizing its potential in the region and the world, but nevertheless the potential opportunity remains for the yuan to be a common currency for trading.

**Figure 3. Cumulative foreign direct outflows to members of the Asian Development Bank**

![Cumulative foreign direct outflows to members of the Asian Development Bank](chart)

Source: UNCTAD FDI Database.
The growth in foreign direct investment in the region demonstrates this potential as a source of finance for development.

Stronger financial market regulation alone will not suffice to increase available finance. Sovereign risk remains a persistent challenge in reducing the cost and increasing availability of finance. According to Torsten, Packard and Remolona (2015), financing is most feasible when the country has a high sovereign rating, especially when this reflects a credible legal framework, political stability and a reasonably efficient bureaucracy. It also helps to have well-functioning markets for hedging currency risks. Establishing this broader environment of stability and human capital will take time but must continue to be part of any country’s plans for sustainable development.

Strong financial markets also require strong macroeconomic fundamentals — strong and stable growth and sustainable levels of inflation. Manageable current accounts and public sector debt are important to minimize the risks of capital flight and to provide necessary comfort to offshore investors. Maintaining its AAA credit rating during and following the financial crisis was critical to the economic performance of Australia and relative stability during this period. This need not mean mindless austerity. Instead, options that achieve fiscal reforms, such as the removal of generous tax concessions for higher earners, should be considered.

The eventual normalization of monetary conditions around the world makes the risk of capital outflows from the Asia-Pacific region even more pressing. This, in turn, would place a higher premium on strong macrofundamentals in the region.

Continuing to strengthen financial market regulation and access to capital is important to the ongoing growth and stability of the Asia-Pacific region. It is also a critical enabler to increasing investment and the financing of development. There is a role for the G20 in this process, as demonstrated during the 2007-2008 global financial crisis when the G20 supported efforts taken by emerging countries, such as China, India, Indonesia and the Republic of Korea, through such initiatives as the Basel III agreements. Agreements, such as these, recognize that sound regulatory policy can support stability in the financial system and a role for regional and international forums and institutions to support those reforms.

Related to this is the ongoing deepening of local capital, particularly local bond markets, so that countries in the Asia-Pacific region are less reliant and exposed to foreign capital flows. Local currency bond markets reduce risks associated with currency mismatch and are very important for financial stability, especially in the countries that suffered greatly during the Asian financial crisis. The Association of Southeast Asian Nations (ASEAN), IMF and other regional and international
institutions with the requisite capacity, have been supporting the development of local capital markets. This effort should continue.

**Infrastructure financing**

While the Asia-Pacific region boasts relatively high savings, the challenge of financing significant infrastructure remains. The World Bank (2013) finds that the undersupply of infrastructure in developing economies has been estimated at around $1 trillion per year through 2020, with an additional $200 billion to 300 billion per year to ensure that investment in infrastructure projects are for low-emitting and climate resilient infrastructure.

As discussed above, boosting domestic resources and strengthening financial markets are critical to addressing the financing gap, but other policy and planning reforms are also necessary to mobilize finance, particularly in relation to financing major infrastructure projects.

Meeting the financing needs for infrastructure is critical to development, but also for generating demand and for growth. As Michael Spence, Nobel Laureate in Economics, has identified:

Given the extent to which insufficient demand is constraining growth, investment should come first. Faced with tight fiscal (and political) constraints, policymakers should abandon the flawed notion that investments with broad — and, to some extent, non-appropriable — public benefits must be financed entirely with public funds. Instead, they should establish intermediation channels for long-term financing. At the same time, this approach means that policymakers must find ways to ensure that public investments provide returns for private investors. Fortunately, there are existing models, such as those applied to ports, roads, and rail systems, as well as the royalties system for intellectual property. Such efforts should not be constrained by national borders. Given that roughly one third of output in advanced economies is tradable — a share that will only increase as technological advances enable more services to be traded — the benefits of a programme to channel savings into public investment would spill over to other economies. That is why the G20 should work to encourage public investment within member countries, while international financial institutions, development banks, and national governments should seek to channel private capital towards public investment, with appropriate returns. With such an approach, the global economy’s “new normal” could shift from its current mediocre trajectory to one of strong and sustainable growth. (Spence, 2015)
When the Labor Party came into power in Australia following the 2007 election, it was apparent that even if funds were available for infrastructure investment a major constraint was the lack of a pipeline of ready, productive investments. This view has been confirmed by Australian Financial Services Council (2015) which notes that, a consistent theme is that the level of fund investment is primarily limited by a lack of suitable projects reaching the investment market, particularly with respect to government-sponsored projects.

Australia has sought to address this challenge with the establishment of Infrastructure Australia, an independent body that undertakes cost-benefit analysis of potential infrastructure projects and prioritizes those projects. The success of this process has largely been the focus on better planning and preparedness for infrastructure needs into the future.

The Reserve Bank of Australia has identified a similar concern for the region more generally (Ehers, Packard and Romolona, 2014):

Infrastructure investments entail complex legal and financial arrangements, requiring a lot of expertise. Building up the necessary expertise is costly, and investors will only be willing to incur these fixed costs if there is a sufficient and predictable pipeline of infrastructure investment opportunities. Otherwise, the costs can easily outweigh the potential benefits of investing in infrastructure over other asset classes such as corporate bonds. Creating a pipeline of suitable projects requires a coherent and trusted legal framework for infrastructure projects. The economic viability of infrastructure projects is often dependent on government decisions, such as pricing, environmental regulation, or transportation and energy policy. In some countries, reliable frameworks do not exist. Cases of political interference — for example arbitrary cuts in the prices private infrastructure operators are allowed to charge — greatly increase the perception of political risks, which are among the greatest concerns of private investors. But even if solid legal frameworks exist, best practices or experience with large infrastructure projects can be lacking on the side of the government.

In the case of Australia, it was clear that despite more than a trillion dollars being held on behalf of members in superannuation funds, there is reluctance to invest those funds in major infrastructure projects. While the Australian superannuation funds under management have grown from 140 billion Australian dollars ($A) ($100 billion) to $A1.3 trillion over the past 20 years, the country's infrastructure gap has widened (Financial Services Council, 2011).
Infrastructure investment models have been particularly attractive to superannuation funds because of the misalignment of interests with traditional bid sponsors with short-term investment horizons. This can result in poor pricing of risk, stripping of value due to transaction fees, and inability to achieve best of breed partners for debt, construction, and operations and maintenance.

Under the current procurement model, Australia’s major infrastructure investors, including Industry SuperFunds via IFM Investors, rarely, if ever, participate in greenfield [public-private partnership] PPP projects either as a bid sponsor or primary equity investor. Yet, combined, they control the majority of infrastructure investment in Australia. Very high bid costs and long procurement processes with ‘patchy’ deal flow limit the number of parties who can afford to dedicate large teams for such projects. Long-term equity investors like superannuation funds do not see the relative value to divert resources away from pursuing brownfield infrastructure to greenfield PPP projects that involve such a costly, lengthy and uncertain process. Their long-term investment horizon and their appetite for illiquid assets make them ideal partners for such projects. However, the current process is biased towards short-term financiers and contractors and requires reform to level the playing field. (Industry Super Australia, 2014, p. 2)
Feedback from the sector provided guidance on necessary reforms to access superannuation savings for infrastructure investment. For example, Financial Services Council (2011) states the following: Institutional investors have particular requirements around the risk/return mix of long term illiquid investments and projects that do not conform to these will not attract sustained investor interest. Governments need to understand these requirements and the impact they have on the structure of infrastructure projects when developing value for money transactions.

To address this challenge, the Government of Australia announced an infrastructure tax incentive for nationally significant projects assessed by Infrastructure Australia. This measure allowed infrastructure investment vehicles to carry forward their losses uplifted by the 10-year government bond rate, and to be exempt from the continuity of ownership and same business tests to access this offset. These incentives mean investors who tend to invest after the asset is already built and operating, such as superannuation or pension funds, can still access the benefits of those investments.

These reforms are helping to support greater investment in infrastructure by Australian superannuation funds. As the Financial Services Council (2011) reports, Australian superannuation funds have approximately 5-10 per cent allocation to infrastructure. This allocation is typically higher for industry funds. “In the 2010 client survey of the consultant firm Mercer, only 2.0 per cent of United Kingdom pension plans are shown to invest in infrastructure (an increase from 0.7 per cent in 2008). The average allocation to infrastructure by those plans is 3.8 per cent. For Continental Europe, only 1.4 per cent of pension plans are said to be invested in infrastructure, with an average allocation of 5.5 per cent to the asset class by those funds invested.”

A further proposal being developed in Australia by Industry Super is a proposed “inverted bid model” whereby “the traditional bidding process is reversed by fixing the terms of project financing through a funding competition prior to the construction, operation and maintenance (O&M) tender and raising of any additional debt. In other words, the government tenders initially for the long-term owner-operator followed by separate bids for construction, operation and maintenance and residual debt.” (Industry Super Australia, 2014, p. 2)

The inverted bid model is intended to support a reasonable return for long-term investors through the upgrade of services and facilities delivered to meet demand over time, as opposed to through the initial bidding, structuring and building of the asset. “Preliminary analysis suggests bid costs can be expected to fall from 1.5 per cent to 0.8 per cent of the total value of the project and procurement timeframes are likely to be compressed from 17 to 12 months or by 30 per cent.” (Industry Super Australia, 2014)
The inverted bid model may provide an avenue for access to finance through pension and superannuation funds, not only in countries with large savings pools but also internationally as those funds continue to expand international investment opportunities. The key benefit of the inverted bid model is the improved alignment of investors and projects, in addition to a more open bidding process that should help reduce financing costs and procurement times.

More generally, increasing available finance for infrastructure depends on the level of confidence in the broader stability of the economy and investing environment. Developing economies often lack the regulatory, legal, and political frameworks to make the risk return viable. These broader policy reforms and institutional strengthening are therefore be critical to the long-term viability of private sector financing for infrastructure.

As the Brookings Institute suggests, “The multilateral development banks have a special leadership role to play on this dimension, since they provide much of the financing leadership for infrastructure. In practical terms, they need to take on more risk; invest in project preparation and the development of bankable projects; help build teams on the ground in priority countries; and ensure projects are moving within timeframes consistent with [Sustainable Development Goal] achievement by 2030. Safeguards, for example, still present major barriers to timely implementation. At the moment, a hydro project can take seven years from concept to approval and then another seven years for construction. This would imply that new projects conceived in 2015 or 2016 would not even begin operating until the 2030 [Sustainable Development Goal] SDG deadline is reached.” (Kharas and McArthur, 2015, p. 17)

Improving the infrastructure pipeline and the capacity to deliver projects is a regional imperative to boost infrastructure investment. The emerging Asian Infrastructure Investment Bank (AIIB) has the potential to improve access to finance for large-scale infrastructure (Elek, 2014).

A related political challenge of infrastructure investment is the growing concern around public debt, arguably necessary to fund major public investments. With the 10-year bond rate currently at an all-time low in Australia, there is seemingly an impenetrable reluctance and public concern around borrowing to undertake the necessary investments that will drive growth and deliver services into the future.

As one seemingly frustrated Australian journalist puts it, “The 10-year bond rate is the rate at which the Government can borrow for 10 years at a fixed rate of interest. Right now it’s just 2.55 per cent, an all-time low...If Australia was to borrow, big time, for important projects that took the best part of a decade to complete, it would have no risk of ever having to fork out more than 2.55 per cent a year in
interest. The record low rate would be locked in for 10 years. It’s rare to be offered money for nothing. All we would need is confidence in the worth of our ideas.” (Martin, 2015)

**Climate change financing**

The recent Australian experience of implementing a carbon price provides an example of how an environmental policy can also generate incentives that finance sustainable development.

Options for carbon pricing and reform present opportunities not only to finance further action and abatement on climate change, but can also provide the means to incentivise investments of a more sustainable nature. The approach applied by Australia is through:

(i) The Clean Energy Financing Corporation (CEFC);

(ii) Carbon pricing

**The Clean Energy Finance Corporation**

The previous Government of Australia established CEFC to act as a catalyst to increase investment in emissions reduction and accelerate the country’s transformation towards a more competitive economy in a carbon-constrained world.

The Clean Energy Financing Corporation is the second longest operating national clean investment bank in the world after the Green Investment Bank of the United Kingdom of Great Britain and Northern Ireland. Since CEFC began operations, a number of countries have established similar domestic clean energy investment institutions.

The Clean Energy Financing Corporation is an independent, government-backed institution and its role is to work in partnership with other banks and financiers to mobilize investment in the clean energy sector. This includes investment in renewable energy, low-emissions technology and energy efficiency.

The Clean Energy Financing Corporation was first announced in 2011 as part of the country’s national package of climate-change-related reforms. Cumulatively, the CEFC has committed more than $A1 billion in total finance and, with the contribution of co-finance partners, has catalysed investments in projects valued at more than $3.2 billion.
The Clean Energy Financing Corporation was established through federal legislation. Its investment mandate is provided by the Government. The roles and functions of the CEFC, include that it:

- Focus on projects at the demonstration, commercialization and deployment stages rather than at earlier stages of innovation.
- Apply commercial rigour when making its investment decisions.
- Can provide concessional finance in certain circumstances but limits the amount of concessionality to $300 million per annum. To date, CEFC has been participating largely without making concessional loans.
- Not invest in nuclear energy or carbon capture and storage and that at least 50 per cent of the CEFC portfolio is invested in renewable energy, with the remaining being met from low-emissions technologies or energy efficiency.

The Clean Energy Financing Corporation operates and makes its investment decisions independently of Government based on rigorous commercial assessments of their board. It is not a grants organization; its investments are made with an

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**Green Investment Bank of the United Kingdom**

The Green Investment Bank is a corporatized government company, established in 2012, with the aim of attracting private finances to private sector initiatives for environmental innovation. The types of projects the bank is intended to fund include: offshore wind power generation; waste-handling plants; energy efficiency measures; biofuels; biomass; carbon capture; and storage, marine energy and renewable heat generation. It was born out of a House of Commons committee, which found that traditional sources of finance could not meet the funding gap for green investment projects required for industry sustainability.

The bank started with a 3.8 billion United Kingdom pound sterling (£) ($5.51 billion) government injection and has lent out £1.8 billion. This money has funded 44 separate projects and is estimated to have created transactions in the country’s green economy worth £6.9 billion. In some cases, the bank co-invests with other government departments or the private sector. For example, the bank has committed £190 million to a renewable energy plant in Thames with the support of the Irish electricity utility Electricity Supply Board (ESB).

For further information on the Green Investment Bank see [www.greeninvestmentbank.com](http://www.greeninvestmentbank.com/).
expectation of being repaid. CEFC invests responsibly, manages risk and is expected to be operationally self-funding through its investment returns.

The Fund looks for gaps in the clean energy finance market and tries to identify new financing models that can help meet those financing gaps and ensure projects go ahead.

One of the primary aims of the CEFC is to facilitate increased flows of finance into the clean energy market. To do this, the Fund also provides significant technical assistance, working with many project proponents and other financiers to match project developers with interested parties, such as equity partners. It aims to broker negotiations and bring parties together, including in financing consortiums and bringing in other co-financiers. Most private financiers do not have the resources nor the time to offer these services in new and emerging market segments, electing instead to fund more well-known technologies because they are perceived as having less risk. The Fund’s public purpose means that it can work collaboratively with clients to restructure financing arrangements to help make their projects bankable.

Every dollar CEFC invests leverages more than $A2 in additional private sector finance into the clean energy sector. The Fund has already partnered with more than 15 co-financiers, including all of the major Australian banks and banks from overseas that have never before been active in the Australian clean energy market. Its role, as a government-backed clean investment bank has, in some transactions, been critical to building the confidence to attract these types of investors into the market.

To date, the projects CEFC has invested in, once operating, are expected to deliver more than 4.2 million tons of CO₂ emissions abatement per annum and involve more than 600 MW of clean electricity generation capacity.

As Indonesia has identified, “In an increasingly carbon-constrained world, there is likely to be an expansion of both private market and public finance to support climate change mitigation in developing countries (figure 5 below). If suitable mechanisms are put in place internationally and domestically, Indonesia could be a major recipient of such finance.” (Ministry of Finance, 2009)

There have been regional attempts to deal with this problem. A notable one is the Carbon Market Program of ADB. A key initiative of this scheme is the Future Carbon Fund (FCF), which seeks to support energy efficiency schemes and reduce the risk in adopting low-carbon technologies. Further efforts to build regional approaches, potentially modeled on CEFC, could provide opportunities to address a problem threatening every country.
Carbon pricing

From 1 July 2012 to 30 June 2014, Australia had a carbon pricing scheme in place, the centrepiece of the “Clean Energy Future” policy (Clean Energy Act 2011) passed by the Labor Government in 2011. However, following a change of government in September 2013, the carbon price was repealed in July 2014. Australia, therefore, provides a unique test case on the impact of a carbon price policy on emissions by comparing data before, during, and after its operation.

Under the carbon pricing mechanism, emitters responsible for more than 60 per cent of country’s emissions were covered by a liability to acquire permits for their emissions arising from the combustion of fossil fuels, as well as for some other processes and emissions. In 2012/13, this equated to 349 of the country’s highest emitting entities, including power stations, mines and emissions-intensive manufacturers (Clean Energy Regulator, 2013).

**Figure 5. Carbon finance needs in developing countries, financing proposals, and the size of the Clean Development Mechanism**


Note: UNFCC = United Nations Framework Convention on Climate Change, EU = European Union, CDM = Clean Development Mechanism.
The carbon pricing mechanism was a permit scheme in which the price was fixed at $A23 per ton of carbon dioxide and equivalent in 2012/13 and $A24.15 in 2013/14. The Government sold an unlimited amount of permits at the fixed price and neither international trading nor banking of permits were allowed. The legislation called for the fixed price scheme to be moved to a floating price in 2015, linked with international carbon markets, including the European Union, however it was repealed before this transition could occur.

Other notable features of the scheme included recycling of about half the revenue to low and middle-income households through lower income tax rates and increases in welfare payments; assistance to emissions-intensive trade-exposed industries through output-linked free permits at a declining rate; an offset mechanism for agriculture and forestry; funding for investment in renewable technology and innovation; and newly created independent institutions, such as the Climate Change Authority, to provide independent advice on national emissions targets.

The impact of the policy on the electricity sector is the most relevant as emissions from electricity generation are the largest contributor to overall emissions of Australia, and are the greatest opportunity for reducing emissions both in the near term and the longer term. The electricity sector also made up the majority of emissions covered under the carbon price (O’Gorman and Jotzo, 2014).

Research by the Australian National University (ANU) found that carbon emissions in the country’s national electricity market would have been 11 million to 17 million tons higher during the 2012/13 and 2013/14 if Australia had not introduced a carbon price.

It found that the carbon price had been performing well in its main job: delivering emissions cuts in the power sector, which is the largest source of emissions in Australia and the sector with the biggest opportunity for cuts. Besides helping to reduce power demand by households and industry, the carbon price had a strong effect on the relative costs of running different types of power plants, making highly polluting plants more expensive, and cleaner ones cheaper. Some black and brown coal generators reduced their hours of operation; others were mothballed. As a result, electricity generated from renewables and gas increased significantly while the share of electricity generated from black and brown coal reached a record low. Together, ANU estimated that the emissions intensity (the amount of carbon dioxide released per kilowatt hour of electricity produced) of the power grid of Australia fell by 2-3 per cent as a direct result of the carbon price, while demand fell by 1-2 per cent and overall emissions by 3-5 per cent.
Because the revenue from the carbon price was recycled to reduce distortionary taxes for low-income earners and encourage investment in renewable energy while providing incentives for energy efficiency for households and businesses, the actual economic cost of the scheme was much smaller than the value of permits sold, or the tax take.

Political uncertainty, however, dogged the carbon pricing policy over its entire existence. At the introduction of the carbon price in mid-2012, a survey found that 40 per cent of experts, including decision makers at liable entities under the Australian carbon pricing mechanism expected the scheme to be repealed by 2016 (Jotzo, 2012, p. 2). As a result its effect was not as great as it would have been under a stable policy framework.

For investors in assets with lifetimes of several decades, what matters most is the expectation of policy settings over the medium to longer term. For any country seriously considering moving to a carbon pricing or emissions trading scheme, a stable, bipartisan, long-term policy framework that creates economic incentives to cut emissions would be the foundation of its success. The world's major economies are pushing ahead with policies that will clean up their energy systems and modernize their economies. The Australian experience shows that pricing the emissions is the most efficient and cost-effective approach to tackling climate change. Other mechanisms, such as implementing strict regulations or introducing subsidies and incentive schemes, can play a complementary role.

By adopting a carbon price, Australia was not only putting a price that captures the externalities of carbon emissions and thereby changing behaviour, but also incentivising investment in more sustainable forms of energy production.

**Development assistance**

The international agenda to identify finance for development should not be a guise for reducing ODA when it is needed. This is particularly the case in the most vulnerable environments in which alternative sources of finance are unlikely to be forthcoming in the short, medium and even longer-term.

According to OECD, ODA reached an all-time high $134.8 billion in 2013. At this level of investment, ODA clearly remains an important source of finance for many countries and “particularly for countries dealing with widespread extreme poverty and/or conflict – in the foreseeable future.” (Lomøy, 2015).
Similar to many nations (the United Kingdom being the noteworthy exception) Australia has not achieved its commitment to 0.7 per cent of GNI for ODA. While significant increases in ODA were made under the previous government, the economic and political imperative for ongoing increases in ODA proved challenging in a drastically changing economic environment. Subsequent cuts to the ODA budget will put the country’s aid programme at its lowest disbursement level ever in 2016/17 at 0.22 per cent of GNI (Howes and Pryke, 2014).

Central to this challenge was not only the fiscal environment in which declining revenues were placing pressure on the budget, but there were also concerns around the effectiveness of an aid programme, which had been growing at a significant pace. Declining public support for ODA during a period of fiscal consolidation is also a real consideration for governments.

While there can be no excuse for reduced efforts to alleviate poverty throughout the world, governments remain accountable to their constituency. The domestic challenge to maintain commitments to ODA requires significant international consensus to regain momentum and support.

There is also an ongoing role of the development banks, including in relation to accountability of development finance and investment. Finance for development must increasingly reflect the need for sustainable investment, with development banks supporting this work through both technical expertise and some level of oversight of investment decisions. For instance, increasingly, investors appreciate the problem of “carbon bubble” or stranded asset risks of building infrastructure with a 40 to 50-year life that will be caught by carbon dioxide (CO\textsubscript{2}) regulations potentially in a 5 to 20-year timeframe. As a consequence, new coal-fired power plants are becoming increasingly difficult to finance in developed countries. Ensuring finance in the developing world for similar projects that may become stranded assets over time will be challenging and critical. The problem is when those building such infrastructure understand this challenge, and yet continue to expand their markets in the developing world through ODA and development banks.

It is important that future ODA programmes keep in mind the growth of Asian nations such as China, India, Indonesia, Malaysia, the Republic of Korea, Thailand, and Singapore, in shifting from aid receivers to aid donors. This opens up additional avenues of finance for ODA and allows priority to be placed on those most in need. Given that these Asian nations recently underwent transformation, they are perhaps best placed to provide advice to neighbouring developing Asian countries.
Overseas development aid has an ongoing role as a source of financing for development. All countries must renew their commitment to this as part of the 2030 Sustainable Development Agenda. The world community must agree to another decade of development that hopefully reaps further gains for the world’s poor.

**Summary of policy lessons**

The above discussion has identified a range of experiences and lessons from reform that have the potential to inform future approaches to policy reform across the Asia-Pacific region. A number of policy implications are briefly summarized below:

- Given the role of public revenue to deliver essential services and ensure an inclusive economy, strengthening domestic revenue remains critical to financing development. Broadening the tax base, ensuring an efficient and equitable tax regime, and strengthening the capacity of governments to raise revenue and avoid revenue leakage are critical to financing the 2030 Sustainable Development Agenda.
- Countries need to build institutional capacity to administer and collect revenue. Donor nations and multilateral institutions, such as IMF, have a role in strengthening the capacity of countries to design and implement an efficient tax regime.

- Global efforts towards improving international tax arrangements and the treatment of multinational corporations must continue to include the work of G20 on Base Erosion and Profit Shifting and automatic exchange of information between tax authorities, as well as the OECD work on multinational taxation and tax transparency.

- There is a need to continue to strengthen financial systems throughout the Asia-Pacific region. This includes ensuring stable, independent central banks, a stronger regulatory environment and deepening capital markets. Clearly countries throughout the Asia-Pacific region are at very different stages of development and therefore the process and sequencing of financial sector reforms must be staged accordingly. There is a role for international and regional institutions, including ADB, ASEAN, G20 and the World Bank, in supporting reforms to strengthen financial markets.

- Meeting the financing needs for infrastructure is critical to development, but also essential for generating demand and growth. Policies need to be adopted that recognize the role of public and private finance in infrastructure in cases which there are clear public benefits.

  - The establishment of institutions, such as Infrastructure Australia, an independent body that would undertake cost-benefit analysis of potential infrastructure projects and prioritize projects, could be beneficial.

  - Opportunities for sovereign wealth or superannuation funds to invest in major public infrastructure requires stability of the economy and investment environment, as well as strengthened regulatory, legal and political frameworks to make investing viable.

- Innovative approaches to addressing climate change that can also support new approaches to financing development exist.

  - The Clean Energy Financing Corporation, a national clean investment bank that facilitates finance into the clean energy market, is a potential model that could help transform the Asia-Pacific region in a carbon constrained world.

  - Carbon pricing, despite having been repealed in Australia, has been found to be an effective and efficient mechanism for delivering emissions cuts in the power sector.
• Renewing global commitments to ODA require international consensus, demonstration of aid effectiveness and accountability for development finance and investment. Increasing the share of ODA to target the most vulnerable nations should be part of this increased focus and accountability.

• Each of the above approaches to financing development requires consideration of the political and economic context within each nation. Innovation in finance and policy reform often challenges the status quo and as such, countries could do well to share policy experiences and approaches to achieving lasting reform including through international forums.

IV. CONCLUSION

There are significant opportunities to pursue finance for development in the Asia-Pacific region. The above discussion sets out the changing sources of finance but also considers challenges involved in accessing those sources of finance.

Across all sources of finance for development, whether domestic revenue strengthening, foreign capital and investment, new sources of finance for climate change and ODA, among others, the domestic political and economic environment is critical to delivering the reforms that are necessary access to those sources of finance.

The lesson from the relatively recent experience in Australia is that delivering reform to finance and supporting sustainable investment can be challenging. Whether it is ensuring the economic case is made for reform, managing existing interests in the design of policy reforms, or ensuring reforms are future proofed, achieving the goal of financing development through innovative policy and new sources of finance can be difficult. Emphasis should be placed on financial market liberalization, regulatory stability and deciphering the public good away from vested interests.

At the same time, the potential sources of finance for development are plentiful and great. They present a real opportunity to fill the investment gap in many countries across Asia and the Pacific. The potential for innovative finance and policy also provides an opportunity to deliver investment that is inclusive and sustainable.

Developed nations have a particular role, along with international organizations, such as OECD, to support nations in building their revenue systems to be able to afford the services and public investment necessary for inclusive growth. An increased share of ODA should be allocated to strengthening domestic revenue
systems. Efforts to improve revenue collections should also be coordinated with greater measurement and support for effective allocation of revenue to achieve inclusive growth.

There are clearly also lessons from developing nations in how they pursue reform, including the need to plan for domestic reform that is likely to be challenged by existing interests, and to factor in the need for reform and investments to be sustainable. Again, there is a role for international forums to support dialogue on the process of reform and for international organizations to provide greater accountability and oversight of both ODA and international investment. The Economic and Social Commission for Asia and the Pacific may also support member States in this endeavor at the regional level.

Innovative opportunities exist to finance development. Whether it relates to new approaches to climate finance or creating the necessary environment to enable pension funds to invest in development, non-traditional opportunities exist to support the achievement of the 2030 Sustainable Development Agenda.

There is a clear role for regional partnerships in the delivery of this agenda. However, those partnerships will be contingent on ensuring greater coordination across the various international forums, such as the Asia-Pacific Economic Cooperation (APEC), ASEAN and G20, the expanding number of international financial organizations, new development banks and philanthropists.

The challenge for the 2030 Sustainable Development Agenda is to achieve consensus on what finance for development looks like, ensure that it is realistic in the domestic political and economic context and that it is capable of achieving the development outcomes the world needs to see in the next decade.
REFERENCES


