The world will need to spend almost $57 trillion on new infrastructure over the next 15 years, according to the McKinsey Global Institute. That’s an enormous sum, but contrary to popular belief, there is no shortage of capital; in fact, there will be more than enough as both governments and investors increase their focus on infrastructure. The past five years, for example, have seen a steady rise in the number of institutional investors allocating assets to infrastructure, as well as the establishment of infrastructure as an asset class in its own right. At the same time, thanks to an increased appetite for direct investing by limited partners and the entrance onto the scene of giant sovereign-wealth funds, more money is in play. Meanwhile, multilateral and development-finance institutions are stepping up their efforts. The pool of capital available is deep. Across infrastructure funds, institutional investors, public treasuries, development banks, commercial banks, corporations, and even retail investors, we estimate that more than $5 trillion a year is available for infrastructure investment.

While capital is, of course, necessary, it is not sufficient to ensure success. The money has to be focused on the right projects and then spent judiciously. Here are five principles that can help infrastructure providers make good choices.

1. Establish realistic revenue streams to encourage private financing.

Spending money, not raising it, is the biggest problem when it comes to financing infrastructure.
investors in infrastructure. The first is public funds and the other is revenue streams in the form of charges, such as tolls, paid by end users. Historically, government has assumed most of the burden, particularly in emerging markets. But the scale of infrastructure required makes attracting private investment critical.

To do so, projects in difficult-to-finance areas such as roads and water should take their cue from telecommunications. This sector manages to attract investors even in capital-poor countries because it offers a clear return on investment and predictable cash flows. In many cases, particularly in developing countries, people have become accustomed to paying little or nothing for water or roads. But they do, of course, derive benefits, economic and otherwise, from such projects; moreover, there needs to be a way to pay for maintenance. If charging users offers a realistic prospect of covering capital or operating costs, then doing so makes sense, assuming this arrangement makes provisions for low-income users, ensuring they are not overburdened.

To replicate the telecoms model for other kinds of infrastructure, governments should ensure that charges reflect the economic costs. Even a well-structured project will fail to attract private financing if prices are set too low; in that case, the public sector will be forced to cover all the costs. The roads sector illustrates the difficulty of setting appropriate prices. Drivers in many countries are unaccustomed to paying for using roads and therefore resist such efforts; for example, violence and mass boycotts arose in response to efforts to introduce charges for heavy-goods vehicles in France and urban tolls in South Africa’s Gauteng Province. Moreover, persuading treasury departments to set aside toll revenues for road improvements is difficult. Tolls can be insufficient, and there is always a temptation to divert them elsewhere. Because of these factors, we expect around half of all proposed road projects to go unfinanced and thus unbuilt in the years ahead. That adds costs with respect to congestion and the difficulty of moving goods.

The same is also true of wastewater; the beneficiaries of sewage systems, meaning everyone, often do not contribute to the cost of cleaning up the water. This is particularly true of developing markets, due to the inability to impose and collect charges. In too many cases, that means wastewater is left to pollute the landscape or, worse, seep back into the water supply. However unpopular doing so may be, governments need to set prices for such projects so that investors can earn a reasonable financial return. Otherwise, the systems will not get built.

Once governments have structured projects to provide stable and appropriate revenue streams, they can begin to figure out which ones to do first. Setting priorities is important, particularly in developing countries that have severe fiscal constraints. South Africa’s National Development Plan contains dozens of road, port, and rail projects, including both public and private financing. Its Department of Public Enterprises has flagged several components, including a new coal terminal and a container port, for private investment. These represent investments that would be attractive to private firms.

One way of making investments attractive is to package smaller projects together; pooling project revenues and risks in this way can attract major investors who might otherwise see the individual projects as too small to bother with. The Metropolitan Waterworks and Sewerage System in Manila used this approach to partition and privatize its two water-service areas. The 1997...
privatization resulted not only in significantly improved access for the city’s population, but also in healthy local-currency returns for the corporate owners of the Manila Water Company.

2. Focus on finding the right types of capital.

Having a lot of capital available for infrastructure doesn’t mean the right type of money will be there. Privately financed infrastructure projects require both debt and equity to manage risks and satisfy debt investors, who typically take the lion’s share of project costs. We forecast Brazil to have a surplus of debt for infrastructure in coming years but a shortfall in equity financing, due to public indebtedness, a devaluing currency, and highly leveraged corporate balance sheets. And Brazil is not alone. Consequently, many projects will fail to find financing simply because there isn’t enough equity to attract the debt required to complete the transaction.

Development banks can help to fill the equity gap, and in fact, many are scaling up their commitments. For example, the World Bank Group’s International Finance Corporation invests more than $1 billion per year in infrastructure equity and has increased its firepower in recent years by launching a global infrastructure equity fund alongside private-sector investors. In October 2013, the effort successfully completed a $1.2 billion fund-raising, well above the $1 billion target.

Capital is also flowing from nontraditional sources. Some countries require their mandatory pension funds to invest part of their resources domestically. This has helped generate a pool of resources suitable for domestic infrastructure investing. In the small town of Glyncoch, Wales, local crowdsourcing finances construction of a new community center without formal government support. Eliminating the legal barriers to crowdsourcing could ensure that personal, not just institutional, capital can help to build the future.

3. Encourage investors to consider emerging markets and greenfield assets.

A sophisticated understanding of countries, regions, and projects is necessary to match capital from investors, developers, and government sponsors alike with the infrastructure projects

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that need it. Simply put, investors need to deal with each emerging market individually and to harness local knowledge on the way.

That may sound obvious, but it needs to be said. The fact is, many investors (or their limited partners) restrict themselves to Organisation of Economic Co-operation and Development (OECD) or investment-grade countries. Others will not take on “greenfield assets”—new-build infrastructure projects where investors must take on the risk of development and construction. Instead, they prefer to focus on already-built brownfield assets. But as more money flows into brownfield OECD markets (industry data provider Preqin has estimated that the number of institutional investors in the sector more than doubled between 2011 and 2014), heightened competition is placing pressure on returns. Although measuring precise changes in such investments is difficult, many institutional investors with long track records are looking beyond brownfield OECD infrastructure assets in response to rising prices.

Investors who want to consider these types of opportunities should be aware that doing so could mean taking calculated risks in emerging markets; adopting a country-by-country approach to risk assessment is important. In addition, those investors would first need to ensure that limited-partner agreements allow them the flexibility to invest in what may be considered riskier countries, as long as these markets meet certain criteria.

For instance, if investors consider a country like Croatia, they would find that although the three major rating agencies rate the country as subinvestment grade, Croatia has an attractive public–private partnership (PPP) regime. The Economist Intelligence Unit rates it well ahead of its peers in southern Europe in many ways, and it has a more favorable legal and regulatory profile than a number of countries that do better at attracting capital. Infrastructure projects in countries like Croatia that fall just outside investment grade (rated BB+ through BB– by Standard & Poor’s) account for $4 trillion of infrastructure needs over the next five years.

Smart investors will deploy a variety of tactics—such as assessing the risk profiles of potential investments and partnering with local sponsors and development-finance institutions—in order to pursue high-growth projects where fewer players are at the bidding table.

4. Realize value from cash-generating assets.

Many governments, particularly in developing markets, are missing the chance to tap a viable source of cash in the form of generating value from existing assets. The world’s infrastructure stock is valued at an estimated $48 trillion. Some of these assets are already profitable, while others could turn a profit if operations improved and subsidies declined. There are examples at hand. Greece’s government recently agreed to sell a network of 14 regional
airports to a consortium, and in 2013, the Brazilian government sold for nearly $800 million a 30-year concession to operate Confins Airport in the state of Minas Gerais.

Reforming or privatizing state-owned infrastructure presents challenges, of course. An asset may operate at a loss, have a difficult labor situation, or need to be untangled from other businesses unsuitable for privatization. Despite these complexities, purchasing these assets can yield greater returns from selling assets or turning money-losing assets into profitable ones. For example, Jordan’s Queen Alia Airport once required a government subsidy to operate; a private-sector operator not only has invested in its expansion but also makes enough money to pay fees back to the government.

One way to take advantage of the ideas and expertise of private-sector developers is to allow them to submit unsolicited proposals for infrastructure projects to government. Brazil and Colombia, which are two of the busiest and most promising infrastructure markets in South America, all accept such proposals. Other entities are seeking to open new channels of communication. For example, the Port Authority of New York and New Jersey has invited private investors and developers to share their perspectives on how to develop the region’s infrastructure. Tanzania’s government uses “delivery labs” of public, private, and social-sector experts to set infrastructure-investment plans. Chile has developed a way of evaluating PPP projects that rewards developers for proposing low-cost solutions to national-infrastructure problems. As each of these approaches becomes successful, private players become more comfortable and more willing to participate, and the public sector becomes more willing to pay attention.

It’s common today to hear that too much capital is chasing too few infrastructure assets. But the problem is not a lack of worthy projects; it’s a lack of expertise and, perhaps, daring. Investment opportunities need to be appraised and prepared properly, and investors need to educate themselves. Marrying investors to assets will require more effort, more innovation, and more thoughtfulness on the part of government and business, but this is vital in order to ensure that there is sufficient investment in infrastructure to support global growth.

Tyler Duvall is a principal in McKinsey’s Washington, DC, office, where Alastair Green is an associate principal; Mike Kerlin is a principal in the Philadelphia office. Copyright © 2015 McKinsey & Company. All rights reserved.