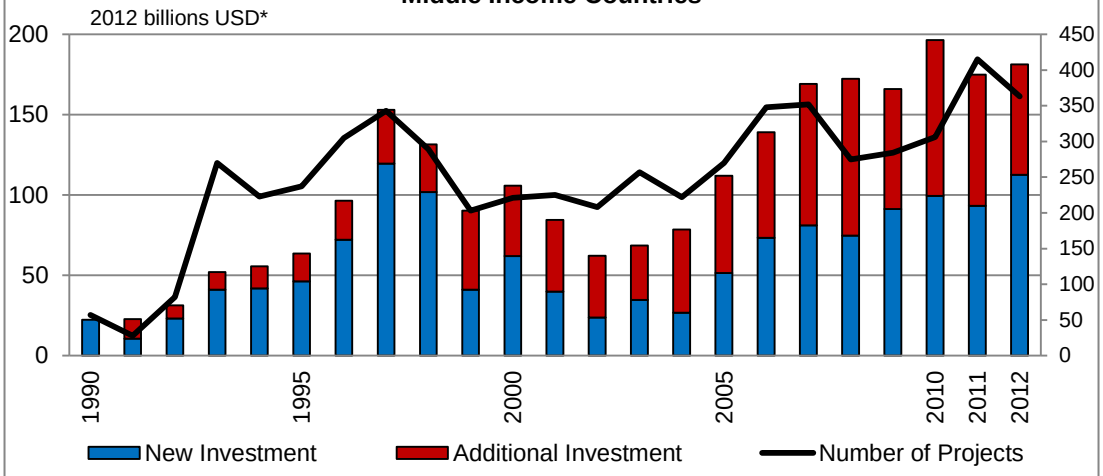
Note 85 **July 2013**

Infrastructure Policy Unit
2012 Global PPI Data Update

Private investment commitments to infrastructure in the developing world rise by 4 percent in 2012

Private investment commitments (hereafter, investment) in infrastructure in developing countries rose in 2012 to US$181.4 billion, increasing by 4 percent compared to 2011 according to data from the Private Participation in Infrastructure Database (Figure 1).[1] There was a 14 percent decrease in the number of projects in 2012, meaning that average project size was greater in 2012 than in 2011.[2] Most of the investment was concentrated in new projects ($112.6 billion), while $68.8 billion was invested in expansions of projects implemented prior to 2012. The new projects were primarily greenfield (new) infrastructure and were concentrated in the energy sector ($76.8 billion). However, as energy investment only grew by 4 percent, the increase in total investment was mainly due to growth in the water and transport sectors. By type of private participation, greenfield projects (BOT, BOO, merchant, and rental) continued to attract the largest share with $117.2 billion. Latin America led investment by region with $87 billion, the largest figure to date in real terms. About 55 percent of all PPI commitments in the developing world in 2012 were concentrated in two countries: Brazil and India.

Figure 1: Private Investment in Infrastructure in Low and Middle Income Countries



Source: World Bank and PPIAF, PPI Project Database.

* Adjusted by US CPI

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[1] The PPI Project Database currently uses the FY12 World Bank country classification released in July 2012. Investment data are in 2012 US dollar using the US CPI to adjust to 2012 values. Data at http://ppi.worldbank.org/ are reported in millions of current U.S. dollars unless otherwise indicated. St. Kitts and Nevis graduated to high income country status in July 2012.

[2] The data on infrastructure projects with private participation include primarily medium-size and large projects as reported by the media and other public sources. Small-scale projects are generally not included because of lack of public information. Additional investment in some projects may have been omitted for the same reason.

Sector Overview

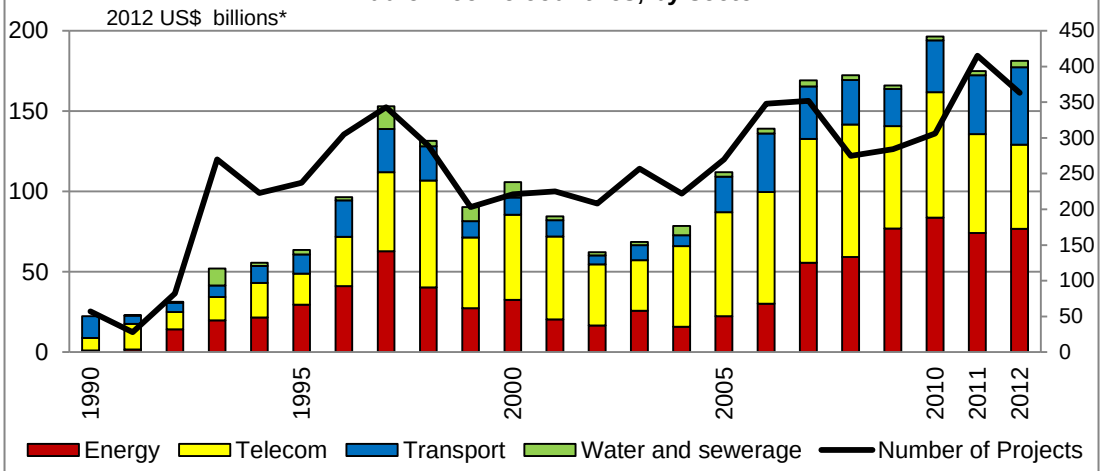
The **energy** sector continued to comprise the most investment with $76.8 billion and 244 projects, but it only increased by approximately 4 percent over the previous year. Thus, energy was not the major driver of the increased investment. Only $500 million was invested in natural gas, the rest was in electricity projects. The vast majority of projects (217) were in energy generation followed by electricity transmission (13). Unlike previous years, there were more natural gas distribution projects (11) than electricity distribution (3). Most of these projects were concentrated in Ukraine. Following the trend of 2011, the number of financial closures in renewable energy generation projects remains high (180 in 2012).

The only drop in investment was in the **telecommunications** sector, falling 15 percent from $61.5 billion to $52.4 billion--the lowest amount since 1999 (Figure 2). In 2012, additional investments accounted for 99 percent of total investment in the telecom sector and in the last ten years additional investments in telecom averaged 90 percent of total investment. There were four new mobile telecom projects in Democratic Republic of Congo, Uganda, Somalia, and Iran.

Transport investment increased by 31 percent from 2011 to $48.2 billion and had 83 new projects. Most projects were in the road subsector (69). Of these, 60 were implemented in India, and were a major driver in global investment growth. Although many of these projects were technically brownfield projects, they included major rehabilitation and expansion and were capital intensive. The average road project in 2012 was $352 million. In terms of overall investment, the subsectors were less evenly distributed; with $23.9 billion in roads, $15.7 billion in airports, $6.8 billion in rail, and $1.7 billion in seaports.

The greatest increase was in the **water** sector, which doubled investment from a low level of overall commitments to over $4 billion with 32 new projects. Of this amount, $3.4 billion was invested in utilities and $0.6 billion in standalone treatment plants. Brazil led water investment with over $3 billion, while China had the most projects (14). The largest project was a $717 million water and sewerage concession in Cuiaba (state of Mato Grosso) Brazil won by CAB Ambiental, a subsidiary of Galvao Engenharia Group. Although Brazil and China led activity in water, projects were implemented in a diverse group of countries including: Ghana, India, Indonesia, Jordan, Peru, and the Russian Federation. Serbia also entered the water market for the first time.

Figure 2: Private investment in infrastructure in low and middle income countries, by sector



Source: World Bank and PPIAF, PPI Project Database.

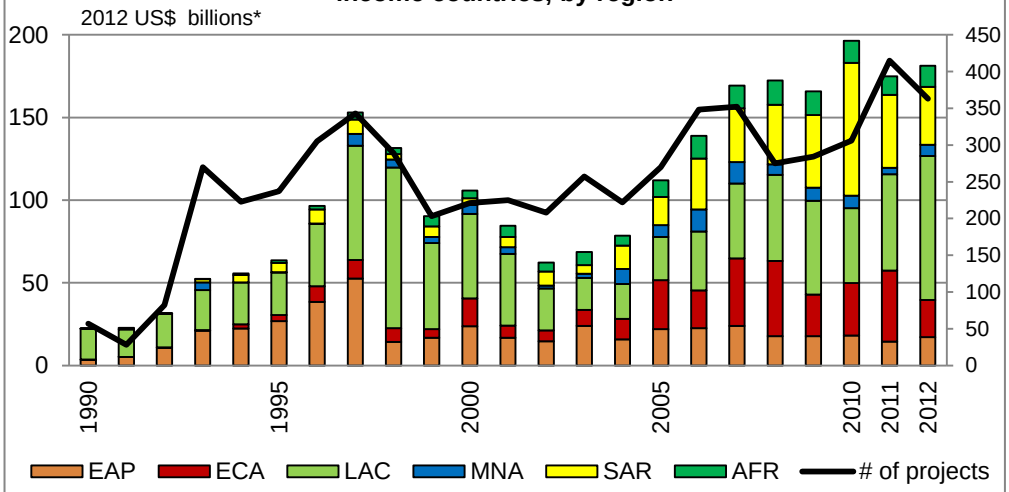
* Adjusted by US CPI

Regional Overview

Investment in **Latin America and the Caribbean (LAC)** jumped by 50 percent to $87 billion and accounted for 48 percent of global investment, the largest share of any region and the most investment seen in the region in the last two decades. New projects totaled 78 and included: 55 energy projects, 12 water and sewerage projects, and 11 transport projects. Brazil had the most activity with 54 projects and 87 percent of total investment in the region. Projects were also implemented in Chile (7), Peru (5), Argentina (4), Mexico (4), Nicaragua (2) and Uruguay (2). The strong growth in 2012 is in line with historic regional growth of private investment, which since 2002 averaged 11.8 percent per year and outpaced GDP growth, which has been about 3.3 percent. In 2012, private investment comprised 1.6 percent of regional GDP.[3]

In **South Asia (SA)**, investment fell by 20 percent to $35.1 billion, yet attracted 19 percent of global investment and was the second most active region after LAC. As in the past, India had the most regional investment ($31.2 billion), particularly in the transport sector ($18.9 billion), which continued to attract the most investment and included (60) projects. Despite the fall in investment in 2012, the year-on-year growth of private investment of 13.8 percent since 2002 outpaced regional GDP growth, at 6.5 percent. Private investment comprised 1.5 percent of regional GDP in 2012. Bangladesh implemented seven projects, has the second largest investment ($1.8 billion), primarily in energy and telecom. In energy, a joint venture between Orion Group (Bangladesh, 50 percent) and Long King (China, 50 percent) developed the 522 MW Khulna ($578.9 million) coal fired power plant. Pakistan, whose energy market has been recently dominated by rental power plants and to some extent coal, closed seven wind projects with capacity totaling 355.9 MW and investment commitments of $758.2 million. The projects all had PPAs backed by a payment guarantee from the central government and credit enhancement from Asian Development Bank, MIGA, IFC or the Islamic Development Bank. Pakistan also closed a biomass and a large hydroelectric plant. Sri Lanka implemented five energy projects and Nepal closed financing on a 120 MW hydroelectric plant.

Figure 3: Private investment in infrastructure in low and middle income countries, by region



Source: World Bank and PPIAF, PPI Project Database.

* Adjusted by US CPI

[3] GDP figures taken from World Development Indicators; average growth calculated by compounded annual growth rate

Europe and Central Asia (ECA) saw investment decline by 48 percent to $22.5 billion, the largest decrease of any region. ECA comprised 12 percent of global investment and still implemented 60 new projects of which 55 were in energy, 3 in transport, and 2 in water and sewerage. Although Turkey was quite active with 14 projects, Ukraine was the most active country with 16 energy projects totaling $520 million. Twelve of these were divestitures of state owned natural gas companies. In terms of investment Turkey had the largest share in the region with $9.7 billion, followed by the Russian Federation with $6.3 billion. New projects were also implemented in Bulgaria and Romania with eight each, Albania (6), Russian federation (3), Serbia (3), Bosnia and Herzegovina (1) and Kosovo (1). Despite the 2012 dip, average annual private investment growth of 11.8 percent since 2002 was more than twice as much as regional annual GDP growth of 4.2 percent during the same period. Private investment in 2012 comprised 1.2 percent of regional GDP.

In **East Asia and Pacific (EAP)**, investment grew by 19 percent over the previous year and comprised 9 percent of global investment. Most regional investment was in the energy sector ($8.9 billion).The region implemented 64 new projects and attracted investments of $17.2 billion. Most of those projects were in energy (41) followed by water and sewerage (15) and transport (8). China had the most projects (33), but Malaysia attracted the most regional investment with $5.1 billion followed by Indonesia ($3.5 billion), Thailand ($2.7 billion), Philippines ($2.5 billion) and China ($2.3 billion). Vietnam also implemented four energy projects and Mongolia implemented one energy project. Average annual growth of private investment of 1.5 percent for the region since 2002 did not keep pace with 8.3 percent annual regional GDP growth. Private investment in 2012 comprised 0.2 percent of regional GDP.

In **Sub-Saharan Africa (AFR)**, investment grew by 13 percent to $12.8 billion and comprised 7 percent of global investment. Investment was concentrated mostly in telecom with $7.7 billion followed by energy with $5 billion. The majority (81 percent) of new projects in AFR were in the energy sector. South Africa led regional investment with over $4 billion in renewable energy projects with PPAs and payment guarantees from ESKOM. An average annual growth in private investment of 8.3 percent since 2002 has outpaced regional growth during the same period of 4.5 percent annually. Private investment comprised 1.0 percent of regional GDP.

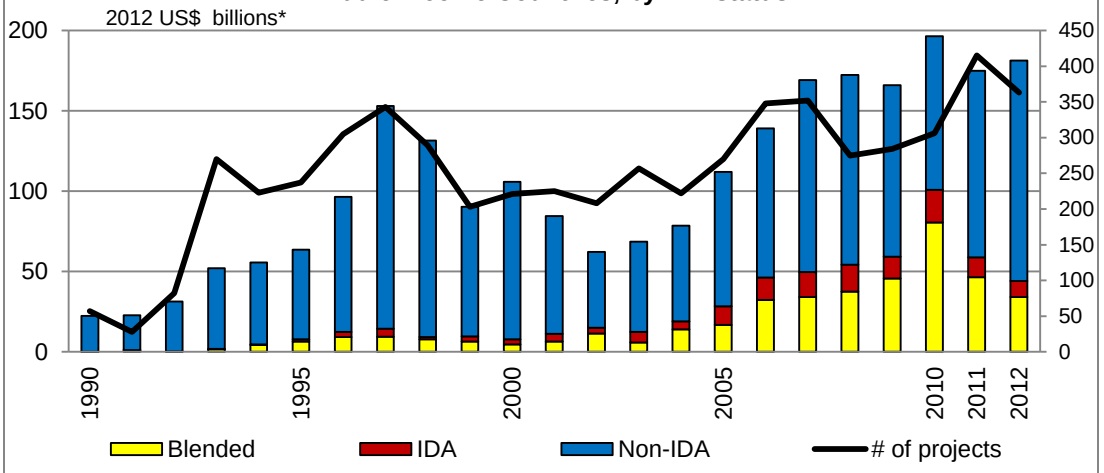
In the **Middle East and North Africa (MNA)**, investment grew by 66 percent over the previous year, yet it only comprised 4 percent of global investment at 6.7 billion. Six projects reached closure, four in energy (Jordan and Morocco) one in water (Jordan) and a new telecom license in Iran. Regional GDP in the Middle East and North Africa grew 4.0 percent annually on average between 2002 and 2009, and did not keep up with the annual growth in private investment at 21.2 percent. Data beyond 2009 has not yet been released. Private investment in 2012 comprised 0.4 percent of regional GDP.

Table 1. Investment commitments to infrastructure projects with private participation by sector or region, 2002–2012 (2012 US$ billions)*

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
SECTOR											
Energy	**16.5**	**25.8**	**15.7**	**22.4**	**30.1**	**55.6**	**59.3**	**76.9**	**83.6**	**74.1**	**76.8**
Electricity	13.3	20.6	13.6	19.0	26.7	50.1	57.3	75.3	76.7	66.2	76.3
Natural gas	3.2	5.1	2.2	3.4	3.5	5.5	2.0	1.6	6.9	7.9	0.5
Telecommunications	**38.0**	**31.4**	**50.2**	**64.7**	**69.5**	**77.0**	**82.4**	**63.7**	**78.2**	**61.5**	**52.4**
Transport	**5.6**	**9.5**	**6.9**	**22.0**	**36.4**	**32.8**	**27.6**	**23.1**	**32.1**	**36.7**	**48.2**
Airports	0.2	0.8	1.0	5.8	9.2	4.7	2.3	0.1	2.6	1.5	15.7
Railways	0.3	1.2	0.6	2.0	10.1	4.3	2.6	2.5	2.8	12.9	6.8
Roads	2.8	5.1	3.1	6.8	11.1	15.6	15.6	15.2	21.6	17.9	23.9
Seaports	2.3	2.3	2.2	7.5	6.1	8.2	7.0	5.4	5.2	4.4	1.7
Water and sewerage	**2.0**	**1.9**	**5.6**	**2.9**	**3.0**	**3.8**	**3.1**	**2.1**	**2.5**	**2.7**	**4.0**
Treatment plant	0.5	0.8	1.5	1.5	0.6	1.8	2.2	0.8	1.5	0.7	0.6
Utility	1.4	1.0	4.2	1.4	2.3	2.0	0.9	0.3	0.8	2.0	3.4
Water Transfer System								1.0	0.1		
REGION											
East Asia and Pacific	14.6	24.0	15.7	22.0	22.5	23.9	17.7	17.8	18.2	14.4	17.2
Europe and Central Asia	6.6	9.6	12.5	29.6	22.8	40.9	45.6	25.1	31.7	43.0	22.5
Latin America and the Caribbean	25.4	19.4	21.1	26.2	35.6	45.3	51.9	56.6	45.2	58.2	87.0
Middle East and North Africa	1.7	2.4	9.0	7.1	13.4	12.9	6.4	8.0	7.6	4.0	6.7
South Asia	8.4	5.3	14.3	17.0	30.9	32.7	36.0	44.1	80.2	44.0	35.1
Sub-Saharan Africa	5.4	7.9	5.8	10.1	13.7	13.6	14.7	14.3	13.4	11.3	12.8
Total	**62.2**	**68.6**	**78.4**	**112.1**	**139.0**	**169.2**	**172.4**	**165.8**	**196.4**	**175.0**	**181.4**

Source: World Bank and PPIAF, PPI Project Database / *Adjusted by US CPI to 2012 prices

Figure 4: Private Investment in Infrastructure in Low and Middle Income Countries, by IDA status



Source: World Bank and PPIAF, PPI Project Database.

* Adjusted by US CPI.