2013 Energy Sector Global Private Participation in Infrastructure (PPI)[1] Update

Energy PPI in emerging markets drops 25% due to India and Brazil; Investment in Turkey rises threefold[2]

- **Energy PPI drops to second place behind Telecoms**
- **Turkey surpasses Brazil as the largest market for energy PPI**
- **First power project reaches financial close in Myanmar in 2013**

1. Global Overview

Energy was ranked second in terms of magnitude of investment behind telecommunications, out of the four main sectors[3] tracked by the PPI database. This was a drop of one spot from last year.

Total PPI[4] in infrastructure in the energy sector in developing countries in 2013 amounted to US$56.4 billion. This represents a 25% decline from 2012 levels. Investment in new projects accounted for US$47.9 billion while additional investments of US$8.6 billion were earmarked to expand the capacity of existing projects and continuation of operations. The total number of projects in 2013 was 205, a 24% decrease from 2012. The average project size was US$274.7 million, almost the same as in 2012 (US$ 272.6 million).

Table 1: PPI Investments in Energy by Region, 2013 US$ Billion

	New Investment	Additional Investment	Total Investment	% of Total
LAC	17.1	6.3	23.4	41%
ECA	14.9	0.1	15.0	27%
EAP	8.5	0.3	8.8	16%
AFR	4.2	0.4	4.5	8%
SAR	2.1	1.2	3.3	6%
MNA	1.1	0.3	1.4	2%
Total	**47.9**	**8.6**	**56.4**	**100%**

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[1] PPI (Private Participation in Infrastructure): Projects are considered to have private participation if a private company or investor is at least partially responsible for operating cost and associated risks. Projects are tracked which have at least 25% private equity or in the case of divestitures, at least 5% private equity. See our methodology http://ppi.worldbank.org/resources/ppi_methodology.aspx.

[2] The PPI database tracks low and middle income countries (emerging markets) per the World Bank Group's GNI per capita index. http://data.worldbank.org/about/country-and-lending-groups prior to 2012. The Russian Federation and Chile graduated to high income status after 2012 and are therefore tracked by the database.

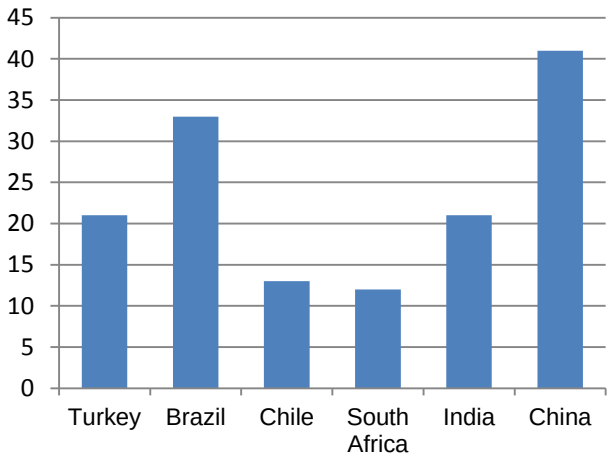
[3] The four main sectors are: (i) telecom, (ii) energy, (iii) transport and (iv) water and sewerage.

[4] PPI or investment refers to the total value of projects in a given year as well as capital expenditures for capacity expansion.

There was significant movement in the regional rankings. The traditionally strong SAR region dropped from second to fifth place, as the Indian PPI market faced multiple challenges. On the reverse, ECA moved from fourth place in 2012 to second in 2013, registering a more than twofold increase in overall investment levels. This was largely fuelled by a spike in Turkish PPI. Rankings for LAC and MNA were the same in both 2012 and 2013.

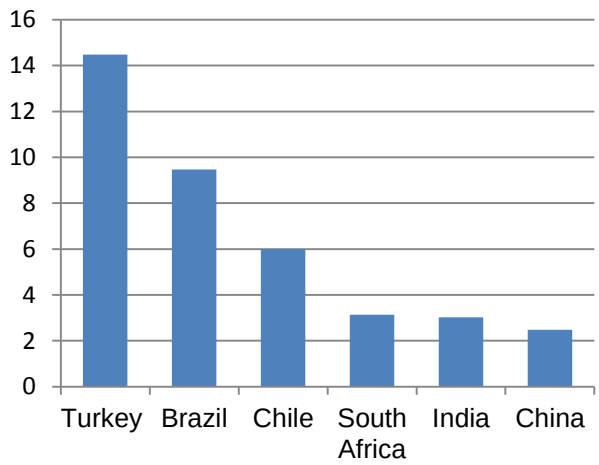
Top six Countries: The top six countries in PPI for energy in 2013 were: (1) Turkey, (2) Brazil, (3) Chile, (4) South Africa, (5) India and (6) China. These six countries attracted US$38.6 billion, representing 68% of all the PPI commitments in the developing world for the energy sector. Turkey attracted the highest volume of investment—US$14.5 billion, followed by Brazil (US$9.5 billion) and Chile (US$6.0 billion). South Africa saw the largest energy PPI for the AFR region, attracting US$3.1 billion out of a total of US$4.5 billion for AFR. India and China registered US$3.0 billion and US$2.5 billion respectively. There was little correlation between the number of projects and total energy PPI levels, with China and India having the most number of projects but placing at fifth and sixth position respectively for PPI levels. On the other hand, Turkey tied with India for third place for number of projects, but had the largest average project size at US$690 million.

Figure 1: Top 6 countries by number of projects (2013)



Source: World Bank and PPIAF. PPI Proiect Database

Figure 2: PPI in top 6 countries for energy, 2013 US$ billion



Source: World Bank and PPIAF, PPI Project Database

Private participation in Turkey increased by 380% in 2013; rising from US$3 billion in 2012 to $14.5 billion in 2013. This was mainly driven by Turkey's energy privatization drive, which resulted in a series of brownfield concessions for state-owned and operated power distribution projects. This constituted 4 out of 6 projects of more than US$1 billion in size, with a total investment of S$7.2 billion. Chile also did well, attracting 380% more PPI than in 2012. On the other hand, investment in Brazil slowed dramatically, dropping 69% from $30.5 billion in 2012 to $9.5 billion in 2013. A major reason for this drop was azlarge investments in 2012, such as the US$15 billion Belo Monte mega hydro project.

There was significant investment in **renewable energy** in 2013. Renewable energy investment in 2013 totaled US$$21.4 billion, which comprised 38% of total PPI in the energy sector. Within this, the top three PPI regions for renewable energy were LAC (66%), followed by EAP (12%) and AFR (11%). The top five renewable energy PPI destination countries reflected the regional investment distribution, with Brazil coming in top, followed in sequence by Chile, China, South Africa and Mexico. However, overall PPI levels in renewable energy contracted by more than half as compared to 2012. While all regions experienced drops, the global decrease was largely due to a $15 billion drop in the LAC region.

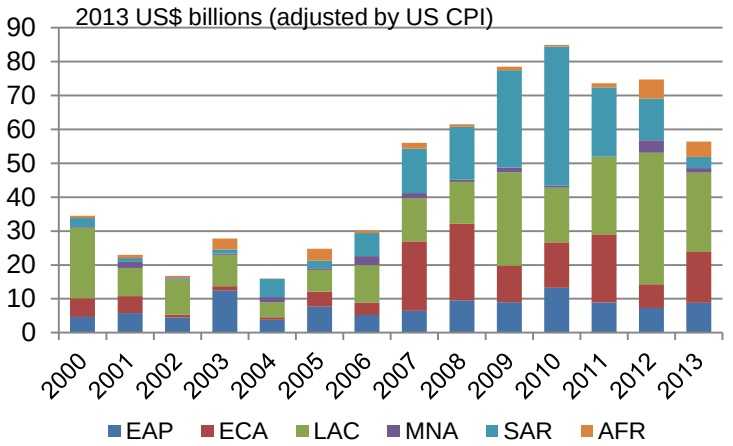
2. Regional Overview

The regions are ranked as follows for PPI in energy in 2013: (1) LAC, (2) ECA, (3) EAP, (4) AFR, (5) SAR, (6) MNA. There was significant change in the regional contributions to global PPI levels from 2012 to 2013, with only the AFR region having similar PPI levels for both years.

Table 2: Regional Share of Global Energy PPI, 2012 and 2013

	Share in 2012	Share in 2013
LAC	52%	41%
ECA	9%	27%
EAP	10%	16%
AFR	8%	8%
SA	16%	6%
MNA	5%	2%
Total	**100%**	**100%**

Figure 3: Global PPI in low and middle income countries,



Source: World Bank and PPIAF, PPI Project Database

2.1 Latin America and the Caribbean (LAC) attracted US$23.4 billion of PPI in 2013. This was 41% of global PPI in the energy sector, the largest share of any region. This amount was a 39% decrease from 2012 in energy sector PPI, translating into a 11% drop in share of global PPI from 2012 to 2013. Within the region, the top four countries both by investment levels and number of deals were Brazil with US$9.5 billion of PPI and 33 projects, followed by Chile with US$6.0 billion and 13 projects, Peru with US$2.3 billion and 10 projects and finally Mexico with US$1.9 billion in PPI and 9 projects. Energy projects were also implemented in Uruguay (6), Costa Rica (2), Argentina (1) and Honduras (1).

Renewable energy generation investments constituted the bulk of PPI for the energy sector in LAC at 66%. This is also reflected in the top five deals for LAC, three of which were for renewable energy. Within LAC, Brazil and Chile saw the most PPI in renewable energy projects with US$3.8 billion and US$3.1 billion respectively. While Brazil has followed historic trends in terms of deal count (25 renewable energy projects; 24 on average over past 5 years), the average project size has fallen from US$1.2 billion to US$287 million. This was mainly due to the presence of three projects of over US$1 billion in size in 2012 (including the mega US$15 billion Belo Monte Hydro Power Plant), compared with zero projects in 2013. There were no major challenges facing Brazil's renewables energy sector in 2013. As such it is likely that future PPI levels will track historic trends. Chile closed nine renewable energy deals in 2013 totaling US$3.1 billion, adding 1,773 MW of capacity to the grid. The AES Corporation was very active in Chile as a sponsor, contributing equity to the top three projects (2 coal, 1 hydro) in Chile in 2013. International lenders, as well as bilateral and multilateral institutions were also active in the Chilean market, including the IFC, JBIC, OPIC and the Bank of Tokyo-Mitsubishi. For example, the largest project – the Alto Maipo Hydro Power Project – received funding from six commercial banks, as well as OPIC (US$ 245 million), IADB (US$ 195 million) and the IFC (US$ 145 million) amounting to US$ 1217 million. PPI in natural gas constituted a small 2% of energy sector PPI at $467 million.

Table 3: Latin America and the Caribbean (LAC) Top Deals					
Country	**Project Name**	**US$ Million**	**Sponsors**	**Source of Revenue**	**Segment**
Chile	Alto Maipo Hydro Power Project (Hydro)	$2,000	AES Corporation (100% / United States)	PPA	Electricity generation
Chile	Cochrane Coal-fired power plant (Coal)	$1,350	AES Corporation (60% / United States), Mitsubishi (40% / Japan)	N/A	Electricity generation
Peru	Chaglla Hydro Power Plant (Hydro)	$1,200	Odebrecht SA (100% / Brazil)	N/A	Electricity generation
Argentina	GEASSA - Gastre Wind Farm (Wind)	$778	Generadora Argentina del Sur (100% / Argentina)	N/A	Electricity generation
Brazil	Matrincha Transmissora de Energia (TP Norte)	$764.7	State Grid Corporation of China (SGCC) (51% / China)	Transmission fees	Electricity transmission

2.2 In **Europe and Central Asia (ECA)** investment in the energy sector totaled US$15 billion in 2013, which represented a 120% jump over the previous year. This translated into a sizeable 18% increase in global share, from 9% to 27%. This pulled the ECA region up from fourth place in 2012 to second place in 2013. The increase was directly due to the influence of Turkey, where PPI increased dramatically by 380% from US$3 billion in 2012 to US$14.5 billion in 2013. This was largely a result of the successful revival of the government's energy privatization drive, after it failed to close any deals in 2012. Four out of ECA's top five projects are brownfield concessions of previously state-owned and operated electricity distribution companies, and reflect Turkey's privatization push in the electricity distribution subsector. Turkey accounted for 96.5% of PPI for ECA. Energy projects were also implemented in Albania (2), Romania (2) and Bulgaria (1).

Renewable energy was not a strong theme for PPI in ECA in 2013, with only US$699 million of investment. This was 3% of global PPI in renewable energy. The natural gas subsector drew less PPI in 2013, with only 0.6% (US$94 million) of energy sector PPI for ECA invested in a single natural gas expansion project in Romania.

Table 4: Europe and Central Asia (ECA) Top Deals					
Country	**Project Name**	**US$ Million**	**Sponsors**	**Source of Revenue**	**Segment**
Turkey	Seyitomer Thermal Power Plant (Coal)	$2,248	Celikler Holding (100% / Turkey)	-	Electricity generation
Turkey	Bogazici Elektrik Dagitim A.S. (BEDAS)	$1,960	Cengiz Holding (34% / Turkey), Limak Holding (34% / Turkey), Kolin Group (34% / Turkey)	-	Electricity distribution
Turkey	Toroslar Elektrik Dagitim A.S.	$1,725	Sabanci Holding (50% / Turkey), E.ON (50% / Germany)	-	Electricity distribution
Turkey	Gediz Elektrik Dagitim A.S.	$1,231	Elsan (Turkey), Tumas (Turkey), Turcas Elektrik Uretim A.S. (Turkey)	User fees	Electricity distribution
Turkey	Istanbul Anatolian Side Electricity Distribution Company (AYEDAS)	$1,223	E.ON (50% / Germany), Sabanci Holding (50% / Turkey)	-	Electricity distribution

2.3 East Asia and Pacific (EAP) ranked third for energy sector PPI, attracting US$8.8 billion. This was an increase of 22% in PPI levels from 2012. EAP's share of energy sector PPI increased from 10% in 2012 to 16% in 2013. Within EAP, China had both the highest levels of PPI and number of deals, at US$2.5 billion and 41 projects respectively. The size of individual projects in China was relatively small at US$60 million per project. Over the period from 2000 to 2013, the average amount of additional capacity a new electricity generation project in China added to the grid was 31.4 MW. This is in line with China's historical deal size from the year 2000, which has not been more than US$100 million (except for 2009[5]). The numerous but small projects in China's market reflect the government's push into small hydro and photovoltaics for its Township and Village Electrification Programs.

Indonesia, Thailand, Malaysia and the Philippines followed in second to fifth place for PPI levels in the energy sector. These four countries had sizeable electricity generation projects that are listed in the top five deals for EAP. There were two notable projects in the EAP region in 2013. First, 2013 saw Myanmar's first energy sector PPI project. This was the US$170 million Ahlone Power Plant, a 121MW natural gas power plant. The project was sponsored by the Toyo-Thai Corporation Public Company Limited and was financed with initial short-term loans totaling US$30 million for the import of machines and equipment. Next was the top project by size in EAP, which was the Banten coal-fired power plant in Indonesia. It was notable for being the first Independent Power Producer in Indonesia that was financed on a limited recourse basis without a guarantee from the government for state utility PLN's obligations under the Power Purchase Agreement.

EAP saw PPI in **renewable energy** decrease from US$3.3 billion to US$2.7 billion, a contraction of 19%. China continued to be a strong investor in renewable energy, increasing investment from US$1.3 billion in 2012 to US$2.2 billion in 2013. China constituted 84% of EAP's PPI in renewable energy. The country also attracted the third most PPI in renewable energy, after Brazil and Chile. On the other hand, the rest of EAP saw relatively muted levels of PPI in renewable energy. Renewable energy PPI in Indonesia dropped sharply from US$288 million in 2012 to US$30.7 million in 2013 (a 10 MW small hydro project), despite moves by the government to introduce or raise feed-in-tariffs for renewables. The exception was the Philippines, where the government's efforts to clarify its feed-in-tariff structure in 2012 also paid off in the form of a US$300 million wind project (Burgos Llocos Norte Wind Farm) in 2013. Despite a drop in renewable PPI from US$567 million in 2012 to US$300 million in 2013, the Philippines was the second largest PPI market in 2013 for renewable energy.

Table 5: East Asia and Pacific (EAP) Top Deals

Country	Project Name	US$ Million	Sponsors	Source of Revenue	Segment
Indonesia	Banten Coal-Fired Power Plant (Coal)	$1,000	Genting Group (95% / Malaysia)	PPA/WPA	Electricity generation
Indonesia	Cilacap Power Plant Phase II (Coal)	$900	PT Sumber Energi Sakti Prima (51% / Indonesia)	PPA/WPA	Electricity generation
Thailand	Khanom 4 Power Plant (Natural Gas)	$809	Electricity Generating Company (EGCO) (100% / Thailand)	PPA/WPA	Electricity generation
Malaysia	TNB Prai Combined Cycle Power Plant (Natural Gas)	$786	Tenaga Nasional Bhd. (100% / Malaysia)	PPA/WPA	Electricity generation
Philippines	Therma South Coal-fired Power Project (Coal)	$720	Aboitiz Equity Ventures (100% / Philippines)	-	Electricity generation

2.4 Sub-Saharan Africa (AFR) rose one level to fourth position with energy sector PPI of US$4.5 billion, despite a drop of 19% compared to 2012. AFR's global share of energy sector PPI remained steady at 8%. Within AFR, South Africa attracted the most PPI, making up 69% of total energy sector PPI. Projects were also implemented in Ghana (1), Nigeria (1) and Kenya (1). This year is significant for PPI in Ghana as it is the first time since 2009 that a new project has reached financial closure. The project – the Takoradi 2 Thermal Power Expansion – builds on the existing Takoradi 2 Natural Gas Power Plant and adds a capacity of 330 MW to

[5] This was due to the China Longyuan Power Group Corporation's divestiture in 2009 of a US$2.3 billion wind farm. This project sharply brought up the average project size.

Takoradi, which already contributes to about 15% of Ghana's electricity needs. The IFC and the AfDB loaned the project US$95 million and US$60 million respectively. The project will generate revenue mainly power through purchase agreements.

AFR makes up 11% of total **renewable energy** PPI globally. Within this relatively small share, South Africa has shown high activity levels; with more than 75% of its energy sector PPI flowing into renewable energy. By deal count, out of 12 projects that reached financial closure in 2013, 10 were for renewable energy. This could have been the result of active government support via its Renewable Energy Independent Power Producer Programme. The mix of renewable energy projects in South Africa also reflected the government's focus on wind energy, with 70% of renewable energy projects being wind projects. There was no investment in natural gas in AFR in 2013.

Table 6: Sub-Saharan Africa (AFR) Top Deals

Country	Project Name	US$ Million	Sponsors	Source of Revenue	Segment
South Africa	Avon OCGT (oil)	$654.1	Mitsui (25% / Japan), SUEZ (38% / France), Others (10%)	User fees	Electricity generation
Ghana	Takoradi 2 Thermal Power Expansion (natural gas)	$440	Abu Dhabi National Energy Company (TAQA) (90% / United Arab Emirates)	PPA/WPA	Electricity generation
South Africa	Amakhala Emoyeni Wind Farm (wind)	$410.38	Tata Enterprises (50% / India), Exxaro Resources (50% / South Africa)	User fees	Electricity generation
Nigeria	KEPCO Egbin Power Plant (natural gas)	$407.3	Korea Electric Power Company (KEPCO) (100% / Korea, Rep.)	-	Electricity generation
South Africa	Linde Solar PV Plant (solar)	$386.1	Scatec (100% / Norway)	-	Electricity generation

2.5 South Asia (SA) saw PPI in energy fall sharply by 72% to US$3.3 billion, which represented 6% of total PPI. The region correspondingly fell to fifth place from second in 2012. This is mainly due to a significant investment drop in India in 2013. There are multiple causes for the steep drop in PPI in India. The inability to procure an adequate supply of coal has caused a decline in new coal power projects – only 2 out of 21 projects reaching financial close in India in 2013 were coal power generation projects. Coal meets 44% of India's energy needs[6] and historically constitutes a significant part of energy sector PPI for India. PPI in coal-fired power plants was US$18 billion, or 69%, of electricity generation projects reaching financial close in 2011. This was compounded by the depreciation of the rupee, which lost more than 20% of its value over the period from January to September 2013. This constrained overseas borrowing and imports on overseas coal. These and other factors contributed to the inability of coal projects, including Ultra Mega Power Plants usually fired by coal, to take shape. Pakistan implemented a total of 2 energy projects, both of which were in renewable energy. Interestingly, there were two major projects in India that required the injection of additional capital. These were the Alakananda Hydro Power Project and the Raj West Power Project. Both required additional PPI of over US$300 million for cost overruns resulting from an ex-ante underestimation of project cost.

India remains the country in SA with the most PPI in **renewable energy** at US$1.1 billion, despite a drop from US$3.1 billion in 2012. PPI in Pakistan for renewable energy has also contracted from US$1.2 billion in 2012 to US$128 million in 2013, with a reduction in new projects from 9 projects in 2012 to 2 projects in 2013. SA did not see PPI in natural gas in 2013.

[6] This information is obtained from the US Energy Information Administration's website.

Table 7: South Asia (SAR) Top Deals					
Country	**Project Name**	**US$ Million**	**Sponsors**	**Source of Revenue**	**Segment**
India	OPGS Power Gujarat Private Limited (Coal)	$276.6	OPG Energy Private Limited (100% / India)	User fees	Electricity generation
India	Maruti Clean Coal and Power Limited (Coal)	$248.5	ACB India Limited (45% / India), Gupta Global Resources Private Limited (10% / India), Spin Packaging Limited (10% / India), Kolahai Infotech Private Limited (10% / India)	User fees	Electricity generation
India	Dirang Energy Private Limited - Gongri HEP (Hydro)	$229.3	Patel Engineering Ltd (74% / India)	User fees	Electricity generation
India	Welspun Solar Madhya Pradesh Private Limited (Hydro)	$187.7	Welspun Energy Limited (100% / India)	PPA	Electricity generation
Pakistan	Jhimpir Power (Private) Limited (Wind)	$135.4	Burj Capital (100% / Pakistan)	PPA	Electricity generation

2.6 The **Middle East and North Africa (MNA)** remained in sixth position, falling by 63% over the prior year and comprising just 2% of global energy sector PPI at US$1.4 billion. Two projects reached closure in Jordan, both in **renewable energy**. The first project was the Tafila Wind Farm which received a US$100 million loan from IFC and a US$72 million loan from the EIB. The second project was the US$812 million Al Manakher Tri-Fuel Power Plant (IPP3), sponsored by KEPCO (Korea). The project included a 25 Year PPA with USD denominated capacity payments and fuel pass-through.

Table 8: Middle East and Africa (MNA) Top Deals					
Country	**Project Name**	**US$ Million**	**Sponsors**	**Source of Revenue**	**Segment**
Jordan	Al Manakher Tri-Fuel Power Plant (IPP3) (Diesel)	$812	Korea Electric Power Company (KEPCO) (60% / Korea, Rep.), Mitsubishi (35% / Japan), Others (5%)	PPA/WPA	Electricity generation
Jordan	Tafila Wind Farm (Wind)	$290	InfraMed (50% / France), EP Global Energy (19% / Cyprus)	PPA/WPA	Electricity generation

3. Emerging Trends

- **India energy sector – shifting from coal to renewables?** India has seen good interest in the renewables sector, evidenced by strong deal flow in the renewable energy subsector in the previous two years (2011 and 2012), with a total of 75 deals reaching financial closure. In September 2014, the government provided a fillip to the sector, announcing an investment target of US$100 billion in renewable energy within the next five years[7] to diversify India's energy mix and reduce reliance on coal. As such, it is likely that investment in renewable energy will continue to grow, despite the temporary setback in PPI levels this year.

  Nevertheless, this might not mean a shift away from coal into renewables. While the over-reliance on coal has caused problems for the economy – for example a growing trade deficit and unplanned spikes on spending on imported coal – India is likely to need to grow its coal resource base to continue powering its economy. Given the current government's focus on improving the business climate for manufacturers, which include ensuring a reliable supply of electricity, coal is being seen as a quick way to meet energy security needs. In addition, India's own coal reserves have yet to be fully explored and mines are currently

[7] The Economic Times, Interview with Power and Coal Minister Piyush Goyal, September 19 2014.

not tapped at their potential. It is hence likely that PPI in coal will grow together with, and not at the expense of, renewable energy.

- **Renewable Energy in South Africa—gathering momentum:** AFR's increase in renewable energy PPI levels has increased dramatically over the past five years, from 2% to 11% of global energy sector PPI. This was almost exclusively due to South Africa's investments in the past two years in solar and wind farms, which have added 648.8 MW and 1076.1 MW of capacity in 2013 and 2012 respectively. This puts South Africa solidly on track to meet its 6.9 gigawatt renewable energy target by 2020[8]. South Africa's vast tracts of uninhabited land and abundant renewable resources, supportive government policies, together with interest from Chinese and international investors could signal a strong future pipeline for private investment in South Africa's renewable energy market.

- **Turkey's energy distribution sector privatization**: Turkey featured very strongly for PPI in energy in 2013, as a result of the government's successful revival of the privatization drive for the power distribution subsector. This followed a dry spell in 2012, when this series of intended privatizations did not reach closure due to investor and government mismatch in terms of company valuations and expectations. Privatization of the energy sector has been on the government's agenda for a long time, stemming from the understanding that privately owned and operated utilities can deliver more efficiency gains. With the announcement from Turkey's finance minister Mehmet Simsek in October 2013 that privatization of the electricity distribution subsector were now complete upon the sale of Toroslar Elektrik, it is likely that PPI in Turkey will decrease to more typical levels at under US$10 billion.

[8] "The Future for Clean Energy in Africa" report 2013, Clean Energy Pipeline, Baker and McKenzie.

WORLD BANK GROUP
Public-Private Partnerships

Energy projects with financial or contractual closure in 2013 in emerging markets (total of 205 projects)								
Region	**Country**	**Project Name**	**Subsector**	**Type Of PPI**	**Investment Commitment (US$ millions)**	**Capacity Type**	**Capacity**	**Sponsors**
East Asia and Pacific	Indonesia	Banten Coal-Fired Power Plant	Electricity generation	Build, operate, and transfer	1000	MW	660	Genting Group (95% / Malaysia)
East Asia and Pacific	Indonesia	Cilacap Power Plant Phase II	Electricity generation	Build, operate, and transfer	900	MW	660	PT Sumber Energi Sakti Prima (51% / Indonesia)
East Asia and Pacific	Thailand	Khanom 4 Power Plant	Electricity generation	Build, own, and operate	809	MW	970	Electricity Generating Company (EGCO) (100% / Thailand)
East Asia and Pacific	Malaysia	TNB Prai Combined Cycle Power Plant	Electricity generation	Build, own, and operate	786	MW	1071	Tenaga Nasional Bhd. (100%)
East Asia and Pacific	Philippines	Therma South Coal-fired Power Project	Electricity generation	Build, own, and operate	720	MW	300	Aboitiz Equity Ventures (100% / Philippines)
East Asia and Pacific	Malaysia	Teknologi Tenaga Perlis Consortium Sdn Bhd CCGT Power Plant	Electricity generation	Build, operate, and transfer	456	MW	650	Jati Cakerawala Sdn Bhd (80% / Malaysia)
East Asia and Pacific	Philippines	Burgos Llocos Norte Wind Farm	Electricity generation	Build, own, and operate	300	MW	87	Energy Development Co (EDC) (100% / Philippines)
East Asia and Pacific	China	Hanergy Gonghe County PV Power Plant Phase I II and III	Electricity generation	Build, operate, and transfer	255.66	MW	150	Hanergy Holding Group Limited (100% / China)
East Asia and Pacific	Philippines	Toledo Coal-Fired Power Plant Cebu	Electricity generation	Build, own, and operate	245	MW	82	Metropolitan Group (..), Global Business Holdings (South Africa)
East Asia and Pacific	China	Jiangsu Zhenfa Gulang County PV Power Plant Phase II	Electricity generation	Build, operate, and transfer	193.68	MW	100	Jiangsu Zhenfa Solar Power Technological Development Co., Ltd. (100% / China)
East Asia and Pacific	Thailand	Amata B. Grimm Power 4 Limited	Electricity generation	Build, own, and operate	184	MW	132	Amata Power Co. Ltd (100% / Thailand)
East Asia and Pacific	Indonesia	Kreung Isep Hydropower Project	Electricity generation	Build, own, and operate	30.7	MW	10	PT Senagan Energi (100% / Malaysia)

East Asia and Pacific	Thailand	Amata B. Grimm Power 5 Limited	Electricity generation	Build, own, and operate	171	MW	132	Amata Power Co. Ltd (100% / Thailand)
East Asia and Pacific	Myanmar	Ahlone Power Plant	Electricity generation	Build, own, and operate	170	MW	121	Toyo-Thai Corporation Public Company Limited (100% / Thailand)
East Asia and Pacific	China	Wuwei City Runfeng Group PV Power Plant Phase I and II	Electricity generation	Build, operate, and transfer	161.4	MW	80	Real Force Group (100% / China)
East Asia and Pacific	China	Ganbala China WindFarm PV Power Plant	Electricity generation	Build, operate, and transfer	110.88	MW	50	China Windpower Group Limited (100% / China)
East Asia and Pacific	China	Yongren County Ganbala 50MW PV Plant	Electricity generation	Build, operate, and transfer	110.88	MW	50	China Windpower Group Limited (100% / China)
East Asia and Pacific	China	Xiajin County Linuo Group 30MW PV Plant	Electricity generation	Build, operate, and transfer	96.84	MW	30	Linuo Group Co Ltd (100% / China)
East Asia and Pacific	China	Sky Solar Honghe County 50MW PV Power Plant	Electricity generation	Build, operate, and transfer	95.39	MW	50	Sky Solar (100% / China)
East Asia and Pacific	China	Pei County China WindPower Group 20 MW PV Plant	Electricity generation	Build, operate, and transfer	88.77	MW	55	China Windpower Group Limited (100% / China)
East Asia and Pacific	Thailand	Solarco Solar Power Plant	Electricity generation	Build, operate, and transfer	87	MW	57	Electricity Generating Company (EGCO) (49% / Thailand), Yanhee Group (51% / Thailand)
East Asia and Pacific	China	Gansu Jinchang China Technology PV Plant Phase I	Electricity generation	Build, operate, and transfer	79.89	MW	50	China Technology Solar Power Holdings Limited (5% / China), Shunfeng Photovoltaic International Company (95% / Hong Kong, China)
East Asia and Pacific	China	Yumen City 30MW Biomass Power Plant Project	Electricity generation	Build, operate, and transfer	77.47	MW	30	Ningshi Industrial Co., Ltd. (100% / China)
East Asia and Pacific	China	Binzhou Solid Waste Power Plant Phase I	Electricity generation	Build, operate, and transfer	61.33	MW	15	TianYing ST Group (100% / China)
East Asia and Pacific	China	Jiangan County Biomass Power Plant Project	Electricity generation	Build, operate, and transfer	59.91	MW	30	Zhuzhou Yifeng Green Energy Company Limited (100% / China)

East Asia and Pacific	China	Jiangling County Kaidi Biomass Power Plant	Electricity generation	Build, operate, and transfer	58.1	MW	30	Kaidi Electric Power (100% / China)
East Asia and Pacific	China	Tumushuke City Canadian Solar 100MW PV Power Plant	Electricity generation	Build, operate, and transfer	58.1	MW	30	Canadian Solar Inc. (100% / Canada)
East Asia and Pacific	China	Liaoyuan Solid Waste Power Plant Phase I	Electricity generation	Build, operate, and transfer	51.65	MW	15	TianYing ST Group (100% / China)
East Asia and Pacific	China	Yangxin Kaidi Biomass Power Plant	Electricity generation	Build, operate, and transfer	51.65	MW	30	Kaidi Electric Power (100% / China)
East Asia and Pacific	China	Baicheng County Zhengtai Group 20MW PV Power Plant	Electricity generation	Build, operate, and transfer	48.42	MW	30	Zhengtai Group (100% / China)
East Asia and Pacific	China	Hami Tianxingjian Hongxing Erchang PV Power Plant	Electricity generation	Build, operate, and transfer	48.42	MW	20	Beijing Tianxingjian Investment Management Company Limited (100% / China)
East Asia and Pacific	China	Hong Solar Hejing County PV Power Plant Phase I	Electricity generation	Build, operate, and transfer	48.42	MW	30	Hong Solar Company Limited (100% / Hong Kong, China)
East Asia and Pacific	China	Ningan City Biomass Co-generation Power Plant	Electricity generation	Build, operate, and transfer	48.42	MW	30	Chant Group (100% / China)
East Asia and Pacific	China	Hongya Kaidi Biomass Power Plant	Electricity generation	Build, operate, and transfer	46.81	MW	30	Kaidi Electric Power (100% / China)
East Asia and Pacific	China	Huoshan Kaidi Biomass Power Plant	Electricity generation	Build, operate, and transfer	45.71	MW	30	Kaidi Electric Power (100% / China)
East Asia and Pacific	China	Anneng Qujialing Biomass Plant	Electricity generation	Build, operate, and transfer	45.68	MW	30	Anneng Group (100% / China)
East Asia and Pacific	China	Chaling County Kaidi Biomass Power Plant	Electricity generation	Build, operate, and transfer	45.38	MW	30	Kaidi Electric Power (100% / China)
East Asia and Pacific	China	Rongcheng City Solid waste Power Plant	Electricity generation	Build, operate, and transfer	44.22	MW	27	Chant Group (100% / China)
East Asia and Pacific	China	Awati County 300MW Solar Power Plant Phase I	Electricity generation	Build, operate, and transfer	41.96	MW	20	Sky Solar (100% / China)
East Asia and Pacific	Malaysia	Kuala Lumpur Airport Solar Plants	Electricity generation	Build, own, and operate	41	MW	15	SunEdison LLC (100% / United States)

East Asia and Pacific	China	Hejing County Zhengxin 20MW PV Power Plant	Electricity generation	Build, operate, and transfer	40.67	MW	20	ZNSHINE Solar (100% / China)
East Asia and Pacific	China	Fuhai County Hanergy 20MW PV Power Plant	Electricity generation	Build, operate, and transfer	40.35	MW	20	Hanergy Holding Group Limited (100% / China)
East Asia and Pacific	China	Longan County LNG Project	Natural gas distribution	Build, operate, and transfer	40.35		Not Available	Huashuo Group (100% / China)
East Asia and Pacific	China	Maigaiti County Zhengxin 20MW PV Power Plant	Electricity generation	Build, operate, and transfer	40.35	MW	20	ZNSHINE Solar (100% / China)
East Asia and Pacific	China	Tumushuke City Kinguo Group 90MW Demonstration PV Power Plant Phase I	Electricity generation	Build, operate, and transfer	38.74	MW	20	Kinguo Group (100% / China)
East Asia and Pacific	China	Qiyang County Biomass Power Plant	Electricity generation	Build, operate, and transfer	37.23	MW	25	Kaidi Electric Power (100% / China)
East Asia and Pacific	China	Qinghai Delingha Solar Power Plant Phase II	Electricity generation	Build, operate, and transfer	35.51	MW	20	China Windpower Group Limited (100% / China)
East Asia and Pacific	China	Zhenfa Gaoyou City 30MW PV Power Plant	Electricity generation	Build, operate, and transfer	34.54	MW	20	Jiangsu Zhenfa Solar Power Technological Development Co., Ltd. (100% / China)
East Asia and Pacific	China	Qinghai Delingha Solar Power Plant Phase III	Electricity generation	Build, operate, and transfer	30.67	MW	20	China Windpower Group Limited (100% / China)
East Asia and Pacific	Thailand	Nine A Solar Power Plant	Electricity generation	Build, own, and operate	27.25	MW	8	Others (100%)
East Asia and Pacific	Thailand	Golden Light Solar Power Plant	Electricity generation	Build, own, and operate	26.17	MW	8	Others (100%)
East Asia and Pacific	Thailand	Chiangmai Solar Power Plant	Electricity generation	Build, own, and operate	26.14	MW	8	Others (100%)
East Asia and Pacific	China	Mayang County LNG Project	Natural gas distribution	Build, operate, and transfer	24.21	Cubic meters per day (thousands)	200	Shitai Natural Gas Business Company Limited (100% / China)
East Asia and Pacific	Thailand	Surin Solar PV 2 Project	Electricity generation	Build, own, and operate	15.81	MW	7.46	SPC Power Corp (100% / Philippines)

East Asia and Pacific	Thailand	Surin Solar PV 3 Project	Electricity generation	Build, own, and operate	15.81	MW	7.46	SPC Power Corp (100% / Philippines)
East Asia and Pacific	Thailand	Surin Solar PV 1 Project	Electricity generation	Build, own, and operate	15.8	MW	7.46	SPC Power Corp (100% / Philippines)
East Asia and Pacific	Thailand	SPC Lopburi PV plant	Electricity generation	Build, own, and operate	15.42	MW	3.73	Electricity Generating Company (EGCO) (33% / Thailand), Mitsubishi (33% / Japan), China Light and Power Ltd. (33% / Hong Kong, China)
East Asia and Pacific	China	Tangyuan County LNG Project	Natural gas distribution	Build, operate, and transfer	10.69		Not Available	China Gas Holdings Limited (100% / Hong Kong, China)
East Asia and Pacific	China	Canadian Solar Inc. Sihong Solar Power Plant Phase I	Electricity generation	Build, operate, and transfer	9.37	MW	6	Canadian Solar Inc. (100% / Canada)
East Asia and Pacific	China	Heilongjiang Tongbei Town LNG Project	Natural gas distribution	Build, operate, and transfer	7.83		Not Available	Heilongjiang Shuanghe Gas Company Limited (100% / China)
East Asia and Pacific	China	Acquisition of 75% share in Tongcheng City Solid Waste Incineration Power Plant	Electricity generation	Partial	5.33	MW	7.5	Anhui Shengyun Machinery Company Limited (75% / China)
East Asia and Pacific	China	Yaan City Dashiban Hydro Power Plant	Electricity generation	Full	3.34	MW	13	Zhaoheng Hydropower Company (100% / Hong Kong, China)
Europe and Central Asia	Turkey	Seyitomer Thermal Power Plant	Electricity generation	Full	2248	MW	600	Celikler Holding (100% / Turkey)
Europe and Central Asia	Turkey	Bogazici Elektrik Dagitim A.S. (BEDAS)	Electricity distribution	Rehabilitate, operate, and transfer	1960	Number of connections (thousands)	4000	Cengiz Holding (34% / Turkey), Limak Holding (34% / Turkey), Kolin Group (34% / Turkey)

Europe and Central Asia	Turkey	Toroslar Elektrik Dagitim A.S.	Electricity distribution	Rehabilitate, operate, and transfer	1725	Number of connections (thousands)	7700	Sabanci Holding (50% / Turkey), E.ON (50% / Germany)
Europe and Central Asia	Turkey	Gediz Elektrik Dagitim A.S.	Electricity distribution	Rehabilitate, operate, and transfer	1231	Number of connections (thousands)	2400	Elsan (Turkey), Tumas (Turkey), Turcas Elektrik Uretim A.S. (Turkey)
Europe and Central Asia	Turkey	Istanbul Anatolian Side Electricity Distribution Company (AYEDAS)	Electricity distribution	Rehabilitate, operate, and transfer	1223	Number of connections (thousands)	1800	E.ON (50% / Germany), Sabanci Holding (50% / Turkey)
Europe and Central Asia	Turkey	ZETES 3 Thermal Power Plant	Electricity generation	Build, own, and operate	1050	MW	1320	Eren Holding (100% / Turkey)
Europe and Central Asia	Turkey	Kangal Thermal Power Plant	Electricity generation	Full	985	MW	457	Anadolu Birlik Holding (50% / Turkey), Siyahkalem Muhendislik Insaat San. ve Tic. Ltd. Sti. (50% / Turkey)
Europe and Central Asia	Turkey	ACWA Kirikkale Power Plant	Electricity generation	Build, own, and operate	900	MW	835	ACWA Power (70% / Saudi Arabia)
Europe and Central Asia	Turkey	GE Kirikkale Power Plant	Electricity generation	Build, own, and operate	900	MW	840	Gama Holding (52% / Turkey), General Electric (48% / United States)

Europe and Central Asia	Turkey	Hamitabat Natural Gas Combined Cycle Power Plant	Electricity generation	Full	705	MW	1156	Limak Holding (100% / Turkey)
Europe and Central Asia	Turkey	Akdeniz Distribution Grid	Electricity distribution	Full	546	Number of connections (thousands)	1.5	Limak Holding (Turkey), Cengiz Holding (Turkey), Kolin Group (Turkey)
Europe and Central Asia	Turkey	Dicle Electricity Distribution Company (Dicle EDAS)	Electricity distribution	Rehabilitate, operate, and transfer	387	Number of connections (thousands)	Not Available	Is-Kaya Insaat (100% / Turkey)
Europe and Central Asia	Bulgaria	Lukoil Gebeleisis & Hrabrovo Wind Farms	Electricity generation	Build, own, and operate	165		84	Lukoil (50% / Russian Federation), ERG Renew (50% / Italy)
Europe and Central Asia	Albania	Bistrica 1 & 2 SHPPs	Electricity generation	Full	144.6	MW	23.1	Kurum (Turkey)
Europe and Central Asia	Turkey	Aras Electricity Distribution Company	Electricity distribution	Rehabilitate, operate, and transfer	128.5	Number of connections (thousands)	815	Calik Holding (49% / Turkey), Kiler Holding (51% / Turkey)
Europe and Central Asia	Turkey	Fina Sadilli & Salman & Karadere Wind Farms	Electricity generation	Build, own, and operate	127.2	MW	68	Fina Enerji Holding (100% / Turkey)
Europe and Central Asia	Turkey	Enda Enerji Wind Farms	Electricity generation	Build, own, and operate	120	MW	68.6	Enda Enerji (100% / Turkey)

Europe and Central Asia	Turkey	Vangolu Elektrik Dagitim A.S.	Electricity distribution	Rehabilitate, operate, and transfer	118	Number of connections (thousands)	485	Turkerler Holding (100% / Turkey)
Europe and Central Asia	Romania	NuclearElectrica A.S.	Electricity generation	Partial	85	MW	1411	Others (10%)
Europe and Central Asia	Turkey	Aksa Kikikoy Wind Farm	Electricity generation	Build, lease, and transfer	24	MW	24	Aksa (100% / Turkey)
Europe and Central Asia	Turkey	Aksa Sebenoba Wind Farm Phase II	Electricity generation	Build, lease, and transfer	24	MW	24.6	Aksa (100% / Turkey)
Europe and Central Asia	Turkey	Adares Wind Farm	Electricity generation	Build, own, and operate	19.5	MW	10	Gestamp Corporation (50% / Spain)
Europe and Central Asia	Albania	Enso Hydro Lengarica HPP	Electricity generation	Build, operate, and transfer	19.4	MW	9	Enso Hydro (100% / Austria)
Europe and Central Asia	Turkey	Akfen Kavakcali SHPP	Electricity generation	Build, own, and operate	12.5	MW	8.9	Akfen Holding (100% / Turkey)
Europe and Central Asia	Turkey	Atik Wind Farm Phase II	Electricity generation	Build, lease, and transfer	12.4	MW	14	Aksa (100% / Turkey)
Europe and Central Asia	Romania	Eurowind Hulchiu/Magurele Solar Plants	Electricity generation	Build, own, and operate	10	MW	5.41	Eurowind Energy (100% / Denmark)
Latin America and the Caribbean	Chile	Alto Maipo Hydro Power Project	Electricity generation	Build, own, and operate	2000	MW	531	AES Corporation (100% / United States)

Latin America and the Caribbean	Chile	Cochrane Coal-fired power plant	Electricity generation	Build, own, and operate	1350	MW	532	AES Corporation (60% / United States), Mitsubishi (40% / Japan)
Latin America and the Caribbean	Peru	Chaglla Hydro Power Plant	Electricity generation	Build, operate, and transfer	1200	MW	406	Odebrecht SA (100% / Brazil)
Latin America and the Caribbean	Argentina	GEASSA - Gastre Wind Farm	Electricity generation	Build, own, and operate	778	MW	300	Generadora Argentina del Sur (100% / Argentina)
Latin America and the Caribbean	Brazil	Matrincha Transmissora de Energia (TP Norte)	Electricity transmission	Build, operate, and transfer	764.7	KM	1005	State Grid Corporation of China (SGCC) (51% / China)
Latin America and the Caribbean	Brazil	Geribatu Wind Park	Electricity generation	Build, own, and operate	601.5	MW	252	Rio Bravo Energia (51% / Brazil)
Latin America and the Caribbean	Chile	Ventanas IV Coal-Fired Power Plant	Electricity generation	Build, own, and operate	550	MW	270	AES Corporation (100% / United States)
Latin America and the Caribbean	Peru	Abengoa Transmision Sur S.A. â€“ ATS	Electricity transmission	Build, operate, and transfer	480	KM	872	Abengoa (100% / Spain)
Latin America and the Caribbean	Mexico	Eoliatec del Pacifico Wind Power Plant	Electricity generation	Build, own, and operate	401.1	MW	160	EDF Energies Nouvelles SA (50% / France), Mitsui (50% / Japan)
Latin America and the Caribbean	Mexico	Bii Stinu Wind Energy Project	Electricity generation	Build, own, and operate	400	MW	164	EDF Energies Nouvelles SA (50% / France), Mitsui (50% / Japan)
Latin America and the Caribbean	Brazil	Interligacao Eletrica Garanhuns	Electricity transmission	Build, operate, and transfer	398.9	KM	666	Interconexion Electrica SA (ISA) (51% / Colombia)
Latin America and the Caribbean	Brazil	CPFL Renovaveis Atlantica Wind Park	Electricity generation	Build, own, and operate	368.4	MW	120	CPFL Energia (64% / Brazil), Ersa (37% / Brazil)

Latin America and the Caribbean	Mexico	Renovalia Piedra Larga II Wind Farm	Electricity generation	Build, own, and operate	346.7	MW	138	Renovalia Energy (100% / Spain)
Latin America and the Caribbean	Brazil	Suape II Thermal Power Plant	Electricity generation	Build, own, and operate	302.6	MW	356	Savana SPE Incorporacao Ltda (80% / Brazil)
Latin America and the Caribbean	Brazil	Sao Roque Hidro Power Plant	Electricity generation	Build, operate, and transfer	297.4	MW	135	Jackson Empreendimentos Ltda (100% / Brazil)
Latin America and the Caribbean	Chile	Amanecer Solar CAP	Electricity generation	Build, own, and operate	267	MW	100	SunEdison LLC (United States)
Latin America and the Caribbean	Chile	Alto Jahuel Transmisora de Energia	Electricity transmission	Build, operate, and transfer	249	KM	258	Elecnor (100% / Spain)
Latin America and the Caribbean	Brazil	Corredor do Senandes Wind Park	Electricity generation	Build, own, and operate	245.7	MW	104.4	Odebrecht SA (100% / Brazil)
Latin America and the Caribbean	Chile	Salvador Solar Power Plant	Electricity generation	Merchant	221	MW	70	Total SA (20% / France), Etrion Corporation (70% / Canada), SunPower (10% / United States)
Latin America and the Caribbean	Brazil	Chesf-Brennand Sento Se Wind Farms	Electricity generation	Build, own, and operate	214.5	MW	90	Brennand (51% / Brazil), Chesf (49% / Brazil)
Latin America and the Caribbean	Chile	Los Cururos Wind Complex	Electricity generation	Merchant	210	MW	110	Ostwind Gruppe (50% / Germany)
Latin America and the Caribbean	Uruguay	Carape I & II Wind Power Plant	Electricity generation	Build, own, and operate	210	MW	90	Grupo San jose (Spain), Corporacion America (CASA) (Argentina), Contreras Hermanos SA (Argentina)
Latin America and the Caribbean	Brazil	Eolica Faisa Wind Farms	Electricity generation	Build, own, and operate	203.9	MW	128.1	Votorantim (60% / Brazil), Oleoplan S.A. - Oleos Vegetais Planalto (40% / Brazil)

Latin America and the Caribbean	Peru	Contour Global Cupisnique Wind Farm	Electricity generation	Build, own, and operate	198.9	MW	80	ContourGlobal (100% / United States)
Latin America and the Caribbean	Mexico	Dominica I Wind Power Plant	Electricity generation	Build, own, and operate	196	MW	100	Enel SpA (100% / Italy)
Latin America and the Caribbean	Brazil	Pernambuco III Thermal Power Plant	Electricity generation	Build, own, and operate	195.4	MW	200.8	Bolognesi Group (87% / Brazil)
Latin America and the Caribbean	Uruguay	Pintado Wind Park	Electricity generation	Build, own, and operate	187.4	MW	90	Deutsche Investitions und Entwicklungsgesellschaft (DEG) (25% / Germany)
Latin America and the Caribbean	Mexico	Sureste I-Phase II Wind Power Plant	Electricity generation	Build, own, and operate	160	MW	102	Enel SpA (100% / Italy)
Latin America and the Caribbean	Brazil	Fontes dos Ventos Wind Farm	Electricity generation	Build, own, and operate	159.3	MW	78	Enel SpA (100% / Italy)
Latin America and the Caribbean	Brazil	Santander Ceara & Rio Grande do Norte Wind Farms	Electricity generation	Build, own, and operate	152.2	MW	90	Santander Bank (100% / Spain)
Latin America and the Caribbean	Mexico	El Retiro Wind Power Plant	Electricity generation	Build, own, and operate	148	MW	70	Grupo Mexico SA (100% / Mexico)
Latin America and the Caribbean	Brazil	Areia Branca Wind Farm	Electricity generation	Build, own, and operate	147.1	MW	86.4	Voltalia (100% / France)
Latin America and the Caribbean	Peru	Eten Thermal Power Plant	Electricity generation	Build, operate, and transfer	145	MW	230	Cobra Group (Spain), Grupo Terra (Honduras)
Latin America and the Caribbean	Brazil	Integracao Maranhense Transmissora de Energia	Electricity transmission	Build, operate, and transfer	139.8	KM	365	Elecnor (51% / Spain)

Latin America and the Caribbean	Costa Rica	Orosi Wind Power Project	Electricity generation	Build, own, and operate	139.6	MW	50	Globeleq (70% / United Kingdom), Mesoamerica Energy (30% / Costa Rica)
Latin America and the Caribbean	Costa Rica	Torito Hydro Power Plant	Electricity generation	Build, operate, and transfer	135	MW	50	Union Fenosa (65% / Spain), Small local investors (35%)
Latin America and the Caribbean	Panama	Penonome Wind Farm	Electricity generation	Build, own, and operate	134.9	MW	55	Union Eolica Espanola (25% / Spain), GoldWind (75% / China)
Latin America and the Caribbean	Honduras	Vientos de Electrotecnia - San Marcos Wind Farm	Electricity generation	Build, own, and operate	130	MW	49	Grupo Terra (100% / Honduras)
Latin America and the Caribbean	Mexico	Soriana - El Porvenir Wind Farm	Electricity generation	Build, own, and operate	130	MW	54	Soriana (100% / Mexico)
Latin America and the Caribbean	Uruguay	Melo Wind Park	Electricity generation	Build, own, and operate	128.1	MW	50	Group Juwi (Germany), Ferrostaal (Germany)
Latin America and the Caribbean	Uruguay	Florida Wind Farm	Electricity generation	Build, own, and operate	128	MW	50	Akuo Energy (100% / France)
Latin America and the Caribbean	Brazil	Canaa Geracao Small Hydro Power Plants	Electricity generation	Build, operate, and transfer	127.4	MW	54	Electra Energy (99% / Brazil), Design Head Engenharia (1% / Brazil)
Latin America and the Caribbean	Brazil	Omega Delta Wind Park	Electricity generation	Build, own, and operate	121.1	MW	75.6	Omega Energia Renovavel (100% / Brazil)
Latin America and the Caribbean	Brazil	Santos Energia Wind Farm	Electricity generation	Build, own, and operate	118	MW	73.6	Santander Bank (100% / Spain)
Latin America and the Caribbean	Brazil	REB Cassino Wind Farm	Electricity generation	Build, own, and operate	117.3	MW	62	Santander Bank (100% / Spain)

Latin America and the Caribbean	Brazil	Curva dos Ventos Wind Park	Electricity generation	Build, own, and operate	115.1	MW	52.8	Enel SpA (100% / Italy)
Latin America and the Caribbean	Brazil	Linha de Transmissao Corumba	Electricity transmission	Build, operate, and transfer	108.4		295	Elecnor (100% / Spain)
Latin America and the Caribbean	Chile	Vinales Biomass Power Plant	Electricity generation	Merchant	105	MW	40	ARAUCO SA (100% / Chile)
Latin America and the Caribbean	Brazil	Atlantic Energias Renovaveis Wind Park	Electricity generation	Build, own, and operate	102	MW	60	Pattac Empreendimentos e Participacoes S.A. (25% / Brazil), Servinoga S.L. (25% / Spain), Cupa Renovables (25% / Spain), Adelanta Corporacion (25% / Spain)
Latin America and the Caribbean	Mexico	Aura Solar I Power Project	Electricity generation	Build, own, and operate	100	MW	38.6	Gauss Energia (100% / Mexico)
Latin America and the Caribbean	Uruguay	Sierra de los Caracoles Wind Park	Electricity generation	Build, own, and operate	96.1	MW	50	Abengoa (100% / Spain)
Latin America and the Caribbean	Uruguay	Akuo - Minas Wind Project	Electricity generation	Build, own, and operate	93.6	MW	42	Akuo Energy (56% / France), Toyota Tsusho Corp. (26% / Japan), Tokyo Electric Power Co (18% / Japan)
Latin America and the Caribbean	Brazil	Modelo Wind Farm	Electricity generation	Build, own, and operate	91.7	MW	52.8	Enel SpA (100% / Italy)
Latin America and the Caribbean	Brazil	Caiua Transmissora de Energia	Electricity transmission	Build, operate, and transfer	91.6	KM	136	Elecnor (51% / Spain)
Latin America and the Caribbean	Brazil	Pedro Afonso Thermal Power Plant	Electricity generation	Build, own, and operate	83.4	MW	80	Bunge (80% / Netherlands), Itochu Corporation (20% / Japan)

Latin America and the Caribbean	Chile	Negrete Wind Power Plant	Electricity generation	Merchant	70	MW	33	Mainstream Renewable Power (100% / Ireland)
Latin America and the Caribbean	Peru	Contour Global - Talara Wind Farm	Electricity generation	Build, own, and operate	70	MW	30	ContourGlobal (80% / United States)
Latin America and the Caribbean	Peru	Empresa de Generacion Electrica de Junin	Electricity generation	Build, operate, and transfer	66.7	MW	39.1	Latin America Power (LAP) (Peru), GCZ Ingenieros (Peru)
Latin America and the Caribbean	Chile	Los Hierros Hydro Power Plant	Electricity generation	Build, own, and operate	62.8	MW	23	Besalco (100% / Chile)
Latin America and the Caribbean	Peru	ACS Marcona Wind Farm	Electricity generation	Build, own, and operate	61.1	MW	32	ACS Group (Actividades de Construccion y Servicios) (100% / Spain)
Latin America and the Caribbean	Brazil	CPFL Renovaveis Campo dos Ventos II	Electricity generation	Build, own, and operate	60.8	MW	30	CPFL Energia (64% / Brazil), Ersa (37% / Brazil)
Latin America and the Caribbean	Brazil	Inxu Small Hydro Power Plant	Electricity generation	Build, operate, and transfer	56.5	MW	20.6	Bimetal Industria Metalurgica (11% / Brazil), Primus Incorporacao e Construcao (11% / Brazil), Mega Brasil Energia (78% / Brazil)
Latin America and the Caribbean	Mexico	REM - Los Altos Wind Power	Electricity generation	Build, own, and operate	54.8	MW	50	Regeneracion Electrica Mexicana SA (100% / Mexico)
Latin America and the Caribbean	Peru	Las Pizarras Small Hydro Power Plant	Electricity generation	Build, operate, and transfer	39.6	MW	18	Energie Baden Wurttemberg (Germany), Aluz Clean Energy (Peru)
Latin America and the Caribbean	Brazil	Guacu Thermal Power Plant	Electricity generation	Build, own, and operate	36.8	MW	30	Carman Participacoes e Incorporacao Ltda (100% / Brazil)

Latin America and the Caribbean	Chile	Santa Marta Biogas Power Plant	Electricity generation	Merchant	36	MW	26	Hidrosan Ingenieria SA (Chile)
Latin America and the Caribbean	Chile	Comasa Bioenergia Lautaro	Electricity generation	Merchant	34.9	MW	26	Forestal y Papelera Concepcion S.A. (100% / Chile)
Latin America and the Caribbean	Chile	Hidrobonito I&II SHPP	Electricity generation	Build, own, and operate	34	MW	12	Hidrochile (100% / Chile)
Latin America and the Caribbean	Brazil	Brasil Biofuels Thermal Power Plant	Electricity generation	Build, own, and operate	32.9	MW	16	Brasil Biofuels (100% / Brazil)
Latin America and the Caribbean	Brazil	Santo Angelo Thermal Power Plant	Electricity generation	Build, own, and operate	23.4	MW	40	Usina Santo Angelo (100% / Brazil)
Latin America and the Caribbean	Brazil	ATE VIII Transmissora de Energia	Electricity transmission	Build, operate, and transfer	20.5	KM	108	Abengoa (50% / Spain), EMBRADE - Empresa Brasileira de Desenvolvimento e Participacoes Ltda (50% / Brazil)
Latin America and the Caribbean	Peru	Pomacocha - Carhuamayo Transmission Line	Electricity transmission	Build, operate, and transfer	16.4	KM	106	Interconexion Electrica SA (ISA) (100% / Colombia)
Latin America and the Caribbean	Brazil	ERB Candeias Thermal Power Plant	Electricity generation	Build, own, and operate	16.3	MW	16.8	Rioforte Investment Holding (26% / Portugal), FIP Ambiental (27% / Brazil)
Latin America and the Caribbean	Peru	Talara - Piura Transmission Line	Electricity transmission	Build, operate, and transfer	14.6	KM	106	Interconexion Electrica SA (ISA) (60% / Colombia), Empresa de Energia de Bogota S.A. ESP (40% / Colombia)

Latin America and the Caribbean	Brazil	Caldas Novas Transmissora	Electricity transmission	Build, operate, and transfer	9.9		Not Available	Jackson Empreendimentos Ltda (25% / Brazil), Construtora Santa Rita Comercio e Instalacoes (13% / Brazil), CEL Engenharia (12% / Brazil)
Latin America and the Caribbean	Brazil	Parnaiba III and Parnaiba IV Thermal Power Plants	Electricity generation	Build, own, and operate	0	MW	212	E.ON (31% / Germany), Petra Energia (30% / Brazil), EBX Capital Partners (26% / Brazil), Small local investors (13%)
Middle East and North Africa	Jordan	Al Manakher Tri-Fuel Power Plant (IPP3)	Electricity generation	Build, own, and operate	812	MW	573	Korea Electric Power Company (KEPCO) (60% / Korea, Rep.), Mitsubishi (35% / Japan), Others (5%)
Middle East and North Africa	Jordan	Tafila Wind Farm	Electricity generation	Build, own, and operate	290	MW	117	InfraMed (50% / France), EP Global Energy (19% / Cyprus)
South Asia	India	OPGS Power Gujarat Private Limited	Electricity generation	Build, own, and operate	276.6	MW	300	OPG Energy Private Limited (100% / India)
South Asia	India	Maruti Clean Coal and Power Limited	Electricity generation	Build, own, and operate	248.5	MW	300	ACB India Limited (45% / India), Gupta Global Resources Private Limited (10% / India), Spin Packaging Limited (10% / India), Kolahai Infotech Private Limited (10% / India)
South Asia	India	Dirang Energy Private Limited - Gongri HEP	Electricity generation	Build, operate, and transfer	229.3	MW	144	Patel Engineering Ltd (74% / India)
South Asia	India	Welspun Solar Madhya Pradesh Private Limited	Electricity generation	Build, own, and operate	187.7	MW	125	Welspun Energy Limited (100% / India)
South Asia	India	ReNew Wind Energy (Jath) Private Limited	Electricity generation	Build, own, and operate	104.2	MW	74.65	Renew Power Limited (100% / India)
South Asia	India	BLP Vayu (Project1) Private Limited	Electricity generation	Build, own, and operate	90.1	MW	150	Bharat Light and Power (100% / India)

South Asia	India	NSL Wind Power Company (Satara) Private Limited	Electricity generation	Build, own, and operate	88.4	MW	75	NSL Sugars Limited (100% / India)
South Asia	India	Hetero Wind Power Limited	Electricity generation	Build, own, and operate	65.2	MW	54	Hetero Group (100% / India)
South Asia	India	ReNew Wind Energy (Vashpet) Windfarm	Electricity generation	Build, own, and operate	63.2	MW	45	Renew Power Limited (100% / India)
South Asia	India	Mahindra Suryaprakash Private Limited	Electricity generation	Build, own, and operate	59.1	MW	30	Kiran Energy Solar Power Private Limited (India), Mahindra & Mahindra (India)
South Asia	India	Kalpataru Satpura Transco Private Limited	Electricity transmission	Build, operate, and transfer	58.2	KM	246	Kalpataru Power Transmission Ltd (100% / India)
South Asia	India	ReNew Wind Energy (Shivpur) Private Limited	Electricity generation	Build, own, and operate	55.6	MW	49.5	Renew Power Limited (100% / India)
South Asia	India	Orange Jaisalmer Wind Energy Private Limited	Electricity generation	Build, own, and operate	47.5	MW	50.4	Orange Renewable Holdings Pte Limited (100% / Singapore)
South Asia	India	Solarfield Energy Two Private Limited	Electricity generation	Build, own, and operate	39.2	MW	20	Kiran Energy Solar Power Private Limited (100% / India)
South Asia	India	ACME Solar Energy (Madhya Pradesh) Private Limited	Electricity generation	Build, own, and operate	36	MW	25	EDF Energies Nouvelles SA (25% / France)
South Asia	India	Tata Power Dalot Windfarm	Electricity generation	Build, own, and operate	33.2	MW	30	Tata Enterprises (100% / India)
South Asia	India	ReNew Wind Energy (Delhi) Private Limited	Electricity generation	Build, own, and operate	29.4	MW	28	Renew Power Limited (100% / India)
South Asia	India	Orange Renewable Power Private Limited	Electricity generation	Build, own, and operate	22.2	MW	19.5	Orange Renewable Holdings Pte Limited (100% / Singapore)
South Asia	India	Essel Vidyut Vitaran (Muzzafarpur) Limited	Electricity distribution	Management contract	18	Population (thousands)	149	Essel Group (100% / India)
South Asia	India	NVR Infrastructure & Services Limited	Electricity generation	Build, own, and operate	17.6	MW	10	Atha Group (100% / India)

South Asia	India	Pokaran Solaire Energy Private Limited	Electricity generation	Build, own, and operate	8.6	MW	5	Solairedirect S.A. (100% / India)
South Asia	Bangladesh	Baraka Patenga Power Limited	Electricity generation	Build, own, and operate	40.3	MW	50	Barakatullah Electro Dynamics Limited (100% / Bangladesh)
South Asia	Pakistan	Jhimpir Power (Private) Limited	Electricity generation	Build, own, and operate	135.4	MW	49.6	Burj Capital (100% / Pakistan)
South Asia	Pakistan	Sapphire Jhampir Wind Farm	Electricity generation	Build, own, and operate	127.7	MW	50	Sapphire Group (100% / Pakistan)
Sub-Saharan Africa	Nigeria	KEPCO Egbin Power Plant	Electricity generation	Partial	407.3	MW	1320	Korea Electric Power Company (KEPCO) (100% / Korea, Rep.)
Sub-Saharan Africa	Ghana	Takoradi 2 Thermal Power Expansion	Electricity generation	Build, rehabilitate, operate, and transfer	440	MW	330	Abu Dhabi National Energy Company (TAQA) (90% / United Arab Emirates)
Sub-Saharan Africa	South Africa	Avon OCGT	Electricity generation	Build, own, and operate	654.1	MW	670	Mitsui (25% / Japan), SUEZ (38% / France), Others (10%)
Sub-Saharan Africa	South Africa	Amakhala Emoyeni Wind Farm	Electricity generation	Build, own, and operate	410.38	MW	138	Tata Enterprises (50% / India), Exxaro Resources (50% / South Africa)
Sub-Saharan Africa	South Africa	Linde Solar PV Plant	Electricity generation	Build, own, and operate	386.1	MW	40	Scatec (100% / Norway)
Sub-Saharan Africa	South Africa	Bokpoort CSP Plant	Electricity generation	Build, own, and operate	382.47	MW	50	ACWA Power (40% / Saudi Arabia), Lereko Investments (25% / South Africa), Kurisani Youth Development Trust (5% / South Africa), Others (30%)
Sub-Saharan Africa	South Africa	Dedisa OCGT	Electricity generation	Build, own, and operate	327	MW	342	Mitsui (25% / Japan), SUEZ (38% / France), Others (10%)
Sub-Saharan Africa	South Africa	Gouda Wind Farm	Electricity generation	Build, own, and operate	271.71	MW	138	Acciona (51% / Spain), Aveng Limited (29% / South Africa), Soul City Institute (10% / South Africa), Others (10%)

Sub-Saharan Africa	South Africa	Sishen Solar PV	Electricity generation	Build, own, and operate	238.8	MW	74	Acciona (51% / Spain), Aveng Limited (29% / South Africa), Soul City Institute (10% / South Africa), Others (10%)
Sub-Saharan Africa	South Africa	West Coast One Wind Farm	Electricity generation	Build, own, and operate	213.4	MW	94	SUEZ (43% / France), Investec (35% / South Africa), Others (3%), Kagiso Tiso Holdings South Africa (20% / South Africa)
Sub-Saharan Africa	Kenya	Kwale Sugar plantation	Electricity generation	Build, own, and operate	200	MW	18	Omnicane Holdings (25% / Mauritius), Pabari Family Investment Trusts (75% / Australia)
Sub-Saharan Africa	South Africa	Grassridge Wind	Electricity generation	Build, own, and operate	109.4	MW	59.8	EDF Energies Nouvelles SA (100% / France)
Sub-Saharan Africa	South Africa	Neusberg Hydro Electric Plant	Electricity generation	Build, operate, and transfer	56	MW	10	Hydro Tasmania (33% / Australia), Old Mutual (33% / South Africa), Industrial Development Corporation (33% / South Africa)
Sub-Saharan Africa	South Africa	Waainek Wind Farm	Electricity generation	Build, own, and operate	46.39	MW	24	Electricite de France (100% / France)
Sub-Saharan Africa	South Africa	Chaba Wind Farm	Electricity generation	Build, own, and operate	36.25	MW	21	Electricite de France (100% / France)

WORLD BANK GROUP
Public-Private Partnerships

PPI Global Ranking (energy) 2013		
Rank	**Country**	**US$ Million**
1	Turkey	14486.1
2	Brazil	9472.3
3	Chile	5999.7
4	South Africa	3132
5	India	3016.6
6	China	2474.22
7	Peru	2292.3
8	Mexico	1936.6
9	Indonesia	1930.7
10	Thailand	1703.4
11	Colombia	1400
12	Malaysia	1283
13	Philippines	1265
14	Jordan	1102
15	Uruguay	843.2
16	Argentina	778
17	Ghana	440
18	Nigeria	407.3
19	Côte d'Ivoire	350
20	Costa Rica	274.6
21	Pakistan	263.1
22	Iraq	250
23	Kenya	200
24	Honduras	198.8
25	Panama	195
26	Romania	189
27	Myanmar	170
28	Bulgaria	165
29	Albania	164
30	Bangladesh	40.3