ING Infrastructure, Industrials & Materials Fund Form N-Q July 21, 2010

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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM N-Q

Quarterly Schedule of Portfolio Holdings of Registered

Management Investment Company

Investment Company Act file number: 811-22051

ING Infrastructure, Industrials and Materials Fund

(Exact name of registrant as specified in charter)

7337 East Doubletree Ranch Rd., Scottsdale, AZ 85258

(Address of principal executive offices) (Zip code)

Huey P. Falgout, Jr., 7337 East Doubletree Ranch Road, Scottsdale, AZ 85258

(Name and address of agent for service)

Registrant s telephone number, including area code: 1-800-992-0180

Date of fiscal year end: February 28
Date of reporting period: May 31, 2010

Item 1. Schedule of Investments
The schedules of investments as of the close of the reporting period are set forth below for:
ING Infrastructure, Industrials and Materials Fund
The schedules are not audited.

PORTFOLIO OF INVESTMENTS as of May 31, 2010 (Unaudited)

ING Infrastructure, Industrials and Materials Fund

Shares COMMON STOCK: 96.6%			Value
		Brazil: 3.0%	
429,200		All America Latina Logistica S.A.	\$ 3,475,237
259,400		Vale S.A. ADR	7,053,086
			10,528,323
		Canada: 2.8%	
1,172,400		Bombardier, Inc Class B	5,447,583
45,000		Potash Corp. of Saskatchewan	4,463,550
			9,911,133
		China: 0.4%	
2,000,000		Harbin Power Equipment	1,449,037
			1,449,037
		Finland: 1.2%	
136,400		Outotec OYJ	4,206,942
			4,206,942
		France: 6.8%	
124,403		Alstom	5,869,580
85,000	@	Compagnie Generale de Geophysique S.A.	1,911,795
79,398		Lafarge S.A.	4,527,927
141,290		Suez Environnement S.A.	2,437,395
149,636		Veolia Environnement	3,828,038
126,479		Vinci S.A.	5,643,700
			24,218,435
		Germany: 7.8%	
84,900		BASF AG	4,467,617
141,596		E.ON AG	4,290,555
227,504		GEA Group AG	4,536,493
91,431		Siemens AG	8,226,024
223,363		ThyssenKrupp AG	6,053,000
			27,573,689
		Hong Kong: 2.9%	
105,400		China Mobile Ltd. ADR	4,908,478
454,300		China Unicom Ltd. ADR	5,510,659
			10,419,137
		Ireland: 3.4%	< 4 - 4 000
277,472		CRH PLC	6,171,008
152,200		Ingersoll-Rand PLC	5,678,582
		L 1 120	11,849,590
205 (00		Italy: 1.3%	4 615 225
305,600		Prysmian S.p.A.	4,615,335
		1 1 10	4,615,335
271 700		Japan: 1.4%	5.062.442
271,700		Komatsu Ltd.	5,062,442
		I	5,062,442
169 900		Luxembourg: 2.9% ArcelorMittal	5,118,016
168,800 62,700		Millicom International Cellular S.A.	5,011,611
02,700		Minicoln International Centual S.A.	10,129,627
		Netherlands: 1.9%	10,129,027
352,820		European Aeronautic Defence and Space Co. NV	6,890,898
332,020		European Acronaune Detence and Space Co. NV	6,890,898
		Norway: 0.7%	0,070,070
89,050		Yara International ASA	2,623,098
07,030		i ara international ASA	2,023,098

			2,623,098
		Russia: 1.3%	
238,000		Mobile Telesystems Finance SA ADR	4,576,740
			4,576,740
		South Korea: 1.6%	
57,673		Posco ADR	5,557,947
			5,557,947
		Spain: 3.0%	
1,165,922	S	Iberdrola Renovables	3,558,306
213,521		Telefonica S.A.	4,054,048
132,773	@	Telvent GIT S.A.	3,077,678
			10,690,032
		Sweden: 2.0%	
243,623		Atlas Copco AB - Class A	3,436,671
238,209		Skanska AB	3,484,015
			6,920,686
		Switzerland: 1.4%	
337,165		Xstrata PLC	4,894,812
			4,894,812
		United Kingdom: 10.1%	
245,547	@	Anglo American PLC	9,371,011
540,086	@	Cookson Group PLC	3,687,269
1,331,260		International Power PLC	5,532,279
131,100		Rio Tinto PLC	6,016,572
3,490,114		Vodafone Group PLC	6,913,256
303,974		Weir Group PLC	4,064,358
•		•	35,584,745
			, , , , , , , , , , , , , , , , , , ,

PORTFOLIO OF INVESTMENTS

ING Infrastructure, Industrials and Materials Fund

as of May 31, 2010 (Unaudited) (continued)

Shares				Value
114.700		United States: 40.7%	¢	2 200 010
114,700	@	AGCO Corp.	\$	3,299,919
77,900	@	Ansys, Inc.		3,406,567
64,500	@	Atlas Air Worldwide Holdings, Inc.		3,371,415
176,600	@	BE Aerospace, Inc.		4,789,392
380,700	@	Cal Dive International, Inc.		2,101,464
128,700	6	Caterpillar, Inc.		7,819,812
83,600	@	Cooper Industries PLC		3,926,692
111,200		Cummins, Inc.		7,559,376
98,500		Deere & Co.		5,681,480
120,000		El Du Pont de Nemours & Co.		4,340,400
145,900		Fluor Corp.		6,845,628
91,700		Gardner Denver, Inc.		4,176,018
93,600		General Dynamics Corp.		6,355,440
149,500		Honeywell International, Inc.		6,394,115
57,900		Joy Global, Inc.		2,952,900
34,500		Kaiser Aluminum Corp.		1,291,335
161,500	@	McDermott International, Inc.		3,582,070
160,200		National Oilwell Varco, Inc.		6,108,426
116,400		Peabody Energy Corp.		4,534,944
301,100	@	Quanta Services, Inc.		6,241,803
107,400	@	SBA Communications Corp.		3,547,422
130,900	_	Schlumberger Ltd.		7,350,035
75,800	@	TransDigm Group, Inc.		3,999,208
223,400		Trinity Industries, Inc.		4,881,290
146,200		UGI Corp.		3,821,668
80,800		Union Pacific Corp.		5,771,544
111,600		United Parcel Service, Inc Class B		7,004,016
76,200		United Technologies Corp.		5,134,356
184,000	@	WABCO Holdings, Inc.		5,593,600
224,900	@	Willbros Group, Inc.		2,089,321
				143,971,656
		Total Common Stock		
		(Cost \$361,755,253)		341,674,304
PREFERRED STO	CK: 1.0%			
		Brazil: 1.0%		
145,600		Usinas Siderurgicas de Minas Gerais S.A.		3,611,410
		Total Preferred Stock		
		(Cost \$3,897,316)		3,611,410
		Total Long-Term Investments		
		(Cost \$365,652,569)		345,285,714
SHORT-TERM IN	VESTMENTS: 2.4%			
		Affiliated Mutual Fund: 2.4%		
8,373,000		ING Institutional Prime Money Market Fund - Class I		8,373,000
		Total Short-Term Investments		
		(Cost \$8,373,000)		8,373,000
		Total Investments in Securities		
		(Cost \$374,025,569)*	100.0% \$	353,658,714
		Other Assets and Liabilities - Net	0.0	72,623
		Net Assets	100.0% \$	353,731,337
	@	Non-income producing security		
	ADR	American Depositary Receipt		
		X 2 2 1 K		

- S All or a portion of this security has been identified by the Fund to cover future collateral requirements for applicable futures, options, swaps, foreign currency contracts and/or when-issued or delayed-delivery securities.
- * Cost for federal income tax purposes is the same as for financial statement purposes.

Net unrealized depreciation consists of:

Gross Unrealized Appreciation \$ 12,945,817 Gross Unrealized Depreciation \$ (33,312,672) Net Unrealized Depreciation \$ (20,366,855)

ING Infrastructure, Industrials and Materials Fund

PORTFOLIO OF INVESTMENTS as of May 31, 2010 (Unaudited) (continued)

	Percentage of
Industry	Net Assets
Energy	6.8%
Industrials	51.2
Information Technology	1.8
Materials	21.4
Telecommunication Services	9.8
Utilities	6.6
Short-Term Investments	2.4
Other Assets and Liabilities - Net	0.0
Net Assets	100.0%

ING Infrastructure, Industrials and Materials Fund

PORTFOLIO OF INVESTMENTS as of May 31, 2010 (Unaudited) (continued)

Fair Value Measurements

The following is a summary of the fair valuations according to the inputs used as of May 31, 2010 in valuing the Fund s assets and liabilities:

Asset Table	Quoted Prices in Active Markets for Identical Investments (Level 1)		Significant Other Observable Inputs# (Level 2)		τ	Significant Unobservable Inputs (Level 3)		Fair Value at 5/31/2010
Investments, at value								
Common Stock								
Brazil	\$	10,528,323	\$		\$		\$	10,528,323
Canada		9,911,133						9,911,133
China				1,449,037				1,449,037
Finland				4,206,942				4,206,942
France				24,218,435				24,218,435
Germany				27,573,689				27,573,689
Hong Kong		10,419,137						10,419,137
Ireland		5,678,582		6,171,008				11,849,590
Italy				4,615,335				4,615,335
Japan				5,062,442				5,062,442
Luxembourg		10,129,627						10,129,627
Netherlands				6,890,898				6,890,898
Norway				2,623,098				2,623,098
Russia		4,576,740						4,576,740
South Korea		5,557,947						5,557,947
Spain		3,077,678		7,612,354				10,690,032
Sweden				6,920,686				6,920,686
Switzerland				4,894,812				4,894,812
United Kingdom				35,584,745				35,584,745
United States		143,971,656						143,971,656
Total Common Stock		203,850,823		137,823,481				341,674,304
Preferred Stock				3,611,410				3,611,410
Short-Term Investments		8,373,000						8,373,000
Total Investments, at value	\$	212,223,823	\$	141,434,891	\$		\$	353,658,714
Liabilities Table Other Financial Instruments+: Written options Total Liabilities	¢		¢		¢	(4,512,180) (4,512,180)	¢	(4,512,180)
Total Liabilities	\$		\$		\$	(4,512,180)	Þ	(4,512,180)

The following is a reconciliation of the fair valuations using significant unobservable inputs (Level 3) for the Fund s assets and liabilities during the period ended May 31, 2010:

Beginning	Accrued	Total	Total Unrealized	Transfers	Transfers	Ending
Balance	Discounts/	Realized	Appreciation/	Into	Out of	Balance

	2/28/2010	Purchases	Sales	(Premiums) G	ain/(Loss)	(Depr	eciation)	Level 3	Level 3	:	5/31/2010
Liabilities Table Other Financial Instruments+:												
Written options	\$ (2,267,022) \$	(4,499,231) \$	4,514,80	2 \$	\$	(907,932) 3	\$ (1,352,797)	\$	\$	\$	(4,512,180)
Total Liabilities	\$ (2,267,022) \$	(4,499,231) \$	4,514,80	2 \$	\$	(907,932)	\$ (1,352,797)	\$	\$	\$	(4,512,180)

As of May 31, 2010, total change in unrealized gain (loss) on Level 3 securities still held at period end and included in the change in net assets was \$(13,748).

+ Other Financial Instruments are derivatives not reflected in the Portfolio of Investments and may include open forward foreign currency contracts, futures, swaps, and written options. Forward foreign currency contracts and futures are reported at their unrealized gain/loss at measurement date which represents the amount due to/from the Fund. Swaps and written options are reported at their market value at measurement date.

Transfers in or out of Level 3 represents either the beginning value (for transfers in), or the ending value (for transfers out) of any security or derivative instrument where a change in the pricing level occurred from the beginning to the end of the period.

The earlier close of the foreign markets gives rise to the possibility that significant events, including broad market moves, may have occurred in the interim and may materially affect the value of those securities. To account for this, the Portfolio may frequently value many of its foreign equity securities using fair value prices based on third party vendor modeling tools to the extent available. Accordingly, a significant portion of the Portfolio s investments are categorized as Level 2 investments.

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PORTFOLIO OF INVESTMENTS as of May 31, 2010 (Unaudited) (continued)

Written OTC Call Options

# of Contracts	Counterparty	Description	Expiration Date	Strike Price/Rate	Premiums Received	Value
		Custom Basket of Equity				
239,184	JP Morgan Securities	Securities	06/18/10	100.00 EUR	1,238,750	(1,193,804)
		Custom Basket of Equity				
93,750	JP Morgan Securities	Securities	06/18/10	100.00 GBP	515,990	(848,648)
		Custom Basket of Equity				
241,380	JP Morgan Securities	Securities	06/18/10	100.00 USD	1,144,141	(1,084,739)
240	TD 16 0 11	Custom Basket of Equity	064040	100.00 7700	4 600 2 70	(4.204.000)
348,660	JP Morgan Securities	Securities	06/18/10	100.00 USD	1,600,350	(1,384,989)
					¢ 4.400.221.¢	(4.512.190)
					\$ 4,499,231 \$	(4,512,180)

ING Infrastructure, Industrials and Materials Fund

PORTFOLIO OF INVESTMENTS as of May 31, 2010 (Unaudited) (continued)

On March 19, 2008, the FASB issued Statement of Financial Accounting Standards No. 161 (SFAS No. 161), Disclosure about Derivative Instruments and Hedging Activities. This new accounting statement requires enhanced disclosures about an entity s derivative and hedging activities. Entities are required to provide enhanced disclosures about (a) how and why an entity invests in derivatives, (b) how derivatives are accounted for under SFAS No. 133, and (c) how derivatives affect an entity s financial position, financial performance, and cash flows. SFAS No. 161 also requires enhanced disclosures regarding credit-risk related contingent features of derivative instruments.

The following is a summary of the fair valuations of the Fund s derivative instruments categorized by risk exposure as of May 31, 2010:

	Derivatives Fair Value*			
Equity contracts	\$	(4,512,180)		
Total	\$	(4.512.180)		

^{*} Forward foreign currency contracts and futures are reported at their unrealized gain/loss at measurement date which represents the amount due to/from the Fund. Swaps, purchased options and written options are reported at their market value at measurement date.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

(Registrant): ING Infrastructure, Industrials and Materials Fund

By /s/ Shaun P. Mathews

Shaun P. Mathews

President and Chief Executive Officer

Date: July 21, 2010

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By /s/ Shaun P. Mathews

Shaun P. Mathews

President and Chief Executive Officer

Date: July 21, 2010

By /s/ Todd Modic

Todd Modic

Senior Vice President and Chief Financial Officer

Date: July 21, 2010