BlackRock Utility & Infrastructure Trust Form N-CSRS September 03, 2015

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM N-CSR

CERTIFIED SHAREHOLDER REPORT OF REGISTERED MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number 811-22606

Name of Fund: BlackRock Utility and Infrastructure Trust (BUI)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: John M. Perlowski, Chief Executive Officer, BlackRock Utility and

Infrastructure Trust, 55 East 52nd Street, New York, NY 10055

Registrant s telephone number, including area code: (800) 882-0052, Option 4

Date of fiscal year end: 12/31/2015

Date of reporting period: 06/30/2015

Item 1 Report to Stockholders

JUNE 30, 2015

SEMI-ANNUAL REPORT (UNAUDITED)

BLACK ROCK®

BlackRock Energy and Resources Trust (BGR)

BlackRock Enhanced Capital and Income Fund, Inc. (CII)

BlackRock Enhanced Equity Dividend Trust (BDJ)

BlackRock Global Opportunities Equity Trust (BOE)

BlackRock Health Sciences Trust (BME)

BlackRock International Growth and Income Trust (BGY)

BlackRock Resources & Commodities Strategy Trust (BCX)

BlackRock Science and Technology Trust (BST)

 $BlackRock\ Utility\ and\ Infrastructure\ Trust\ (BUI)$

Not FDIC Insured; May Lose Value; No Bank Guarantee

Section 19(a) Notices

BlackRock Energy and Resources Trust s (BGR), BlackRock Enhanced Capital and Income Fund, Inc. s (CII), BlackRock Enhanced Equity Dividend Trust s (BDJ), BlackRock Global Opportunities Equity Trust s (BOE), BlackRock Health Sciences Trust s (BME), BlackRock International Growth and Income Trust s (BGY), BlackRock Resources & Commodities Strategy Trust s (BCX), BlackRock Science and Technology Trust s (BST) and BlackRock Utility and Infrastructure Trust s (BUI) (each, a Trust and collectively, the Trusts), amounts and sources of distributions reported are estimates and are being provided to you pursuant to regulatory requirements and are not being provided for tax reporting purposes. The actual amounts and sources for tax reporting purposes will depend upon each Trust s investment experience during the remainder of the fiscal year and may be subject to changes based on regulations. Each Trust will provide a Form 1099-DIV each calendar year that will tell you how to report these distributions for federal income tax purposes.

June 30, 2015

Total Cumulative Distributions for the Fiscal Period

% Breakdown of the Total Cumulative Distributions for the Fiscal Period

Return

	Net	Net Realized	Net Realized	of	T (1 P)		Net RealizedN			T () D
	Investment	Capital Gains		~			Stapital GairGa	•		Total Per
	Income	Short-Term	Long-Term	Capital	Common Share	Income	Short-Term I	ong-Term	Capital C	Common Share
BGR*	\$ 0.158918			\$ 0.651082	\$ 0.810000	20%	0%	0%	80%	100%
CII	\$ 0.058368	\$ 0.464517	\$ 0.077115		\$ 0.600000	10%	77%	13%	0%	100%
BDJ*	\$ 0.078264			\$ 0.201936	\$ 0.280200	28%	0%	0%	72%	100%
BOE*	\$ 0.077624			\$ 0.504376	\$ 0.582000	13%	0%	0%	87%	100%
BME		\$ 0.881781	\$ 0.108219		\$ 0.990000	0%	89%	11%	0%	100%
BGY*	\$ 0.062609			\$ 0.231391	\$ 0.294000	21%	0%	0%	79%	100%
BCX*	\$ 0.157890			\$ 0.258310	\$ 0.416200	38%	0%	0%	62%	100%
BST*				\$ 0.600000	\$ 0.600000	0%	0%	0%	100%	100%
BUI*	\$ 0.226858	\$ 0.100951	\$ 0.278990	\$ 0.119201	\$ 0.726000	31%	14%	38%	16%	100%

^{*} Certain Trusts estimate that they have distributed more than the amount of earned income and net realized gains; therefore, a portion of the distribution may be a return of capital. A return of capital may occur, for example, when some or all of the shareholder s investment in a Trust is returned to the shareholder. A return of capital does not necessarily reflect a Trust s investment performance and should not be confused with yield or income. When distributions exceed total return performance, the difference will reduce the Trust s net asset value per share.

Section 19(a) notices for the Trusts, as applicable, are available on the BlackRock website http://www.blackrock.com.

Section 19(b) Disclosure

The Trusts, acting pursuant to a U.S. Securities and Exchange Commission (SEC) exemptive order and with the approval of each Trust s Board of Trustees/Directors (the Board), each have adopted a plan, consistent with its investment objectives and policies to support a level distribution of income, capital gains and/or return of capital (the Plan). In accordance with the Plans, the Trusts distributed the following fixed amounts per share on a monthly basis as of June 30, 2015:

Exchange Symbol	Amount Per Common Share
BGR	\$0.1350
CII	\$0.1000
BDJ	\$0.0467
BOE	\$0.0970
BME	\$0.1650
BGY	\$0.0490
BCX	\$0.0655

BST \$0.1000 BUI \$0.1210

The fixed amounts distributed per share are subject to change at the discretion of each Trust so Board. Under its Plan, each Trust will distribute all available investment income to its shareholders, consistent with its primary investment objectives and as required by the Internal Revenue Code of 1986, as amended (the Code). If sufficient investment income is not available on a monthly basis, the Trusts will distribute long-term capital gains and/or return of capital to shareholders in order to maintain a level distribution. Each monthly distribution to shareholders is expected to be at the fixed amount established by the Board, except for extraordinary distributions and potential distribution rate increases or decreases to enable the Trusts to comply with the distribution requirements imposed by the Code.

Shareholders should not draw any conclusions about each Trust s investment performance from the amount of these distributions or from the terms of the Trust s Plan. Each Trust s total return performance on net asset value is presented in its financial highlights table.

The Board may amend, suspend or terminate a Trust s Plan at any time without prior notice to the Trust s shareholders if it deems such actions to be in the best interests of the Trust or its shareholders. The suspension or termination of the Plan could have the effect of creating a trading discount (if the Trust s stock is trading at or above net asset value) or widening an existing trading discount. The Trusts are subject to risks that could have an adverse impact on their ability to maintain level distributions. Examples of potential risks include, but are not limited to, economic downturns impacting the markets, decreased market volatility, companies suspending or decreasing corporate dividend distributions and changes in the Code. Please refer to each Trust s prospectus for a more complete description of its risks.

2 SEMI-ANNUAL REPORT JUNE 30, 2015

Table of Contents

		Page
Section 19(a) Notices		2
Section 19(b) Disclosure		2
The Markets in Review		4
Semi-Annual Report:		
The Benefits and Risks of Option Over-Writing		5
Trust Summaries		6
Derivative Financial Instruments		24
Financial Statements:		
Schedules of Investments		25
Statements of Assets and Liabilities		87
Statements of Operations		89
Statements of Changes in Net Assets		91
Statements of Cash Flows		96
Financial Highlights		99
Notes to Financial Statements		108
Disclosure of Investment Advisory Agreement and Sub-Advisory Agreement		128
Officers and Trustees		134
Additional Information		135
SEMI-ANNUAL REPORT	JUNE 30, 2015	3

The Markets in Review

Dear Shareholder,

During the 12-month period ended June 30, 2015, market volatility increased from the remarkably low levels seen in recent years, although it remained below the historical average. In the middle of 2014, geopolitical tensions intensified in Ukraine and the Middle East and oil prices became highly volatile, stoking worries about economic growth outside the United States. The U.S. economy, however, was showing improvement, which made investors concerned that the U.S. Federal Reserve (the Fed) would raise short-term rates sooner than previously anticipated. The U.S. dollar appreciated and global credit markets tightened, ultimately putting a strain on investor flows.

In the fourth quarter, U.S. growth picked up considerably while the broader global economy showed more signs of slowing. This, combined with rising global risks, drove investors to the relative stability of U.S. assets. International markets continued to struggle even as the European Central Bank (ECB) and the Bank of Japan eased monetary policy. Oil prices plummeted due to a global supply-and-demand imbalance, sparking a selloff in energy-related assets and putting stress on emerging markets. Fixed income investors piled into U.S. Treasuries despite their persistently low yields, which had become attractive as compared to the even lower yields on international sovereign debt.

Equity markets reversed in early 2015, with international markets outperforming the United States as global risks abated. Investors had held high expectations for the U.S. economy, but a harsh winter and west coast port strike brought disappointing first-quarter data and high valuations took their toll on U.S. stocks, while bond yields fell to extreme lows. (Bond prices rise as yields fall.) In contrast, economic reports in Europe and Asia easily beat investors—very low expectations, and accommodative policies from central banks in those regions helped international equities rebound. Oil prices stabilized, providing some relief for emerging market stocks, although a stronger U.S. dollar continued to be a headwind for the asset class.

U.S. economic data regained momentum in the second quarter, helping U.S. stocks resume an upward path. However, meaningful strength in the labor market underscored the likelihood that the Fed would raise short-term rates before the end of 2015 and bond yields moved swiftly higher. The period ended on a downbeat, but temporary, note as Greece s long-brewing debt troubles came to an impasse. As the drama unfolded around the tumultuous negotiations between Greece and its creditors, investors feared the possibility of Greece leaving the euro zone and the impact such an event might have on global markets. Most asset classes broadly sold off, especially in Europe, even while macroeconomic and company fundamentals continued to improve.

At BlackRock, we believe investors need to think globally, extend their scope across a broad array of asset classes and be prepared to move freely as market conditions change over time. We encourage you to talk with your financial advisor and visit **blackrock.com** for further insight about investing in today s markets.

Sincerely,

Rob Kapito

President, BlackRock Advisors, LLC

Rob Kapito

President, BlackRock Advisors, LLC

Total Returns as of June 30, 2015

	6-month	12-month
U.S. large cap equities	1.23%	7.42%
(S&P 500 [®] Index)		
U.S. small cap equities	4.75	6.49
(Russell 2000® Index)		
International equities	5.52	(4.22)
(MSCI Europe, Australasia,		

Far East Index) Emerging market equities (MSCI Emerging	2.95	(5.12)
Markets Index)	0.01	0.02
3-month Treasury bill (BofA Merrill Lynch	0.01	0.02
3-Month Treasury Bill Index)		
U.S. Treasury securities	(0.51)	3.79
(BofA Merrill Lynch 10-Year U.S.		
Treasury Index)		
U.S. investment grade bonds (Barclays	(0.10)	1.86
U.S. Aggregate		
Bond Index)		
Tax-exempt municipal bonds (S&P	0.01	3.00
Municipal Bond Index)		
U.S. high yield bonds	2.53	(0.39)
(Barclays U.S.		
Corporate High Yield 2%		
Issuer Capped Index)		

Past performance is no guarantee of future results. Index performance is shown for illustrative purposes only. You cannot invest directly in an index.

THIS PAGE NOT PART OF YOUR TRUST REPORT

The Benefits and Risks of Option Over-Writing

In general, the goal of each of the Trusts is to provide total return through a combination of current income and realized and unrealized gains (capital appreciation). The Trusts seek to pursue this goal primarily by investing in a portfolio of equity securities and utilizing an option over-writing strategy in an effort to enhance the Trusts distribution rate and total return performance. However, these objectives cannot be achieved in all market conditions.

The Trusts primarily write single stock covered call options, and may also from time to time write single stock put options. When writing (selling) a covered call option, the Trust holds an underlying equity security and enters into an option transaction which allows the counterparty to purchase the equity security at an agreed-upon price (strike price) within an agreed-upon time period. The Trusts receive cash premiums from the counterparties upon writing (selling) the option, which along with net investment income and net realized gains, if any, are generally available to support current or future distributions paid by the Trusts. During the option term, the counterparty may elect to exercise the option if the market value of the equity security rises above the strike price, and the Trust is obligated to sell the equity security to the counterparty at the strike price, realizing a gain or loss. Premiums received increase gains or reduce losses realized on the sale of the equity security. If the option remains unexercised upon its expiration, the Trusts realize gains equal to the premiums received. Alternatively, an option may be closed out by an offsetting purchase or sale of an option prior to expiration. The Trust realizes a capital gain from a closing purchase or sale transaction if the premium paid is less than the premium received from writing the option. The Trust realizes a capital loss from a closing purchase or sale transaction if the premium received is less than the premium paid to purchase the option.

Writing covered call options entails certain risks, which include, but are not limited to, the following: an increase in the value of the underlying equity security above the strike price can result in the exercise of a written option (sale by the Trust to the counterparty) when the Trust might not otherwise have sold the security; exercise of the option by the counterparty may result in a sale below the current market value and a gain or loss being realized by the Trust; and limiting the potential appreciation that could be realized on the underlying equity security to the extent of the strike price of the option. As such, an option over-writing strategy may outperform the general equity market in flat or falling markets but underperform in rising markets.

Each Trust employs a plan to support a level distribution of income, capital gains and/or return of capital. The goal of the plan is to provide shareholders with consistent and predictable cash flows by setting distribution rates based on expected long-term returns of the Trusts. Such distributions, under certain circumstances, may exceed a Trust s total return performance. When total distributions exceed total return performance for the period, the difference reduces the Trust s total assets and net asset value per share (NAV) and, therefore, could have the effect of increasing the Trust s expense ratio and reducing the amount of assets the Trust has available for long term investment. In order to make these distributions, a Trust may have to sell portfolio securities at less than opportune times.

The final tax characterization of distributions is determined after the fiscal year and is reported in the Trust s annual report to shareholders. Distributions can be characterized as ordinary income, capital gains and/or return of capital. The Trust s taxable net investment income or net realized capital gains (taxable income) may not be sufficient to support the level of distributions paid. To the extent that distributions exceed the Trust s current and accumulated earnings and profits, the excess may be treated as a non-taxable return of capital. Distributions that exceed a Trust s taxable income but do not exceed the Trust s current and accumulated earnings and profits, may be classified as ordinary income which are taxable to shareholders. Such distributions are reported as distributions in excess of net investment income.

A return of capital distribution does not necessarily reflect a Trust s investment performance and should not be confused with yield or income. A return of capital is a return of a portion of an investor s original investment. A return of capital is not taxable, but it reduces a shareholder s tax basis in his or her shares, thus reducing any loss or increasing any gain on a subsequent disposition by the shareholder of his or her shares. It is possible that a substantial portion of the distributions paid during a calendar year may ultimately be classified as return of capital or as distributions in excess of net investment income for income tax purposes when the final determination of the source and character of the distributions is made.

To illustrate these concepts, assume the following: (1) a common stock purchased at and currently trading at \$37.15 per share; (2) a three-month call option is written by a Trust with a strike price of \$40 (i.e., 7.7% higher than the current market price); and (3) the Trust receives \$2.45, or 6.6% of the common stock s value, as a premium. If the stock price remains unchanged, the option expires and there would be a 6.6% return for the three-month period. If the stock were to decline in price by 6.6% (i.e., decline to \$34.70 per share), the option strategy would break-even from an economic perspective resulting in neither a gain nor a loss. If the stock were to climb to a price of \$40 or above, the option would be exercised and the stock would return 7.7% coupled with the option premium received of 6.6% for a total return of 14.3%. Under this scenario, the Trust loses the benefit of any appreciation of the stock above \$40, and thus is limited to a 14.3% total return. The premium from writing the call option serves to offset some of the unrealized loss on the stock in the event that the price of the stock declines, but if the stock were to decline more than 6.6% under this scenario, the Trust s downside protection is eliminated and the stock could eventually become worthless.

Each Trust intends to write covered call options to varying degrees depending upon market conditions. Please refer to each Trust s Schedule of Investments and the Notes to Financial Statements for details of written options.

SEMI-ANNUAL REPORT JUNE 30, 2015

5

Trust Summary as of June 30, 2015

BlackRock Energy and Resources Trust

TrustOverview

BlackRock Energy and Resources Trust s (BGR) (the Trust) investment objective is to provide total return through a combination of current income, current gains and long-term capital appreciation. The Trust seeks to achieve its investment objective by investing, under normal market conditions, at least 80% of its total assets in equity securities of energy and natural resources companies and equity derivatives with exposure to the energy and natural resources industry. The Trust may invest directly in such securities or synthetically through the use of derivatives. The Trust seeks to pursue this goal primarily by investing in a portfolio of equity securities and utilizing an option over-writing strategy in an effort to seek total return performance and enhance distributions.

No assurance can be given that the Trust s investment objective will be achieved.

Trust Information

Symbol on NYSE
Initial Offering Date
Current Distribution Rate on Closing Market Price as of June 30, 2015 (\$17.97)\frac{1}{2}
Current Monthly Distribution per Common Share\frac{2}{2}
Current Annualized Distribution per Common Share\frac{2}{2}

\$0.135

- 1 Current distribution rate on closing market price is calculated by dividing the current annualized distribution per share by the closing market price. The current distribution rate consists of income, net realized gains and/or a return of capital. See Section 19(a) Notices on page 2 for the estimated sources and character of distributions. Past performance does not guarantee future results.
- The monthly distribution rate per Common Share, declared on August 3, 2015, has decreased to \$0.11 per share. The current distribution rate on closing price, current monthly distribution per Common Shares and current annualized distribution per Common Share do not reflect this new distribution rate. The distribution rate is not constant and is subject to change in the future. A portion of the distribution may be deemed a return of capital or net realized gain.

Performance and Portfolio Management Commentary

Returns for the six months ended June 30, 2015 were as follows:

	Keturns	Returns Based On		
	Market Price	Net Asset Value ³		
BGR ¹	(6.19)%	(5.95)%		
Lipper Natural Resources Funds ²	(7.29)%	(5.37)%		

- ¹ All returns reflect reinvestment of dividends and/or distributions.
- 2 Average return.
- The Trust s discount to NAV, which widened during the period, accounts for the difference between performance based on price and performance based on NAV.

The following discussion relates to the Trust s absolute performance based on NAV:

What factors influenced performance?

The Trust s position in the U.S.-based refiner Phillips 66 was the largest contributor to absolute performance. U.S. refiners generally performed well due to the combination of continued oversupply in the oil market and strong demand for refined petroleum products. The Trust s holding in BG Group PLC was another notable contributor, as the stock was bid for by fellow integrated company Royal Dutch Shell PLC. The U.K.-listed exploration and production (E&P) company Cairn Energy PLC also made a robust contribution to performance. The company issued a positive update that contained further details regarding its recent discoveries in Senegal and future exploration plans in the region.

The price of oil recovered during the period, and while near-term oil futures con- tracts rallied strongly, longer-dated contracts weakened. Since energy stocks are typically priced on expectations of future profits, the sector significantly underperformed spot (near-term) oil prices. Concerns that Greek debt

re-negotiations and China s stock market pullbacks could have an adverse impact on global growth also weighed on market sentiment regarding energy companies. The Trust s holdings in some of the large, integrated energy companies detracted from absolute performance, with positions in Exxon Mobil Corp. and Chevron Corp. among the largest individual detractors.

The Trust made use of options, principally written call options on individual stocks, in order to seek enhanced income returns while continuing to participate in the performance of the underlying equities. The Trust s option writing strategy had a positive impact on performance during the period.

Describe recent portfolio activity.

During the first calendar quarter of 2015, the Trust s investment advisor gradually began to increase the portfolio s sensitivity to oil prices. The rationale for this move was the increasing evidence that lower oil prices had forced energy companies to change their behavior in ways that should lead to a more favorable balance of supply and demand over time. The Trust achieved this shift by adding to positions in E&P companies and reducing exposure to lower-beta, more defensive integrated oil & gas companies. The investment advisor subsequently maintained its oil-price sensitivity at a constant level as it awaited further clarity on variables such as U.S. production, geopolitical unrest and the outcome of the Iran talks.

Describe portfolio positioning at period end.

As of period end, the Trust held its largest allocations in the E&P and integrated oil & gas sub-industries, with smaller allocations to oil services, distribution, and refining & marketing stocks. The Trust continued to emphasize companies with strong balance sheets, high-quality assets and low costs of production.

The views expressed reflect the opinions of BlackRock as of the date of this report and are subject to change based on changes in market, economic or other conditions. These views are not intended to be a forecast of future events and are no guarantee of future results.

6 SEMI-ANNUAL REPORT JUNE 30, 2015

BlackRock Energy and Resources Trust