Registration No. 333-

### SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## FORM S-3

REGISTRATION STATEMENT Under THE SECURITIES ACT OF 1933

### SL GREEN REALTY CORP.

(Exact name of registrant as specified in its charter)

#### Maryland

(State or other jurisdiction of incorporation or organization)

13-3956775 (I.R.S. Employer Identification Number)

420 Lexington Avenue New York, NY 10170 (212) 594-2700

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Marc Holliday
Chief Executive Officer and President
SL Green Realty Corp.
420 Lexington Avenue
New York, NY 10170
(212) 594-2700

(Name, address, including zip code, and telephone number, including area code, of agent for service)

with copies to:

Andrew S. Levine, Esq.
Executive Vice President, Secretary, and General Counsel
SL Green Realty Corp.
420 Lexington Avenue
New York, NY 10170
(212) 594-2700

Robert E. King, Jr., Esq. Larry P. Medvinsky, Esq. Clifford Chance US LLP 200 Park Avenue New York, NY 10166 (212) 878-8000

**Approximate date of commencement of proposed sale to the public:** From time to time or at one time after the effective date of the Registration Statement as determined by market conditions.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. o

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. o

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of earlier effective registration statement for the same offering. 

333-68493

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If delivery of the prospectus is expected to be made pursuant to Rule 434 under the Securities Act, please check the following box. o

CALCULATION OF REGISTRATION FEE

Title of Securities Proposed Maximum Amount of Registration Being Registered Aggregate Fee

		Offering Price(1)	
Common Stock,	, \$0.01 par value	\$18,700,000.00	\$1,512.83
(1) Estimate	ed solely for the purpose of computing the registration fee	e in accordance with Rule 457(o) under the Securities A	Act.
The Registramended (File N	rant hereby incorporates by reference into this Registration No. 333-68493), filed with the Securities and Exchange C mission, including each of the documents filed by the Regreference therein.	on Statement on Form S-3 in its entirety the Registratic Commission, and declared effective on or about January	y 28, 2000, by the Securities and
	INFORMATION NO	PART II. OT REQUIRED IN PROSPECTUS	
Item 16. Exhibit	ts		
	s filed with or incorporated by reference in Registration S tion Statement, except the following which are filed herev		e into, and shall be deemed a part
Exhibit Number		Description	
5.1	Opinion of Clifford Chance US LLP, with respect to	o the legality of the shares being registered.	
23.1	Consent of Ernst & Young LLP.		
23.2	Consent of Clifford Chance US LLP (included in its	s opinion filed as Exhibit 5.1 hereto).	
		2	
		OLON ATTAINING	
meets all of the	o the requirements of the Securities Act of 1933, as amen- requirements for filing on Form S-3 pursuant to Rule 462 ereunto duly authorized, in the City of New York, State o	2(b) and has duly caused this registration statement to b	
	SLC	GREEN REALTY CORP.	
	By:	/s/ THOMAS E. WIRTH	
		Name: Thomas E. Wirth Title: Executive Vice President and Chief Fin	nancial Officer
Pursuant to dates indicated.	o the requirements of the Securities Act of 1933, this Reg	istration Statement has been signed by the following po	ersons in the capacities and on the
	Name	Title	Date

/s/ STEPHEN L. GREEN		
73/ 0121121121	- Chairman of the Board of Directors and Executive	January 12, 2004
Stephen L. Green	Officer	, ,
/s/ MARC HOLLIDAY	Chief Executive Officer, President and Director (principal executive officer)	January 12, 2004
Marc Holliday	(principal executive officer)	
/s/ MICHAEL W. REID	Chief Operating Officer	January 12, 2004
Michael W. Reid	-	

/s/ THOMAS E. WIRTH	Executive Vice President and Chief Financial Officer (principal financial officer and principal accounting	January 12, 2004
Thomas E. Wirth	officer)	
/s/ JOHN H. ALSCHULER, JR.	Director	January 12, 2004
John H. Alschuler, Jr.		
/s/ EDWIN THOMAS BURTON, III	Director	January 12, 2004
Edwin Thomas Burton, III		
/s/ JOHN S. LEVY	Director	January 12, 2004
John S. Levy		
	3	

Exhibit Number	Description
5.1	Opinion of Clifford Chance US LLP, with respect to the legality of the shares being registered.
23.1	Consent of Ernst & Young LLP.
23.2	Consent of Clifford Chance US LLP (included in its opinion filed as Exhibit 5.1 hereto).

# QuickLinks

<u>CALCULATION OF REGISTRATION FEE</u>
<u>PART II. INFORMATION NOT REQUIRED IN PROSPECTUS</u>
<u>SIGNATURES</u>

January 12, 2004

SL Green Realty Corp. 420 Lexington Avenue New York, NY 10170

Re: <u>SL Green Realty Corp. Registration Statement on Form S-3</u>

Ladies and Gentlemen:

We have acted as counsel to SL Green Realty Corp., a Maryland corporation (the "Company"), and SL Green Operating Partnership, L.P., a Delaware limited partnership (the "Operating Partnership"), in connection with the preparation and filing with the Securities and Exchange Commission pursuant to Rule 462(b) promulgated under the Securities Act of 1933, as amended (the "Securities Act"), of the Company's Registration Statement on Form S-3 (the "Registration Statement"), relating to the registration of \$18,700,000 in aggregate amount of shares of common stock (the "Securities") of the Company. The Securities may be offered by the Company from time to time at prices and on terms to be set forth in one or more prospectus supplements to the prospectus contained in the Registration Statement.

In rendering the opinions expressed below, we have examined originals or copies, certified or otherwise identified to our satisfaction, of the Company's Registration Statement (No. 333-68493) on Form S-3 as amended by Pre-Effective Amendment No. 1, dated June 15, 1999, Pre-Effective Amendment No. 2, dated September 28, 1999, Pre-Effective Amendment No. 3, dated September 28, 1999 and Pre-Effective Amendment No. 4 dated January 12, 2000 (the Registration Statement, as amended at the time it became effective, being referred to herein as the "Shelf Registration Statement"), and the related prospectus included in the Shelf Registration Statement (the "Prospectus") in the form in which it was first filed by the Company with the Securities and Exchange Commission (the "Commission") pursuant to Rule 424(b) under the Securities Act, and the rules and regulations promulgated thereunder. We have also examined originals or copies, certified or otherwise identified to our satisfaction, of such other documents, corporate, trust, and partnership records, certificates and letters of public officials and other instruments as we have deemed necessary or appropriate for the purposes of rendering the opinions set forth below. In examining all such documents, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of all documents submitted to us, and the conformity with the respective originals of all documents submitted to us as certified, telecopied, photostatic or reproduced copies. As to facts upon which this opinion is based, we have relied, as to all matters of fact, upon certificates and written statements of officers, directors, partners and employees of, and accountants for, the Company. We have further assumed that:

- (a) There will be no changes in applicable law between the date of this opinion and any date of issuance or delivery of the Securities to be issued;
- (b) At the time of delivery of the Securities to be issued, all contemplated additional actions shall have been taken and the authorization of the issuance of the Securities to be issued will not have been modified or rescinded;
- (c) The issuance, execution and delivery of the Securities to be issued will not violate any then applicable law or result in a default under, breach of, or violation of any provision of any instrument or agreement then binding on the Company, or any restriction imposed by any court or governmental body having jurisdiction over the Company;
- (d) The consideration received or proposed to be received in connection with the offer and sale of any offering of Securities as contemplated by each of the Registration Statement, the Prospectus, and any applicable supplement or supplements to the Prospectus (each, a "Prospectus Supplement") is not less than the par value per share; and
- (e) The aggregate number of Securities that would be outstanding after the issuance of any Securities, together with the number of Securities previously issued and outstanding and the number of Securities previously reserved for issuance upon the conversion or exchange of other securities issued by the Company, does not exceed the number of then-authorized Securities.

Based on, and subject to, the foregoing, the qualifications and assumptions set forth herein and such examination of law as we have deemed necessary, we are of the opinion that when and if (i) the definitive terms of any offering of any Securities have been duly established, in accordance with resolutions of the Board of Directors of the Company authorizing the issuance and sale of the Securities, and (ii) those Securities so offered have been duly issued or delivered in the manner and for the consideration contemplated by each of the Registration Statement, the Prospectus, and the applicable Prospectus Supplement, those Securities will be validly issued, fully paid, and nonassessable.

The opinions expressed herein are limited to the federal laws of the United States, the laws of the State of New York and the Maryland General Corporation Law, and we express no opinion as to the effect of the laws of any other jurisdiction.

We consent to the filing of this letter as an exhibit to the Registration Statement and to the reference to us under the caption "Legal Matters" in the Shelf Registration Statement. In giving this consent, we do not concede that we are within the category of persons whose consent is required under the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ Clifford Chance US LLP

### **Consent of Independent Auditors**

We consent to the reference to our firm under the caption "Experts" in the Registration Statement Form S-3 of SL Green Realty Corp. (the "Company") for the registration of an aggregate maximum offering price of \$18,700,000 of common stock and to the incorporation by reference therein of our reports (a) dated January 28, 2003 (except Note 23, as to which the date is February 13, 2003) with respect to the consolidated financial statements and schedule of the Company included in its Annual Report on Form 10-K for the three years ended December 31, 2002 (b) dated January 28, 2003 (except Note 23, as to which the date is December 2, 2003) with respect to the consolidated financial statements and schedule of the Company included in its Form 8-K dated December 3, 2003 for the three years ended December 31, 2002 (c) dated November 20, 2002, with respect to the statement of revenues and certain expenses for the 220 East 42<sup>nd</sup> Street property for the year ended December 31, 2001, included in its Form 8-K dated February 21, 2003, (d) dated February 4, 2003 (except Note 1, as to which the date is December 29, 2003), with respect to the statement of revenues and certain expenses of Rock-McGraw Inc. for the for the year ended December 31, 2002, included in its Form 8-K/A dated December 29, 2003, all filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

New York, New York January 12, 2004

QuickLinks

Consent of Independent Auditors