PENGROWTH ENERGY Corp Form 6-K March 29, 2012

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 6-K

Report of Foreign Private Issuer

Pursuant to Rule 13a-16 or 15d-16 of the

Securities Exchange Act of 1934

March 29, 2012

Commission File Number: 1-31253

PENGROWTH ENERGY CORPORATION

2100, 222 3 Avenue S.W.

Calgary, Alberta T2P 0B4 Canada

(address of principal executive offices)

Indicate by check mark whether the	:	:11 £:1		20 E E 40 E
indicate by check mark whether the	e regisirani illes oi	· will the annual re	eporis under cover For	m ZU-E OF FORM 4U-E.

Form 20-F " Form 40-F x

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Security Exchange Act of 1934.

Yes " No x

If Yes is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b):

DOCUMENTS FILED AS PART OF THIS FORM 6-K

See the Exhibit Index to this Form 6-K.

SIGNATURES

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

PENGROWTH ENERGY CORPORATION

March 29, 2012 By: /s/ Andrew D. Grasby

Name: Andrew D. Grasby

Title: Sr. Vice President, General Counsel and

Corporate Secretary

FORM 6-K EXHIBIT INDEX

Exhibit No.

99.1 Pengrowth Energy Corporation 2011 Annual Report.