

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

SCHEDULE 13D

(Rule 13d-101)

**INFORMATION TO BE INCLUDED IN STATEMENTS FILED
PURSUANT TO RULE 13d-1(a) AND AMENDMENTS
THERE TO FILED PURSUANT TO RULE 13d-2(a)**

**Under the Securities Exchange Act of 1934
(Amendment No.)***

GEVO, INC.

(Name of Issuer)

Common Stock, par value \$0.01 per share
(Title of Class of Securities)

374396109
(CUSIP Number)

**Kathleen Dohmlo, Esq.
LANXESS Corporation
111 RIDC Park West Drive
Pittsburgh, PA 15275-1112
(412) 809-1518**

(Name, Address and Telephone Number of Person Authorized to
Receive Notices and Communications)

February 14, 2011
(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is subject of this Schedule 13D, and is filing this statement because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No.

1	NAME OF REPORTING PERSON: LANXESS Corporation
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF GROUP (SEE INSTRUCTIONS): (a) <input type="radio"/> (b) <input type="radio"/>
3	SEC USE ONLY:
4	SOURCE OF FUNDS: WC
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input type="radio"/>
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	7 SOLE VOTING POWER: 2,244,445
	8 SHARED VOTING POWER: 0
	9 SOLE DISPOSITIVE POWER: 2,244,445
	10 SHARED DISPOSITIVE POWER: 0
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 2,244,445
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): <input type="radio"/>
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 9.1%
14	TYPE OF REPORTING PERSON: CO

CUSIP No. 374396109

1	NAME OF REPORTING PERSON: LANXESS AG	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF GROUP (SEE INSTRUCTIONS): (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY:	
4	SOURCE OF FUNDS: WC	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Federal Republic of Germany	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	7	SOLE VOTING POWER: 2,244,445
	8	SHARED VOTING POWER: 0
	9	SOLE DISPOSITIVE POWER: 2,244,445
	10	SHARED DISPOSITIVE POWER: 0
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 2,244,445	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 9.1%	
14	TYPE OF REPORTING PERSON CO	

Item 1. Security and Issuer

The class of securities to which this Schedule 13D relates is the common stock, par value \$0.01 per share (the “Shares”) of Gevo, Inc., a Delaware corporation (the “Issuer”). The Issuer is a renewable chemicals and advanced biofuels company. The principal executive offices of the Issuer are located at 345 Inverness Drive South, Building C, Suite 310, Englewood, CO 80112.

Item 2. Identity and Background

(a) This statement is filed by:

- (i) LANXESS Corporation, a Delaware corporation, and
- (ii) LANXESS AG, a corporation formed under the laws of the Federal Republic of Germany.

Each of the foregoing is referred to as a “Reporting Person” and together as the “Reporting Persons.” The Reporting Persons are parties to that certain Joint Filing Agreement, as further described in Item 6. Accordingly, the Reporting Persons are hereby filing a joint Schedule 13D.

(b) The address of the principal office of LANXESS Corporation is 111 RIDC Park West Drive, Pittsburgh, PA 15275-1112.

The address of LANXESS AG is Kaiser-Wilhelm Allee 40, 51369 Leverkusen, Germany.

The officers and directors of LANXESS Corporation and their principal occupations and business addresses are set forth on Schedule B and incorporated by reference in this Item 2.

The Board of Management and the Supervisory Board of LANXESS AG and their principal occupations and business addresses are set forth on Schedule B and incorporated by reference in this Item 2.

(c) The principal business of each of LANXESS Corporation and LANXESS AG is specialty chemicals.

(d) No Reporting Person, nor to their knowledge any person listed on Schedule B, annexed hereto, has, during the last five years, been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) No Reporting Person, nor to their knowledge any person listed on Schedule B, annexed hereto, has, during the last five years, been party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 3. Source and Amount of Funds or Other Consideration

The Shares purchased by LANXESS Corporation were purchased with working capital. The aggregate purchase price of the Shares is \$27,000,009.

Item 4. Purpose of Transaction

LANXESS Corporation acquired 584,113 shares of the Issuer's Series D-1 Convertible Preferred Stock on May 7, 2010 at a price of \$17.12 per share for a total purchase price of \$10,000,014. The shares of Series D-1 Preferred Stock were converted into 1,111,112 shares of the Company's Common Stock upon completion of the Company's initial public offering on February 14, 2011. LANXESS Corporation purchased an additional 1,133,333 shares of the Company's Common Stock in the Company's initial public offering at the initial public offering price of \$15.00 per share for a total purchase price of \$16,999,995. LANXESS Corporation acquired the Shares as a strategic investment to support the development of a source of bio-isobutanol for the purpose of producing butadiene and isobutylene for use in the production of polybutadiene and butyl rubber.

No Reporting Person has any present plan or proposal which would relate to or result in any of the matters set forth in subparagraphs (a) — (j) of Item 4 of Schedule 13D.

Item 5. Interest in Securities of the Issuer

The aggregate percentage of Shares reported owned by each person named herein is based upon 24,640,360 Shares outstanding which is the total number of Shares outstanding as of the completion of the Company's initial public offering as set forth in the Company's Prospectus filed pursuant to Rule 424(b)(4) with the Securities and Exchange Commission on February 10, 2011

(i) LANXESS Corporation

(a) As of the date hereof, LANXESS Corporation beneficially owns 2,244,445 Shares.

Percentage: Approximately 9.1%.

(b) 1. Sole power to vote or direct vote: 2,244,445

2. Shared power to vote or direct vote: 0

3. Sole power to dispose or direct the disposition: 2,244,445

4. Shared power to dispose or direct the disposition: 0

(c) The transactions in the Shares by LANXESS Corporation in the past 60 days are set forth in Schedule A and are incorporated by reference.

(ii) LANXESS AG

(a) As of the date hereof, as the parent company of LANXESS Corporation, LANXESS AG is deemed the beneficial owner of the 2,244,445 Shares owned by LANXESS Corporation.

Percentage: Approximately 9.1%.

(b) 1. Sole power to vote or direct vote: 2,244,445

2. Shared power to vote or direct vote: 0

3. Sole power to dispose or direct the disposition: 2,244,445

4. Shared power to dispose or direct the disposition: 0

(c) LANXESS AG did not enter into any transactions in the Shares in the past 60 days. The transactions in the Shares in the past 60 days on behalf of LANXESS Corporation are set forth in Schedule A and are incorporated by reference.

(d) No person other than the Reporting Persons is known to have the right to receive, or the power to direct the receipt of dividends from, or proceeds from the sale of, such shares of the Common Stock.

(e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

On February 17, 2011, the Reporting Persons entered into a Joint Filing Agreement in which the Reporting Persons agreed to the joint filing on behalf of each of them of statements on Schedule 13D, with respect to securities of the Issuer, to the extent required by applicable law. A copy of this agreement is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

Other than as described herein, there are no contracts, arrangements, understandings or relationships among the Reporting Persons, or between the Reporting Persons and any other person, with respect to the securities of the Issuer.

Item 7. Material to be Filed as Exhibits.

99.1 Joint Filing Agreement by and among LANXESS Corporation and LANXESS AG

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: February 17, 2011

LANXESS Corporation

By: /s/ Randall S. Dearth

Randall S. Dearth

President and Chief Executive Officer

LANXESS AG

By: /s/ Stephanie Cossmann

/s/ Jochen Schroer

Dr. Stephanie Cossmann

Dr. Jochen Schroer

SCHEDULE A

On February 14, 2011, LANXESS Corporation acquired 1,111,112 shares of the Company's Common Stock upon the automatic conversion of 584,113 shares of Series D-1 Convertible Preferred Stock on completion of the Company's initial public offering. Also on February 14, 2011, LANXESS Corporation purchased an additional 1,133,333 shares of the Company's Common Stock at the initial public offering price of \$15.00 per share.

SCHEDULE B

Directors and Officers of LANXESS Corporation

The name and current principal occupation of each director and executive officer of LANXESS Corporation is set forth below. Unless otherwise noted, each director and officer is a citizen of the United States and the business address of each director and executive officer is c/o 111 RIDC Park West Drive, Pittsburgh, PA 15275-1112.

<u>Name</u>	<u>Current Principal Occupation</u>
Randall S. Dearth	Director, President and Chief Executive Officer
Dr. Rainier van Roessel Kaiser-Wilhelm Allee 40, 51369 Leverkusen, Germany Citizen of the Netherlands	Director; Member of the Board of Management (Industrial Relations Director) of LANXESS AG
Matthias Zachert Kaiser-Wilhelm Allee 40, 51369 Leverkusen, Germany Citizen of Federal Republic of Germany	Director, Member of the Board of Management (Chief Financial Officer) of LANXESS AG
Bruce R. Davis	Treasurer
Todd A. Portzline	Assistant Secretary
Raymond D. Newhouse	Vice President and Chief Financial Officer
Marcy L. Tenaglia	Vice President, General Counsel & Secretary

Directors and Executive Officers of LANXESS AG

The name and current principal occupation of each member of the Board of Management and Supervisory Board of LANXESS Ag is set forth below. Unless otherwise noted, each such member is a citizen of the Federal Republic of Germany. The business address of each member of the Board of Management is Kaiser-Wilhelm Allee 40, 51369 Leverkusen, Germany.

BOARD OF MANAGEMENT

<u>Name</u>	<u>Current Principal Occupation</u>
Dr. Axel Claus Heitmann	Chairman of the Board of Management
Dr. Werner Breuers	Member of the Board of Management
Dr. Rainier van Roessel Citizen of the Netherlands	Member of the Board of Management (Industrial Relations Director)
Matthias Zachert	Member of the Board of Management (Chief Financial Officer)

SUPERVISORY BOARD

Name	Current Principal Occupation
<i>Stockholder Representatives</i>	
Dr. Rolf Stomberg	Chairman of the Supervisory Board Chairman of the Board of Directors of Management Consulting Group plc.
Dr. Friedrich Janssen	Formerly Member of the Executive Board of E.ON Ruhrgas AG, Essen
Robert J. Koehler	Chairman of the Board of Management of SGL Carbon SE, Wiesbaden
Rainer Laufs	Self-employed Consultant formerly Chairman of the Executive Board of Management of Deutsche Shell AG, Hamburg
Prof. h.c. (CHN) Dr. rer. oec. Ulrich Middelmann	Formerly Chairman of the Executive Board of Management of ThyssenKrupp Steel AG, Duisburg
Theo H. Walthie	Self-employed Consultant
<i>Employee Representatives</i>	
Ulrich Freese	Vice Chairman of the Supervisory Board Vice Chairman of the German Mine, Chemical and Power Workers' Union (IG BCE)
Axel Berndt	Member of the LANXESS Works Council Leverkusen
Wolfgang Blossey	Head of Trade Union district of the main Executive Board of the German Mine, Chemical and Power Workers' Union (IG BCE) Hanover
Dr. Rudolf Fauss	Chairman of the LANXESS Managerial Employees' Committee Head of Central Functions Human Resources at LANXESS Deutschland GmbH
Hans-Jürgen Schicker	Chairman of the Works Council Uerdingen
Giesela Seidel	Chairwoman of the Works Council Dormagen
All of the above with postal address at Kaiser-Wilhelm-Allee 40, 51369 Leverkusen, Germany	

JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k)(1)(iii) under the Securities Exchange Act of 1934, as amended, the persons named below agree to the joint filing on behalf of each of them of a Statement on Schedule 13D filed on February 22, 2011 (including additional amendments thereto) with respect to the shares of Common Stock, par value \$.01 per share, of Gevo, Inc. This Joint Filing Agreement shall be filed as an Exhibit to such Statement.

Dated: February 17, 2011

LANXESS Corporation

By: /s/ Randall S. Dearth

Randall S. Dearth

President and Chief Executive Officer

LANXESS AG

By: /s/ Stephanie Cossmann

/s/ Jochen Schroer

Dr. Stephanie Cossmann

Dr. Jochen Schroer